Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

State of Nevada

Purchasing Division
5 February, 2018

Response to
Request for Proposal: 3516

for

Workforce Scheduling Solution

Opening Date and Time: February 7, 2018 @ 2:00 PM

Part IA - Technical Proposal Submission Requirements

Vendor Name:
Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

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Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

Section III: Vendor Information Sheet

V1	Company Name	***Appointy Software Inc.***

V2	Street Address	***16 Corning Ave, Suite 136***

V3	City, State, ZIP	***Milpitas, CA - 95035***

V4	Telephone Number		
	Area Code: ***786***	Number: ***7667676***	Extension: ***+1***

V5	Facsimile Number		
	Area Code: ***408***	Number: ***228-3750***	Extension: ***+1***

V6	Toll Free Number		
	Area Code: **-**	Number: **Not Available**	Extension: -

V7	***Contact Person for Questions / Contract Negotiations, including address if different than above***
	Name: ***Sarang Verma***
	Title: ***Chief Operating Officer***
	Address: ***4th Floor, Maple High Street Mall, Opposite Aashima Mall, Bhopal, India***
	Email Address: ***sarang@appointy.com***

V8	Telephone Number for Contact Person		
	Area Code: -	Number: ***9893127783***	Extension: ***+91***

V9	Facsimile Number for Contact Person		
	Area Code: -	Number: ***Not Available***	Extension: -

V10	***Name of Individual Authorized to Bind the Organization***	
	Name: ***Sarang Verma***	Title: ***Chief Operating Officer***

V11	Signature ***(Individual shall be legally authorized to bind the vendor per NRS 333.337)***	
	Signature: SARANG VERMA	Date: **5 Feb 2018**

Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

Section IV: State Documents

A. The signature page from all amendments signed by an individual authorized to bind the organization.

State of Nevada
Department Administration
Purchasing Division
515 E. Musser Street, Suite 300
Carson City, NV 89701

Brian Sandoval
Governor

Jeffrey Haag
Administrator

SUBJECT:	Amendment 1 to Request for Proposal 3516
RFP TITLE:	Workforce Scheduling Solution
DATE OF AMENDMENT:	January 24, 2018
DATE OF RFP RELEASE:	December 28, 2017
OPENING DATE:	February 7, 2018
OPENING TIME:	2:00 PM
CONTACT:	Annette Morfin, Procurement Staff Member

ALL ELSE REMAINS THE SAME FOR RFP 3516.

Vendor must sign and return this amendment with proposal submitted.

Vendor Name: ***Appointy Software Inc***

Authorized Signature: SARANG YERMA

Title: ***Chief Operating Officer*** Date: ***5 Feb 2018***

Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

State of Nevada
Department Administration
Purchasing Division
515 E. Musser Street, Suite 300
Carson City, NV 89701

Brian Sandoval
Governor

Jeffrey Haag
Administrator

SUBJECT:	Amendment 2 to Request for Proposal 3516
RFP TITLE:	Workforce Scheduling Solution
DATE OF AMENDMENT:	January 25, 2018
DATE OF RFP RELEASE:	December 28, 2017
OPENING DATE:	February 7, 2018
OPENING TIME:	2:00 PM
CONTACT:	Annette Morfin, Procurement Staff Member

ALL ELSE REMAINS THE SAME FOR RFP 3516.

Vendor must sign and return this amendment with proposal submitted.

Vendor Name: ***Appointy Software Inc***

Authorized Signature: SARANG VERMA

Title: ***Chief Operating Officer*** Date: ***5 Feb 2018***

Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

B.
Attachment A – Confidentiality and Certification of Indemnification signed by an individual authorized to bind the organization.

ATTACHMENT A – CONFIDENTIALITY AND CERTIFICATION OF INDEMNIFICATION

Submitted proposals, which are marked "confidential" in their entirety, or those in which a significant portion of the submitted proposal is marked "confidential" **shall not** be accepted by the State of Nevada. Pursuant to NRS 333.333, only specific parts of the proposal may be labeled a "trade secret" as defined in NRS 600A.030(5). All proposals are confidential until the contract is awarded; at which time, both successful and unsuccessful vendors' technical and cost proposals become public information.

In accordance with the submittal instructions of this RFP, vendors are requested to submit confidential information in separate files marked "**Part IB Confidential Technical**" and "**Part III Confidential Financial**".

The State shall not be responsible for any information contained within the proposal. If vendors do not comply with the labeling and packing requirements, proposals shall be released as submitted. In the event a governing board acts as the final authority, there may be public discussion regarding the submitted proposals that shall be in an open meeting format, the proposals shall remain confidential.

By signing below, I understand it is my responsibility as the vendor to act in protection of the labeled information and agree to defend and indemnify the State of Nevada for honoring such designation. I duly realize failure to so act shall constitute a complete waiver and all submitted information shall become public information; additionally, failure to label any information that is released by the State shall constitute a complete waiver of any and all claims for damages caused by the release of the information.

This proposal contains Confidential Information, Trade Secrets and/or Proprietary information.

Please initial the appropriate response in the boxes below and provide the justification for confidential status.

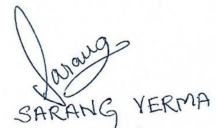
Part IB – Confidential Technical Information			
YES		NO	☑
Justification for Confidential Status			
None			

Part III – Confidential Financial Information			
YES	☑	NO	
Justification for Confidential Status			
As a private company, we are not obligated by law to disclose our financials publicly. Given that this information can impact future contracts, as well as discussions with other stakeholders, we would require all financial information about Appointy to be kept confidential			

Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

Appointy Software Inc

Company Name



Signature

Sarang Verma

Print Name

5 Feb 2018

Date

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Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

C.
Attachment B – Vendor Certifications signed by an individual authorized.

ATTACHMENT B – VENDOR CERTIFICATIONS

Vendor agrees and shall comply with the following:

(1) Any and all prices that may be charged under the terms of the contract do not and shall not violate any existing federal, State or municipal laws or regulations concerning discrimination and/or price fixing. The vendor agrees to indemnify, exonerate and hold the State harmless from liability for any such violation now and throughout the term of the contract.

(2) All proposed capabilities can be demonstrated by the vendor.

(3) The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, agreement or disclosure with or to any other contractor, vendor or potential vendor.

(4) All proposal terms, including prices, shall remain in effect for a minimum of 180 days after the proposal due date. In the case of the awarded vendor, all proposal terms, including prices, shall remain in effect throughout the contract negotiation process.

(5) No attempt has been made at any time to induce any firm or person to refrain from proposing or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal. All proposals shall be made in good faith and without collusion.

(6) All conditions and provisions of this RFP are deemed to be accepted by the vendor and incorporated by reference in the proposal, except such conditions and provisions that the vendor expressly excludes in the proposal. Any exclusion shall be in writing and included in the proposal at the time of submission.

(7) Each vendor shall disclose any existing or potential conflict of interest relative to the performance of the contractual services resulting from this RFP. Any such relationship that might be perceived or represented as a conflict shall be disclosed. By submitting a proposal in response to this RFP, vendors affirm that they have not given, nor intend to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant or any employee or representative of same, in connection with this procurement. Any attempt to intentionally or unintentionally conceal or obfuscate a conflict of interest shall automatically result in the disqualification of a vendor's proposal. An award shall not be made where a conflict of interest exists. The State shall determine whether a conflict of interest exists and whether it may reflect negatively on the State's selection of a vendor. The State reserves the right to disqualify any vendor on the grounds of actual or apparent conflict of interest.

(8) All employees assigned to the project are authorized to work in this country.

(9) The company has a written equal opportunity policy that does not discriminate in employment practices with regard to race, color, national origin, physical condition, creed, religion, age, sex, marital status, sexual orientation, developmental disability or handicap.

(10) The company has a written policy regarding compliance for maintaining a drug-free workplace.

(11) Vendor understands and acknowledges that the representations within their proposal are material and important, and shall be relied on by the State in evaluation of the proposal. Any vendor misrepresentations shall be treated as fraudulent concealment from the State of the true facts relating to the proposal.

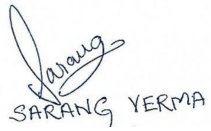
(12) Vendor shall certify that any and all subcontractors comply with Sections 7, 8, 9, and 10, above.

(13) The proposal shall be signed by the individual(s) legally authorized to bind the vendor per NRS 333.337.

Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

Appointy Software Inc

Vendor Company Name



Vendor Signature

Sarang Verma | **5 Feb 2018**

Print Name | Date

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Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

D.
Copy of any vendor licensing agreements and/or hardware and software maintenance agreements.

SOFTWARE SERVICES ORDER FORM

Customer:	*Contact:*
Address:	*Phone:*
	E-Mail:
***Services**:*	
***Services Fees**:*	***Initial Service Term**:*
Service Capacity:	
***Implementation Services**: Company will use commercially reasonable efforts to provide Customer the services described in the Statement of Work ("SOW") attached as Exhibit A hereto ("Implementation Services"), and Customer shall pay Company the Implementation Fee in accordance with the terms herein.* ***Implementation Fee (one-time)**:*	

SOFTWARE SERVICES AGREEMENT

This Software Services Agreement ("Agreement") is entered into on this <>(the "Effective Date") between Appointy Software Inc with a place of business at Milpitas, California ("Company"), and the Customer listed above ("Customer"). This Agreement includes and incorporates the above Order Form, as well as the attached Terms and Conditions and contains, among other things, warranty disclaimers, liability limitations and use limitations. There shall be no force or effect to any different terms of any related purchase order or similar form even if signed by the parties after the date hereof.

Appointy Software Inc.	***[Customer]:***
By:	*By:*
Name:	*Name:*
Title:	*Title:*

TERMS AND CONDITIONS

1. SOFTWARE SERVICES AND SUPPORT

1.1 Subject to the terms of this Agreement, Company will use commercially reasonable efforts to provide Customer the Services. As part of the registration process, Customer will identify an administrative user name and password for Customer's Company account. Company reserves the right to refuse registration of, or cancel passwords it deems inappropriate.

1.2 Subject to the terms hereof, Company will provide Customer with reasonable technical support services in accordance with the Company's standard practice.

2. RESTRICTIONS AND RESPONSIBILITIES

2.1 Customer will not, directly or indirectly: reverse engineer, decompile, disassemble or otherwise attempt to discover the source code, object code or underlying structure, ideas, know-how or algorithms relevant to the Services or any software, documentation or data related to the Services ("Software"); modify, translate, or create derivative works based on the Services or any Software (except to the extent expressly permitted by Company or authorized within the Services); use the Services or any Software for time sharing or service bureau purposes or otherwise for the benefit of a third; or remove any proprietary notices or labels.

2.2 Further, Customer may not remove or export from the United States or allow the export or re-export of the Services, Software or anything related thereto, or any direct product thereof in violation of any restrictions, laws or regulations of the United States Department of Commerce, the United States Department of Treasury Office of Foreign Assets Control, or any other United States or foreign agency or authority. As defined in FAR section 2.101, the Software and documentation are "commercial items" and according to DFAR section 252.2277014(a)(1) and (5) are deemed to be "commercial computer software" and "commercial computer software documentation." Consistent with DFAR section 227.7202 and FAR section 12.212, any use modification, reproduction, release, performance, display, or disclosure of such commercial software or commercial software documentation by the U.S. Government will be governed solely by the terms of this Agreement and will be prohibited except to the extent expressly permitted by the terms of this Agreement.

2.3 Customer represents, covenants, and warrants that Customer will use the Services only in compliance with Company's standard published policies then in effect (the "Policy") and all applicable laws and regulations. Customer hereby agrees to indemnify and hold harmless Company against any damages, losses, liabilities, settlements and expenses (including without limitation costs and attorneys' fees) in connection with any claim or action that arises from an alleged violation of the foregoing or otherwise from Customer's use of Services. Although Company has no obligation to monitor Customer's use of the Services, Company may do so and may prohibit any use of the Services it believes may be (or alleged to be) in violation of the foregoing.

2.4 Customer shall be responsible for obtaining and maintaining any equipment and ancillary services needed to connect to, access or otherwise use the Services, including, without limitation, modems, hardware, servers, software, operating systems, networking, web servers and the like (collectively, "Equipment"). Customer shall also be responsible for maintaining the security of the Equipment, Customer account, passwords (including but not limited to administrative and user passwords) and files, and for all uses of Customer account or the Equipment with or without Customer's knowledge or consent.

3. CONFIDENTIALITY; PROPRIETARY RIGHTS

3.1 Each party (the "Receiving Party") understands that the other party (the "Disclosing Party") has disclosed or may disclose business, technical or financial information relating to the Disclosing Party's business (hereinafter referred to as "Proprietary Information" of the Disclosing Party). Proprietary Information of Company includes non-public information regarding features, functionality and performance of the Service. Proprietary Information of Customer includes non-public data provided by Customer to Company to enable the provision of the Services ("Customer Data"). The Receiving Party agrees: (i) to take reasonable precautions to protect such Proprietary Information, and (ii) not to use (except in performance of the Services or as otherwise permitted herein) or divulge to any third person any such Proprietary Information. The Disclosing Party agrees that the foregoing shall not apply with respect to any information after five (5) years following the disclosure thereof or any information that the Receiving Party can document (a) is or becomes generally available to the public, or (b) was in its possession or known by it prior to receipt from the Disclosing Party, or (c) was rightfully disclosed to it without restriction by a third party, or (d) was independently developed without use of any Proprietary Information of the Disclosing Party or (e) is required to be disclosed by law.

3.2 Customer shall own all right, title and interest in and to the Customer Data. Company shall own and retain all right, title and interest in and to (a) the Services and Software, all improvements, enhancements or modifications thereto, (b) any software, applications, inventions or other technology developed in connection with Implementation Services or support, and (c) all intellectual property rights related to any of the foregoing.

3.3 Notwithstanding anything to the contrary, Company shall have the right collect and analyze data and other information relating to the provision, use and performance of various aspects of the Services and related systems and technologies (including, without limitation, information concerning Customer Data and data derived therefrom), and Company will be free (during and after the term hereof) to (i) use such information and data to improve and enhance the Services and for other development, diagnostic and corrective purposes in connection with the Services and other Company offerings, and (ii) disclose such data solely in aggregate or other de-identified form in connection with its business. No rights or licenses are granted except as expressly set forth herein.

4. PAYMENT OF FEES

4.1 Customer will pay Company the then applicable fees described in the Order Form for the Services and Implementation Services in accordance with the terms therein (the "Fees"). If Customer's use of the Services exceeds the Service Capacity set forth on the Order Form or otherwise requires the payment of additional fees (per the terms of this Agreement), Customer shall be billed for such usage and Customer agrees to pay the additional fees in the manner provided herein. Company reserves the right to change the Fees or applicable charges and to institute new charges and Fees at the end of the Initial Service Term or then current renewal term, upon thirty (30) days prior notice to Customer (which may be sent by email). If Customer believes that Company has billed Customer incorrectly, Customer must contact Company no later than 60 days after the closing date on the first billing statement in which the error or problem appeared, in order to receive an adjustment or credit. Inquiries should be directed to Company's customer support department.

4.2 Company may choose to bill through an invoice, in which case, full payment for invoices issued in any given month must be received by Company thirty (30) days after the mailing date of the invoice. Unpaid amounts are subject to a finance charge of 1.5% per month on any outstanding balance, or the maximum permitted by law, whichever is lower, plus all expenses of collection and may result in immediate termination of Service. Customer shall be responsible for all taxes associated with Services other than U.S. taxes based on Company's net income.

5. TERM AND TERMINATION

5.1 Subject to earlier termination as provided below, this Agreement is for the Initial Service Term as specified in the Order Form, and shall be automatically renewed for additional periods of the same duration as the Initial Service Term (collectively, the "Term"), unless either party requests termination at least thirty (30) days prior to the end of the then-current term.

5.2 In addition to any other remedies it may have, either party may also terminate this Agreement upon thirty (30) days' notice (or without notice in the case of nonpayment), if the other party materially breaches any of the terms or conditions of this Agreement. Customer will pay in full for the Services up to and including the last day on which the Services are provided. All sections of this Agreement which by their nature should survive termination will survive termination, including, without limitation, accrued rights to payment, confidentiality obligations, warranty disclaimers, and limitations of liability.

6. WARRANTY AND DISCLAIMER

Company shall use reasonable efforts consistent with prevailing industry standards to maintain the Services in a manner which minimizes errors and interruptions in the Services and shall perform the Implementation Services in a professional and workmanlike manner. Services may be temporarily unavailable for scheduled maintenance or for unscheduled emergency maintenance, either by Company or by third-party providers, or because of other causes beyond Company's reasonable control, but Company shall use reasonable efforts to provide advance notice in writing or by e-mail of any scheduled service disruption. HOWEVER, COMPANY DOES NOT WARRANT THAT THE SERVICES WILL BE UNINTERRUPTED OR ERROR FREE; NOR DOES IT MAKE ANY WARRANTY AS TO THE RESULTS THAT MAY BE OBTAINED FROM USE OF THE SERVICES. EXCEPT AS EXPRESSLY SET FORTH IN THIS SECTION, THE SERVICES AND IMPLEMENTATION SERVICES ARE PROVIDED "AS IS" AND COMPANY DISCLAIMS ALL WARRANTIES,

EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.

7. INDEMNITY

Company shall hold Customer harmless from liability to third parties resulting from infringement by the Service of any United States patent or any copyright or misappropriation of any trade secret, provided Company is promptly notified of any and all threats, claims and proceedings related thereto and given reasonable assistance and the opportunity to assume sole control over defense and settlement; Company will not be responsible for any settlement it does not approve in writing. The foregoing obligations do not apply with respect to portions or components of the Service (i) not supplied by Company, (ii) made in whole or in part in accordance with Customer specifications, (iii) that are modified after delivery by Company, (iv) combined with other products, processes or materials where the alleged infringement relates to such combination, (v) where Customer continues allegedly infringing activity after being notified thereof or after being informed of modifications that would have avoided the alleged infringement, or (vi) where Customer's use of the Service is not strictly in accordance with this Agreement. If, due to a claim of infringement, the Services are held by a court of competent jurisdiction to be or are believed by Company to be infringing, Company may, at its option and expense (a) replace or modify the Service to be non-infringing provided that such modification or replacement contains substantially similar features and functionality, (b) obtain for Customer a license to continue using the Service, or (c) if neither of the foregoing is commercially practicable, terminate this Agreement and Customer's rights hereunder and provide Customer a refund of any prepaid, unused fees for the Service.

8. LIMITATION OF LIABILITY

NOTWITHSTANDING ANYTHING TO THE CONTRARY, EXCEPT FOR BODILY INJURY OF A PERSON, COMPANY AND ITS SUPPLIERS (INCLUDING BUT NOT LIMITED TO ALL EQUIPMENT AND TECHNOLOGY SUPPLIERS), OFFICERS, AFFILIATES, REPRESENTATIVES, CONTRACTORS AND EMPLOYEES SHALL NOT BE RESPONSIBLE OR LIABLE WITH RESPECT TO ANY SUBJECT MATTER OF THIS AGREEMENT OR TERMS AND CONDITIONS RELATED THERETO UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER THEORY: (A) FOR ERROR OR INTERRUPTION OF USE OR FOR LOSS OR INACCURACY OR CORRUPTION OF DATA OR COST OF PROCUREMENT OF SUBSTITUTE GOODS, SERVICES OR TECHNOLOGY OR LOSS OF BUSINESS; (B) FOR ANY INDIRECT, EXEMPLARY, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES; (C) FOR ANY MATTER BEYOND COMPANY'S REASONABLE CONTROL; OR (D) FOR ANY AMOUNTS THAT, TOGETHER WITH AMOUNTS ASSOCIATED WITH ALL OTHER CLAIMS, EXCEED THE FEES PAID BY CUSTOMER TO COMPANY FOR THE SERVICES UNDER THIS AGREEMENT IN THE 12 MONTHS PRIOR TO THE ACT THAT GAVE RISE TO THE LIABILITY, IN EACH CASE, WHETHER OR NOT COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

9. MISCELLANEOUS

If any provision of this Agreement is found to be unenforceable or invalid, that provision will be limited or eliminated to the minimum extent necessary so that this Agreement will otherwise remain in full force and effect and enforceable. This Agreement is not assignable, transferable or sublicensable by Customer except with Company's prior written consent. Company may transfer and assign any of its rights and obligations under this Agreement without consent. This Agreement is the complete and exclusive statement of the mutual understanding of the parties and supersedes and cancels all previous written and oral agreements, communications and other understandings relating to the subject matter of this Agreement, and that all waivers and modifications must be in a writing signed by both parties, except as otherwise provided herein. No agency, partnership, joint venture, or employment is created as a result of this Agreement and Customer does not have any authority of any kind to bind Company in any respect whatsoever. In any action or proceeding to enforce rights under this Agreement, the prevailing party will be entitled to recover costs and attorneys' fees. All notices under this Agreement will be in writing and will be deemed to have been duly given when received, if personally delivered; when receipt is electronically confirmed, if transmitted by facsimile or e-mail; the day after it is sent, if sent for next day delivery by recognized overnight

delivery service; and upon receipt, if sent by certified or registered mail, return receipt requested. This Agreement shall be governed by the laws of the State of California without regard to its conflict of laws provisions.

EXHIBIT A

Statement of Work

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Appointy Software Inc.
16 Corning Ave, Suite 136
Milpitas, CA - 95035

Section V. System Requirements

High Level requirements:

Scheduling	
1.	Flexible Schedule Creation functionality

The proposed solution will provide absolute flexibility in creating schedules in terms of:

1. ***Time:***
    a. *Schedule shifts at any time.*
    b. *Schedule shifts for any duration.*

2. ***Staff:***
    a. *Add staff to existing post shifts.*
    b. *Create variable shifts: different times on different days.*

3. ***Posts, places, etc.:***
    a. *Add new posts within the system, including the ones which are required due to special reasons like emergency.*
    b. *Add shifts to posts at variable times.*
    c. *Set custom capacity for posts: number of staff required.*
    d. *Override controls as per need.*

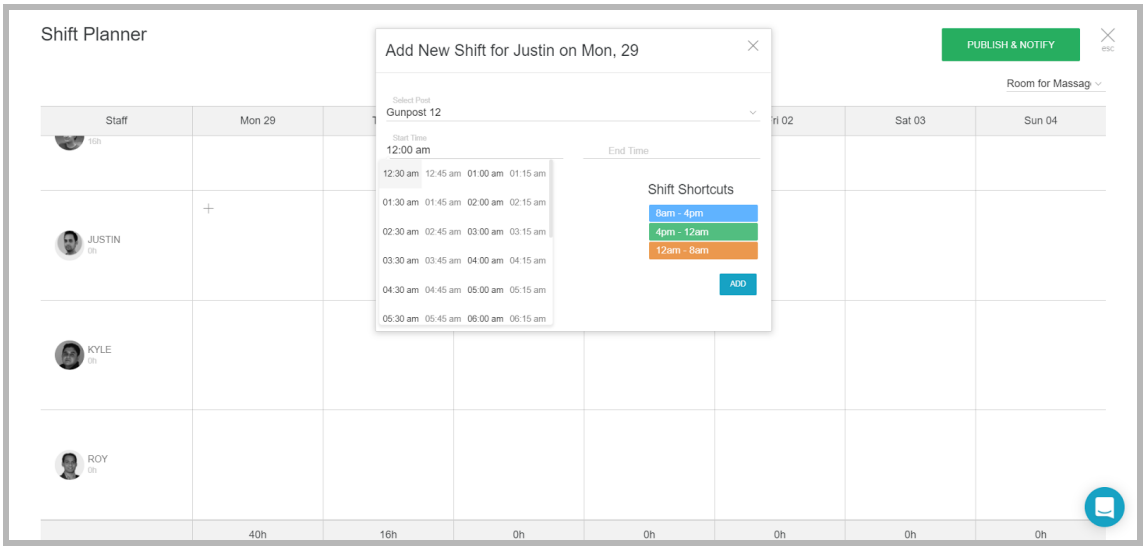
If and whenever a need arises, where a created schedule needs to be modified, the system will allow the supervisors (and other defined user roles) to:

1. *Reassign shift to a different staff.*
2. *Reassign a post to a particular staff.*
3. *Reschedule a shift to a different time with the same staff.*
4. *Reschedule a shift to a different time with a different staff.*

The system also allows scheduling shift assignments in both the cases:

1. ***In bulk:*** *Scheduling shifts for a group of staff.*
   Example: Schedule all 'patrolling shifts' for a week, schedule all shifts for the 'security department', etc.
2. ***Ad-hoc:*** *Schedule shifts for unplanned circumstance.*
   Example: Schedule shifts for 2 extra personnel at the exit and entry gates because of an emergency.'

All of these scheduling functionalities work with all the business rules specified within the system.



Sample Screen: Shift Planner

2.	Drag & Drop Scheduling

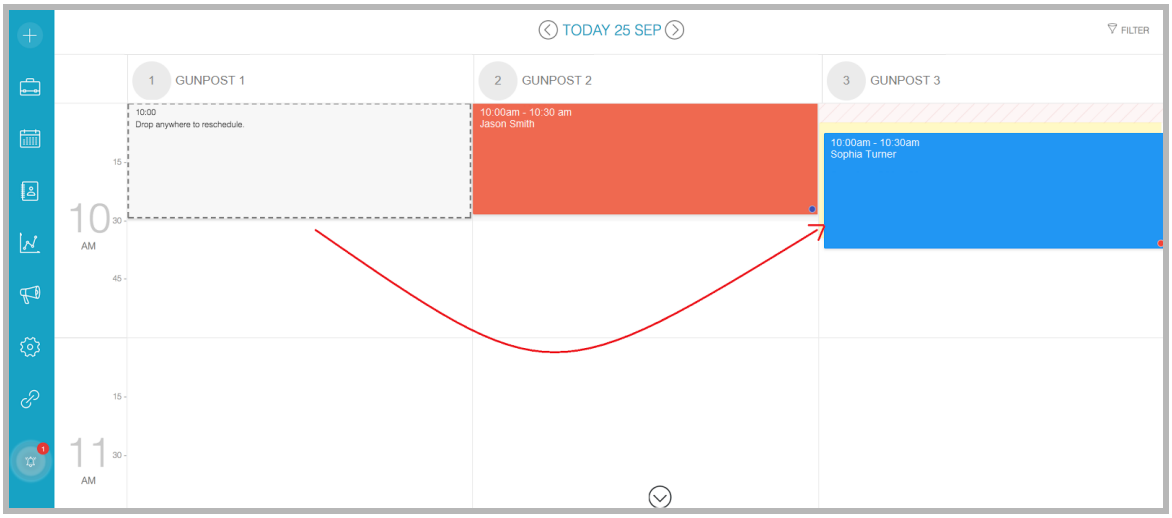
The proposed solution has an intuitive graphical interface, designed keeping in mind ease of use and efficiency.

The system will house various calendars for different entities like staff, posts, etc. All the shift assignments appear on the calendars in the form of 'shift tiles'.

For example: For a 9 AM to 5 PM shift of Jason Smith on Gunpost 12, the shifts will be displayed on both Jason Smith's calendar, as well as on the calendar of Gunpost 12.

These shift tiles can be easily dragged and dropped from:

1. *One resource to another (one staff to another, one post to another).*
2. *One time to another.*



Sample Screen: Drag and Drop

3.	Auto Scheduling

The proposed solution will contain the following data

1. *Shift bids data*
2. *Leave bids data.*
3. *Required shifts data.*
4. *Business rules.*
5. *Staff restrictions.*

In combination of this data, the system will analyze the data in the defined priority order.

Using this analysis, the system will by itself make all the assignments to the required shifts. These assigned shifts (soft schedule) is then sent to the supervisors and other user roles for review.

The supervisors review the soft schedule, make the required changes to the schedule and finally publish it. Once the final shift is published, all the staff members are notified of their shift timings and details.

4.	Flexible Task Scheduling

Our proposed solution is well equipped to handle a wide variety of scheduling tasks. The system provides enough leeway to schedule:

1. *Schedule planned tasks at the time of shift scheduling itself.*
2. *Schedule unplanned tasks at a later stage to existing shifts, as and when a task arrives.*

5.	Informative & Customizable Schedule Views

In our proposed solution, every resource which has a schedule like staff, posts, etc. has got a calendar associated with it.

The various assignments for these resources appear as 'shift tiles' on the calendars. The shift tiles contain information about the scheduled shift like:

1. *Time of shift,*
2. *Tasks assigned,*
3. *Staff details, etc.*

The calendar also has various schedule views like: day view, week view, month view, etc.

All calendars also allow applying relevant filters. For example: In a post calendar, filters can be applied on staff names, to see schedule of a particular staff on that post.

6.	Real-time Scheduling Conflicts Detection

The proposed solution will contain all information related to shifts, leaves, restrictions, etc.

The system recommends all the suggestions only after cross referencing and checking with all the business rules and restrictions.

In cases where conflicts arise, the system will prompt the supervisors to take the required action by throwing real time pop-up warnings as and when conflicts arise in the scheduling journey.

Employee Information Management

1.	Personal, contact, scheduling and leave preferences, qualifications, etc.

The proposed solution will allow managing employee information like the following:

1. *First name*
2. *Last name*
3. *Email address*
4. *Phone*
5. *Address*
6. *Department*
7. *Shift data*
8. *Leave data*
9. *Certifications and qualifications*

Other fields as required by NDOC can be easily configured and added.

Attendance Tracking and Labor Cost Controls

1.	Punch In/Out, overtime codes, reporting, etc.

In our proposed solution, the staff can be checked-in and checked-out, to ensure recording of exact check-in and check-out times.

This check-in and check-out will happen separately for each shift, thus ensuring separate check-in and check-out times for regular and overtime shifts.

Since all the data of the scheduled shifts will be pre-stored in the system, all the check-in and check-out times will be mapped with other shift details like: shift codes, overtime codes, etc.

Attendance tracking can be done by:

1. *Generating attendance reports, which are exportable and printable.*
2. *Visiting the attendance card of a staff from the staff profile, which will contain all the check-in and check-out times*

Attendance Card
Jan 01, 2018 - Jan 31, 2018
Total Records: 42 **Absences:** 3

#	SHIFT TIME	CHECK-IN TIME:	CHECK-OUT TIME	SHIFT TYPE	LEAVE TYPE
1	Jan 01, 09:00 AM - 05:00 PM	08:58 AM	05:01 PM	Regular	-
2	Jan 02, 09:00 AM - 05:00 PM	09:03 AM	05:03 PM	Regular	-
3	Jan 03, 11:00 PM - 07:00 AM	11:00 PM	07:01 AM	Regular	-
4	Jan 04, 09:00 AM - 05:00 PM	09:00 AM	04:59 PM	Regular	-
5	Jan 04, 06:00 PM - 10:00 PM	05:55 AM	10:03 PM	Overtime	-
6	Jan 05, 09:00 AM - 05:00 PM	09:06 AM	05:10 PM	Regular	-
7	Jan 06, 9:00 AM - 05:00 PM	08:57 AM	05:07 PM	Regular	-

Sample Screen: Attendance card of an employee

Reports

1.	Standard, customizable reports

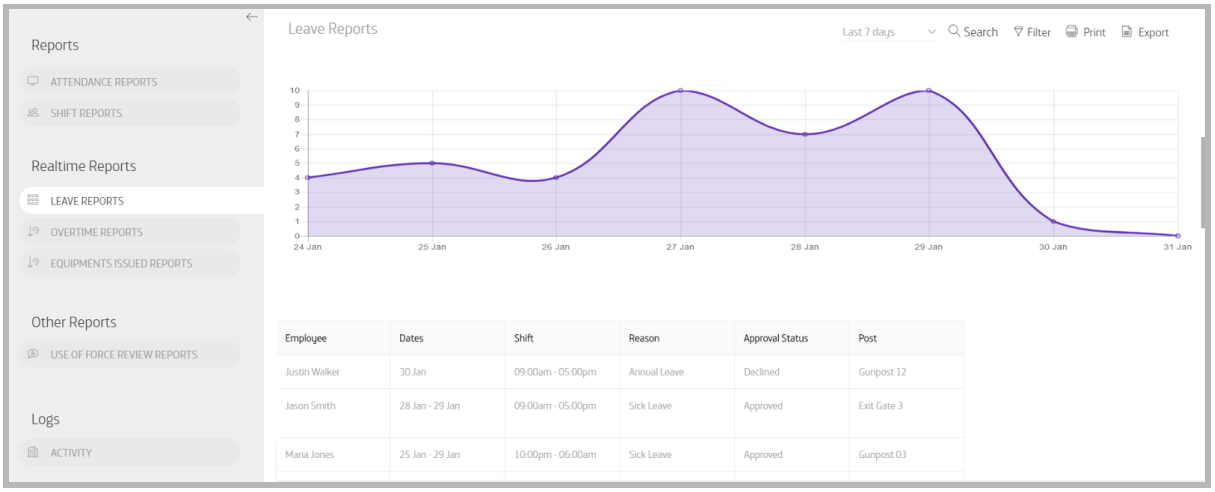
The proposed solution will house an extensive reporting module.

The solution will contain all the basic reports, pre-customised within the solution. These can be viewed directly by going to the reporting section. Example: Leave reports, overtime reports, etc.

The reporting module also consists of a report builder feature which allows:

1. *Selecting the data columns to be displayed in the generated report.*
2. *Applying relevant filters over the data to be pulled in the generated report.*

This allows complete customisation of all the reports.



Sample Screen: Reporting Section

All reports can also be printed and exported.

2.	*Data exports via ETL, etc.*

Appointy's Reporting Module can be configured to automate data export at regular intervals. Data can streamed to a data warehouse or uploaded in batches at regular intervals.

Data can be exported in various formats like:

- *JSON*
- *SQL*
- *XML*
- *CSV*
- *Excel*
- *ETL Complaint format specified by NDOC*

Shift Bidding

1.	Shift Bidding for year ahead

The proposed solution will allow staff to raise their shift bids. The system will allow this in two ways:

1. ***Regular:*** *This will allow the staff to create shift bids in the following format:*
   a. *Select the days of shift.*
   b. *Select time for each selected day.*

2. ***Irregular:*** *This will allow the staff to create shift bids for a short set of dates which follow a*

different pattern from the regular shift bids.

a. *Select date.*
b. *Select time on the date selected.*

2.	Leave bidding

The proposed solution will allow the users to apply for leave bids. The system will allow leave bidding in *both of the following cases:*

1. ***Unplanned Leaves:*** *The staff will be able to apply for leave arising out of an unplanned situation (like a sick leave) on an ad-hoc basis.*
2. ***Planned Leaves:*** *The staff will be able to apply for leaves well in advance in case of planned circumstances.*

The system will also allow staff to bid for leaves:

1. *For an entire date or a set of dates.*
2. *For a particular time duration on a date or a set of dates.*

The leave bids raised by the staff will automatically get forwarded to the designated users, who can then approve or reject the leave requests. The staff in both the cases will be notified of the outcome of their leave bid.

3.	Rules based logic

The proposed solution will allow incorporating all the rules required to meet all the complex employee scheduling needs. The rules based scheduling system will allow the supervisors to keep an account of all the restrictions and unique rule set to create specific schedules in scenarios.

The solution will actively help the supervisors by automatically:

1. *Minimizing unnecessary staff overtime hours.*
2. *Ensuring that the correct qualified staff is at the correct post.*
3. *Leaving almost no scope of scheduling errors.*
4. *Streamlining important tasks to increase efficiency.*

The system will also allow defined user roles (like admins) to create and manage all the rules from within the application.

Interface with External Systems

1.	Vendor to cover their applications' capability/feature set

Integration with external system:

- *External System provides and API:*
  - *Using our application's Webhook feature Event data can be pushed to external systems.*

- *For higher control, our modular software architecture can be leveraged to integrate with the external system.*

- *External System does not provide an API:*
  - *Using our RESTful HTTP API external applications can integrate with our system.*

Some of our integrations:

- *Paypal*
- *Google Calendar*
- *Google Analytics*

Roster Publishing

1.	*Vendor to cover their applications' capability/feature set*

The proposed solution will provide the users with extensive roster publishing functionalities. The system will help the supervisors by suggesting them staff assignments, keeping a check on factors like:

1. *Restrictions applicable on staff,*
2. *Minimum travel distance for staff,*
3. *Preference for regular working hours over overtime working hours (staff who will be scheduled for overtime shifts, will only be assigned shifts if there are no staff available with non-overtime shift), etc.*

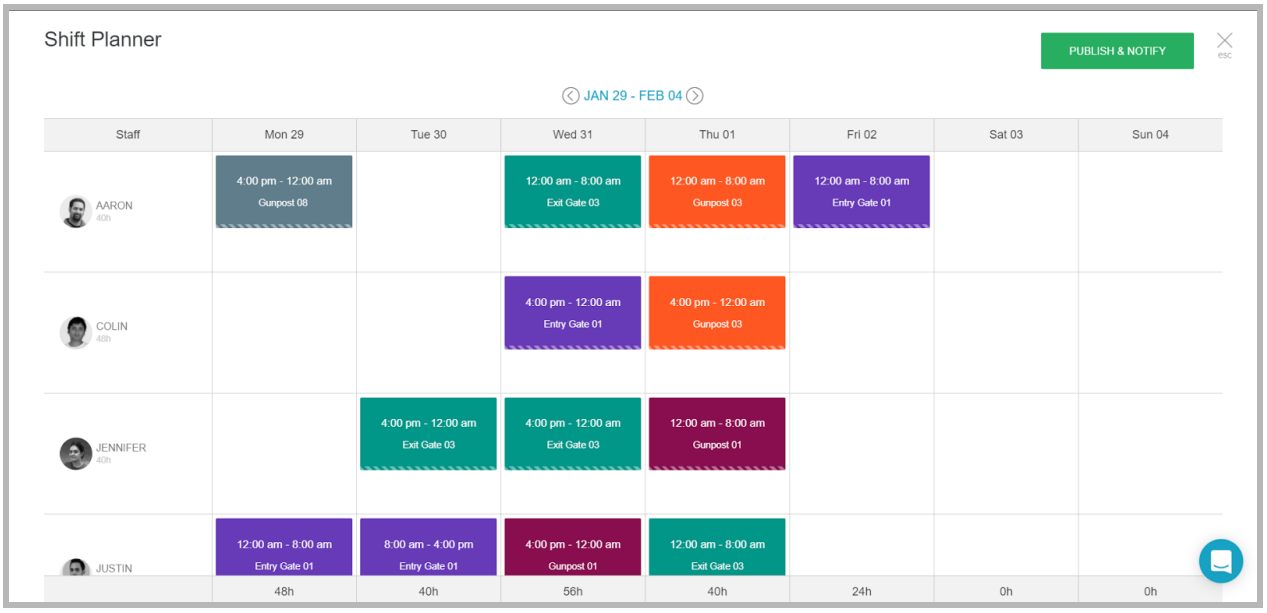
The process of roster publishing can be done in two ways:

1. ***Automatic:*** *All the business rules to be used will be defined within the system. Based on these defined business rules, the system will automatically prepare a draft shift roster. This prepared roster will be created with the use of most optimal combinations of various checks and conditions. Supervisors will then be able to review the draft shift roster. The supervisor can make changes to the draft schedule. Once the draft schedule is modified to meet the requirements, the draft roster can be published as the final 'published schedule'.*

2. ***Manual:*** *In this process, the supervisors themselves will be preparing the shifts. The system will only make available to the supervisors a list of available staff with relevant staff details. This list will contain staff all staff eligible to be assigned to a particular post. The system can also be configured in a way to show staff with restrictions too. These staff members will be demarcated using colors to differentiate them from the staff having no restrictions.*

The solution will also allow to easily modify an existing shift schedule. All assignments can be rescheduled:

1. *By dragging and dropping assignments across resources on the calendar.*
2. *Manually: enter the updated details in the 'edit shift window'.*



Sample Screen: Shifts

Technologies and Infrastructure

1.	Vendor to cover their applications' capability/feature set

Technologies:

- *.NET Core for Backend Services and APIs*
- *Angular 2 for Web Client*
- *MS SQL Server as primary database*
- *Redis for Caching*

Infrastructure:

- *Nginx for Edge Servers*
- *ModSecurity 3.0 based Web Application Firewall*
- *Linux based Virtual Machines*
- *Docker for Application Runtime Environments*
- *Kubernetes for Docker Orchestration*
- *Prometheus for Monitoring and Logging*

Online Functionality

1.	Vendor to cover their applications' capability/feature set

The solution is entirely web based i.e. can be accessed using a web browser such as Internet Explorer and Google Chrome. It does not have any external/system dependencies. In addition to the standard web based functionality, the solution also qualifies as Progressive Web App (PWA) ensuring it is,

- ***Reliable**: Load instantly even in uncertain network conditions.*

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- ***Fast***: *Respond quickly to user actions with smooth and intuitive UI/UX.*
- ***Engaging***: *Feel like native experience on the device it's being used, be it mobile or desktop*.

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Section VI. Scope of Work

Approach for completing tasks:

- ***Staffing the right team***
  - *Required roles are identified for the project.*
  - *Staff are assigned taking into account - role, knowledge, ability and skill.*
  - *Responsibilities, tasks and goals are clearly defined and documented.*
- ***Research***
  - ***Primary***
    - *Includes study of existing process and requirements.*
    - *Identify user roles associated with the proposed solution.*
    - *Identify major challenges/pain points in the existing process.*
    - *Identify clear objective of the solution.*
  - ***Experience***
    - *Suggest optimal solution sketches from experience in the scheduling space.*
    - *Optimise and automate possible processes in the tasks (as per the use case).*
- ***Planning***
  - *Create task timelines, plan resource assignments and milestones.*
  - *Allocate appropriate time for discussion with key stakeholders.*
  - *Allocate appropriate time to evaluate and design solution sketches.*
- ***Prepare pre-task documentation***
  - *Prepare questionnaires for key stakeholders to further understand the use case, journey and pain points.*
  - *Outline all outstanding clarifications required on the task.*
  - *Send all the documentation in advance for approval.*
- ***Post task MoM for agreement/ feedback***
  - *Document minutes of the meetings, next steps, and outstanding subjects from each meeting.*
  - *With due permission, record all the discussions through a portable device. This will allow revisiting discussions in case of clarifications.*
  - *Discuss next steps and outstanding subjects.*
  - *Present and share an overview (includes summary, stakeholders involved, time, major understanding and outcomes) of all the meetings for feedback.*
- ***Outcome document for comments/ approval***
  - *Document will include the following:*
    - *User roles and rights wrt to the task.*
    - *Subtasks, user touch points and user journey.*
    - *Draft screen designs/ flows that are designed to operate across web, mobile and tablet devices*

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    - *Key wins from the task.*
  - *The final document will be sent to all the concerned stakeholders for feedback and approval.*
  - *Once approved the document will be treated as reference to go about implementing the outlined tasks.*

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Section VII. Company Background and References

Vendors shall provide a company profile in the table format below.

Question	Response
Company name:	***Appointy Software Inc***
Ownership (sole proprietor, partnership, etc.):	***Corporation***
State of incorporation:	***California***
Date of incorporation:	***May 1, 2014***
# of years in business:	***Appointy has been in business since January 2009. We underwent restructuring/reorganisation in 2014/2015 due to which the incorporation date of our current company is in 2014.***
List of top officers:	***Nemesh Singh, Sarang Verma, Rajeev Madnawat***
Location of company headquarters, including City and State:	***Appointy Global Pte Ltd, 20 Bendemeer Road #03-12, Singapore 339914***
Location(s) of the office that shall provide the services described in this RFP:	***Location 1: 16 Corning Ave, Suite 136, Milpitas, CA, USA 95035 Location 2: 4th Floor Maple high Street Mall, Opposite Aashima Mall, Bhopal, India 462024***
Number of employees locally with the expertise to support the requirements identified in this RFP:	***Employees will travel as required by the State (as in the the scope of the RFP). The cost associated with travel/lodging/food is included in the cost proposal. No extra cost will be charged.***
Number of employees nationally with the expertise to support the requirements in this RFP:	***Employees will travel as required by the State (as in the the scope of the RFP). The cost associated with travel/lodging/food is included in the cost proposal. No extra cost will be charged.***
Location(s) from which employees shall be assigned for this project:	***Location 1: 16 Corning Ave, Suite 136, Milpitas, CA, USA 95035 Location 2: 4th Floor Maple high Street Mall, Opposite Aashima Mall, Bhopal, India 462024***

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Question	Response
Nevada Business License Number:	***Not Available***
Legal Entity Name:	***Not Available***

We will register with the State of Nevada immediately, if the project is awarded to Appointy Software Inc.

Is "Legal Entity Name" the same name as vendor is doing business as?

Yes	✓	No	

If "No", provide explanation.

Vendors are cautioned that some services may contain licensing requirement(s). Vendors shall be proactive in verification of these requirements prior to proposal submittal. Proposals that do not contain the requisite licensure may be deemed non-responsive.

Has the vendor ever been engaged under contract by any State of Nevada agency?

Yes		No	✓

Are you now or have you been within the last two (2) years an employee of the State of Nevada, or any of its agencies, departments, or divisions?

Yes		No	✓

If "Yes", please explain when the employee is planning to render services, while on annual leave, compensatory time, or on their own time?

If you employ (a) any person who is a current employee of an agency of the State of Nevada, or (b) any person who has been an employee of an agency of the State of Nevada within the past two (2) years, and if such person shall be performing or producing the services which you shall be contracted to provide under this contract, you shall disclose the identity of each such person in your response to this RFP, and specify the services that each person shall be expected to perform.

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Disclosure of any significant prior or ongoing contract failures, contract breaches, civil or criminal litigation in which the vendor has been alleged to be liable or held liable in a matter involving a contract with the State of Nevada or any other governmental entity. Any pending claim or litigation occurring within the past six (6) years which may adversely affect the vendor's ability to perform or fulfill its obligations if a contract is awarded as a result of this RFP shall also be disclosed.

Does any of the above apply to your company?

Yes		No	✓

Company background/history and why vendor is qualified to provide the services described in this RFP. Limit response to no more than five (5) pages.

Company Background:

Company's legal name:	***Appointy Software Inc***
Company's State of Incorporation:	***California***
Nature of Legal Company entity of company	***Private Limited***
Company Staffing	***45 (Forty Five)***

History
The founders of Appointy started a services Company in 2001. Between 2005-2008, sensing a strong customer requirement in the appointment scheduling process, they launched a free scheduling plugin in 2008. In 2011, Appointy was launched as a standalone scheduling product.

Ownership Structure

- *Appointy is completely debt free, profitable and has no external shareholders.*
- *100% of the ownership rests with the management team + ESOPs.*
- *Appointy is headquartered in Singapore (Appointy Global Pte) with subsidiary in California, U.S. (Appointy Software Inc.). Our development team sits out of India (Appointy IT Pvt. Ltd.).*

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Company's Market Presence

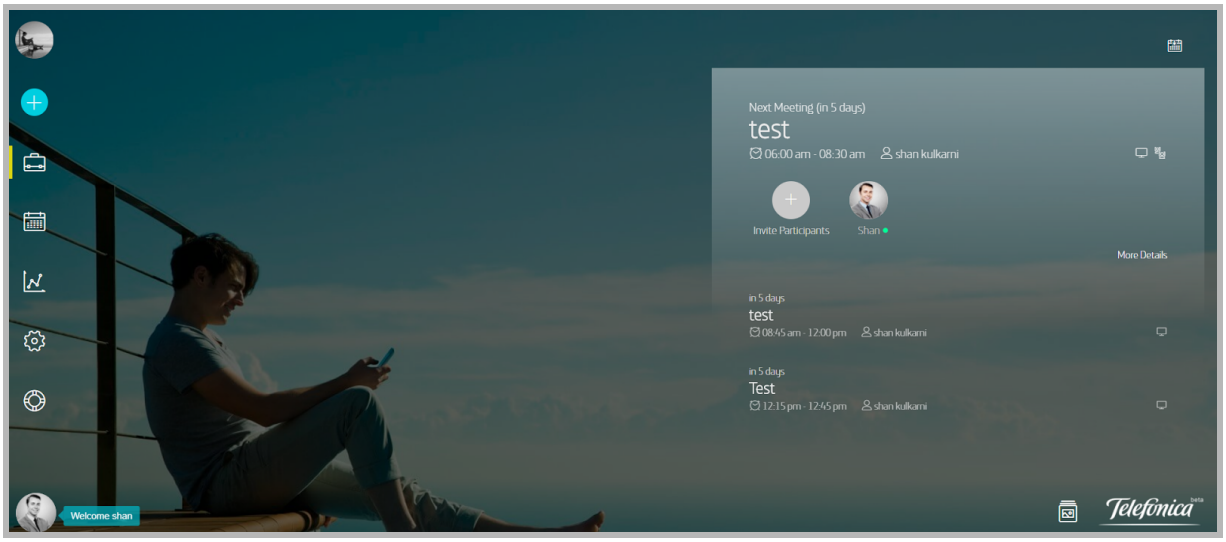
- *8+ years of experience in scheduling space.*
- *Helped 130,000+ businesses/agencies/organisations with their scheduling needs.*
- *We provide services in 110+ countries*
- *Our out of the box scheduling product has the an average of 4.8/5 with hundreds of reviews across multiple platforms.*
- *Appointy understands scheduling space across 150+ verticals. The major verticals include:*
    - *Administrative professionals/firms/consultancies*
    - *Financial Institutions*
    - *Universities*
    - *Law Firms*
    - *Local and state governments*
    - *Fitness Centers*
    - *Doctors*
    - *Enterprise Salons and Spas*
    - *Embassies and Consulates*

On a similar scale, we have deployed a custom conference scheduling solution for Telefonica, a multinational broadband and telecommunication provider in Europe (€ 52.04 billion revenue in 2016).

Use Case 1:

We delivered a completely customized scheduling product (phase 1) to Telefonica in a record time of 60 business days.
Telefonica will schedule 25,000+ staff in 1000+ locations across 30+ countries. They also plan to make the booking solution available to its partnering companies in future.

- *The major highlights of the project includes:*
- *On-premise hosting of the developed solution*
- *Integration with CISCO APIs (CMS/TMS)*
- *Custom branded booking portal*
- *Custom reporting*



My Space Screen

SUBCONTRACTOR INFORMATION

Subcontractors are defined as a third party, not directly employed by the contractor, who shall provide services identified in this RFP. This does not include third parties who provide support or incidental services to the contractor.

Does this proposal include the use of subcontractors?

Yes		No	✓

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Section VIII. Attachment H - Proposed Staff Resumes

Fourteen staff members will be working on the project. The team will be subdivided into development, testing, training and setup & configuration. Company's Chief Operating Officer will be leading the project with development head as the Chief Technical Officer. CEO will be the Technical Consultant and Lead.
A dedicated Account Executive and technical Consultant will be assigned who will be available 7 days a week through phone, email and chats.

#	Name	Designation	Years at Appointy	Anticipated Services	Role in Project
1	Sarang Verma	COO	4	Project Management and Point of Contact	**Project Manager**
2	Nemesh Singh	CEO	8	Project related consultation	**Technical Lead**
3	Khushal Patel	CTO	8	Technical Project Manager	**Implementation Lead**
4	Puneet Pathak	Senior Developer	7	Database Management, Backend Development	Backend Lead
5	Rajesh Meena	Senior Developer	8	UI/UX Development	UI/UX Lead
6	Sri Krishna Paritala	Product Developer	1	Architecture development	Application Architect
7	Shan Kulkarni	UI/UX Developer	2	UI/UX Design and Development	UI/UX Developer
8	Lav Kulkarni	Backend Developer	2	API, Web Services, Database Development	Backend Developer
9	Akshay Gupta	Project Management	1	Project Management	Documentation

10	Pavan Shukla	Server Manager	1	Server and Security Management	Server Security Officer
11	Gaurav Sharma	Testing Engineer	6	UAT	Testing Engineer
12	Yajuvendra Singh	Setup and Configuration Head	7	Account Executive Support & Setup	Setup and configuration Head
13	Utkarsh	Support /Training	1	Procedures and Policies	Risk Manager
14	Anviti	Content Developer	1	Support Documentation	Required Documentation

Hereby attached are the resumes of prime staff members from Appointy who will be working on the project:

1. Sarang Verma
2. Nemesh Singh
3. Khushal Patel
4. Pavan Shukla
5. Sri Krishna Paritala
6. Akshay Gupta

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PROPOSED STAFF RESUME FOR RFP 3516

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	**Appointy Software Inc**

Check the appropriate box if the proposed individual is prime contractor staff or subcontractor staff.			
Contractor:	✓	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.			
Name:	**Sarang Verma**	**Key Personnel: (Yes/No)**	**Yes**
Classification; i.e., Project Manager, Implementation Lead, etc.	**Project Manager**		
# of Years in Classification:	10	**# of Years with Firm:**	4

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

Company Name	**Years**	**Title**
E&Y-Lead Advisory (M&A)	2007-2012	Associate Vice President
Bhopal Autographic Engineering	2012-2013	Director
Appointy	2014-till date	COO and Co-Founder

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the project/position and software/hardware used during the project engagement.

Position Title	**Company Name**	**Company Location**	**Timeframe**
COO	Appointy	Milpitas, USA	2014-Ongoing
Project Manager	Telefonica	Spain	2017-2018
Project Manager	Google	Sunnyvale, USA	Nov-Ongoing

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REFERENCES

A minimum of three (3) references are required, including name, phone number, fax number and email address.

Name	**Phone Number**	**Email Address**
Jesus Montiel Maillo	+34676310741	jmontielmaillo@gmail.com
Ricardo Bendavez	+1-4082050602	benavidez@google.com
John Cummings	+1-301-975-8117	cumings@umd.edu

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PROPOSED STAFF RESUME FOR RFP 3516

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	**Appointy Software Inc**

Check the appropriate box if the proposed individual is prime contractor staff or subcontractor staff.			
Contractor:	✓	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.			
Name:	**Nemesh Singh**	**Key Personnel: (Yes/No)**	**Yes**
Classification; i.e., Project Manager, Implementation Lead, etc.	**Technical Lead**		
# of Years in Classification:	10	**# of Years with Firm:**	8

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

Xtreme Heights

Company Name	**Years**	**Title**
Freelancer	2001-2005	-
Xtreme Heights	2005-2015	Founder and CEO
Appointy	2009-till date	Founder and CEO

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the project/position and software/hardware used during the project engagement.

Position Title	**Company Name**	**Company Location**	**Timeframe**
CEO	Appointy	Milpitas, USA	2009-Ongoing
Technical Consultant	Telefonica	Spain	2017-2018
Technical Lead	Google	Sunnyvale, USA	Nov-Ongoing

EDUCATION
Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

Institute Name	City	State	Date Completed
Oriental Institute of Technology	Bhopal	Madhya Pradesh	1997-2001

HARDWARE/SOFTWARE SUMMARY (BE SPECIFIC)
Information required should include: environments, hardware, software, tools and databases.

Technologies (Hardware and Software) Worked On:

- Web Servers:
  - IIS, Nginx, Apache
- Database Servers:
  - MS SQL, Mysql
- Cloud Platforms
  - Microsoft Azure
  - Amazon Web Services.
  - Google Cloud
- Directory Management
  - Active Directory, Openldap
- Kubernetes
- Docker
- Application Security
- Security Compliance

REFERENCES
A minimum of three (3) references are required, including name, phone number, fax number and email address.

Name	Phone Number	Email Address
Prasanna Krishnamoorthy	+91 9448353940	prasanna@upekkha.in
Laxman Papeneni	+91 99630 29471	lax@appvirality.com
Kolja Leo	+49 151 11 303 351	Kl@cl-krankenpflege.de

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PROPOSED STAFF RESUME FOR RFP 3516

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	**Appointy Software Inc.**

Check the appropriate box if the proposed individual is prime contractor staff or subcontractor staff.			
Contractor:	✓	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.			
Name:	**Khushal Patel**	**Key Personnel: (Yes/No)**	**Yes**
Classification; i.e., Project Manager, Implementation Lead, etc.	**Implementation Lead**		
# of Years in Classification:	5	**# of Years with Firm:**	8

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

Company Name	**Years**	**Title**
People's Group	2002-2004	Software Developer
Xtreme Heights	2005-2015	CTO
Appointy	2009-till date	CTO

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the project/position and software/hardware used during the project engagement.

Position Title	**Company Name**	**Company Location**	**Timeframe**
CTO	Appointy	USA	2009-Till date
Development Head	Telefonica	Spain	2017-2018

EDUCATION

Information required should include: institution name, city, state,

degree and/or Achievement and date completed/received.

Institution Name	City	State	Degree	Year
Barkatullah university	Bhopal	Madhya Pradesh, India	B.Com	2003-2007
Rajiv Gandhi Prodyogiki Vishwavidyalaya	Bhopal	Madhya Pradesh, India	MCA	2008

CERTIFICATIONS

Information required should include: type of certification and date completed/received.

S.No	Title	Year Completed
1	GNIIT from NIIT	1999-2001

HARDWARE/SOFTWARE SUMMARY (BE SPECIFIC)

Information required should include: environments, hardware, software, tools and databases.

Technologies (Hardware and Software) Worked On:

- Extensive Work Experience in Microsoft Stack
- Design and develop technical architecture of high performing and scalable applications.
- Web Servers:
  - IIS, Nginx
- Database:
  - MS SQL, MySQL, Redis
- Cloud Platforms
  - Microsoft Azure
  - Amazon Web Services.
  - Google Cloud
- Kubernetes
- Docker
- Language and frameworks expertise in:
  - C#
  - VB.Net
  - Xamarin
  - Jquery
  - Javascript
  - AngularJS

    - HTML/CSS
- Expertise in the following frameworks
- Application Security
    - Web Firewalls
- Server Security.
    - Hardening
- Web and application Security Compliance.

REFERENCES

A minimum of three (3) references are required, including name, phone number, fax number and email address.

Name	**Phone Number**	**Email Address**
Laxman Papeneni	+91 99630 29471	lax@appvirality.com
Kolja Leo	+49 151 11 303 351	Kl@cl-krankenpflege.de
John Cummings	+1-301-975-8117	cumings@umd.edu

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PROPOSED STAFF RESUME FOR RFP 3516

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	**Appointy Software Inc**

Check the appropriate box if the proposed individual is prime contractor staff or subcontractor staff.			
Contractor:	✓	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.			
Name:	**Sri Krishna Paritala**	**Key Personnel: (Yes/No)**	**Yes**
Classification; i.e., Project Manager, Implementation Lead, etc.	**Product Developer**		
# of Years in Classification:	1	**# of Years with Firm:**	1

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE
Information should include a brief summary of the proposed individual's professional experience.

Company Name	Years	Title
Appointy	2017-till date	Product Developer

RELEVANT EXPERIENCE
Information required should include: timeframe, company name, company location, position title held during the term of the project/position and software/hardware used during the project engagement.

Position Title	Company Name	Company Location	Timeframe
Product Developer	Telefonica	Spain	2017-2018
Product Developer	Google	Sunnyvale, USA	Nov-Ongoing

EDUCATION
Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

Institution Name	City	State	Degree	Year
Maulana Azad National Institute of Technology	Bhopal	Madhya Pradesh, India	B.Tech	2013-2017

HARDWARE/SOFTWARE SUMMARY (BE SPECIFIC)
Information required should include: environments, hardware, software, tools and databases.

Technologies (Hardware and Software) Worked On:

- Designing technical architecture of efficient, robust and scalable applications.
- Database:
  - PostgresQL, MySQL, Redis
- Cloud Platforms
  - Microsoft Azure
  - Google Cloud
- Expertise in the following Language and frameworks:
  - Web Development
    - Go (std)
    - Spring (Java, Kotlin)
    - .Net Stack (.Net Core, .Net Framework, Mono, C#, F#)
  - Mobile
    - Unity (Cross Platform, C#)
    - Xamarin (Cross Platform, C#)
    - iOS (Swift)
    - Android (Java, Kotlin)
  - Desktop
    - Cocoa (Swift)
    - Swing (Java)
    - JavaFX (Java)
    - Windows Forms (C#)
    - Windows Presentation Foundation (WPF)
  - Embedded Systems (Rust, C\C++)
  - Systems Programming (Rust, C\C++)
  - Machine Learning and AI
    - Tensorflow (C/C++, Python)
  - Graphics Programming
    - OpenGL
    - Vulkan
    - Metal
    - ShaderLab
  - Distributed Systems
    - gRPC (Go, C#)
    - Akka.Net (C#)

        - Container Orchestration (Kubernetes, Service Fabric, Docker Swarm)
    - Other Programming/Scripting Languages
        - Scala
        - Dart
        - Haskell
        - TypeScript
        - Common Lisp
- Expertise in the following design and architectural patterns
    - Onion Architecture
    - Domain Driven Design
    - Object Oriented Design
    - Microservice Architecture
    - Concurrent Systems Design
    - Asynchronous Programming
    - Distributed & Decentralised Systems
- Experience in the following development methodologies/technologies/environments
    - Test Driven Development (TDD)
    - DevOps - Continuous Integration/ Continuous Deployment (CI/CD)
- Expertise in the following fields
    - Web application Security.
    - OpenID Connect and OAuth 2.0 Standards.
- Experience with the following tools/build frameworks
    - Jenkins - CI/CD
    - Gulp - Build System
    - Git - Version Control
    - Pprof - Application Profiling (Go, C++)
    - IDEs (Jetbrains Suite, Visual Studio, Visual Studio Code, Sublime)

REFERENCES

A minimum of three (3) references are required, including name, phone number, fax number and email address.

Name	**Phone Number**	**Email Address**
Bharath Gundala	+91 (964) 488-6292	gundalabharath@gmail.com
Srikar Meka	+1 (815) 593-6102	srikarmeka@gmail.com
Nikhil Mukka	+97 (155) 636-9536	nikhilmukka1@gmail.com

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PROPOSED STAFF RESUME FOR RFP 3516

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	**Appointy Software Inc**

Check the appropriate box if the proposed individual is prime contractor staff or subcontractor staff.			
Contractor:	✓	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.			
Name:	**Pavan Shukla**	**Key Personnel: (Yes/No)**	**Yes**
Classification; i.e., Project Manager, Implementation Lead, etc.	**Server Administrator**		
# of Years in Classification:	1	**# of Years with Firm:**	1

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

Company Name	**Years**	**Title**
ITE Bhopal, India	2016-'17	Server Support Engineer
Appointy	2017-till date	Associate, Server Support Engineer

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the project/position and software/hardware used during the project engagement.

Position Title	**Company Name**	**Company Location**	**Timeframe**	**Technology Used**
Server Manager	Telefonica	Spain	2017-2018	Active Directory SQL Database

EDUCATION

Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

Institution Name	City	State	Degree	Year
Rajiv Gandhi Proudyogiki Mahavidyalaya	Bhopal	MP	BE	2013-2017

CERTIFICATIONS
Information required should include: type of certification and date completed/received.

S.No	Title	Year Completed
1	RHCSA (EX200)	2016-2017
2	RHCE (EX300)	2016-2017
3	RHCVA (EX318)	2016-2017
4	RH Expertise in Server Hardening (EX413)	2016-2017
5	RH Expertise in Enterprise Linux Diagnostics and Troubleshooting (EX 342)	2017-2018
6	RH Expertise in Openstack Administratration (EX210)	2017-2018

HARDWARE/SOFTWARE SUMMARY (BE SPECIFIC)
Information required should include: environments, hardware, software, tools and databases.

Technologies (Hardware and Software) Worked On:

- Work Experience in Red Hat Enterprise Linux
- Web Servers:
  - IIS, Nginx, Apache
- Database Servers:
  - MS SQL, Mysql
- Cloud Platforms
  - Microsoft Azure
  - Amazon Web Services.
  - Google Cloud
- Mail Servers:
  - Zimbra, Postfix
- Directory Management
  - Active Directory, Open LDAP

- Kubernetes
- Docker
- Application Security
    - Web Firewalls.
- Server Security.
    - Hardening
- Security Compliance.

REFERENCES

A minimum of three (3) references are required, including name, phone number, fax number and email address.

Name	Phone Number	Email Address
Hemraj Singh Chouhan	+91-9981511646	hschouhan@gmail.com
Akshay Raja	+44-7933678244	akshay.raja@ymail.com
Jaydeep Singh	+974-33845960	j4jaideep@gmail.com

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PROPOSED STAFF RESUME FOR RFP 3516

A resume must be completed for all proposed prime contractor staff and proposed subcontractor staff.

Company Name Submitting Proposal:	**Appointy Software Inc**

Check the appropriate box if the proposed individual is prime contractor staff or subcontractor staff.			
Contractor:	✓	**Subcontractor:**	

The following information requested pertains to the individual being proposed for this project.			
Name:	**Akshay Gupta**	**Key Personnel: (Yes/No)**	**Yes**
Classification; i.e., Project Manager, Implementation Lead, etc.	**Project Documentation**		
# of Years in Classification:	1	**# of Years with Firm:**	1

BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE

Information should include a brief summary of the proposed individual's professional experience.

Company Name	**Years**	**Title**
Appointy	2015-'16	Intern
Appointy	2017-till date	Associate, Sales Development

RELEVANT EXPERIENCE

Information required should include: timeframe, company name, company location, position title held during the term of the project/position and software/hardware used during the project engagement.

Position Title	**Company Name**	**Company Location**	**Timeframe**
Project Documentation	Telefonica	Spain	2017-2018
Project Documentation	Google	Sunnyvale, USA	Nov-Ongoing

EDUCATION

Information required should include: institution name, city, state, degree and/or Achievement and date completed/received.

Institution Name	City	State	Degree	Year
Maulana Azad National Institute of Technology	Bhopal	Madhya Pradesh, India	B.Tech	2013-'17

REFERENCES

A minimum of three (3) references are required, including name, phone number, fax number and email address.

Name	Phone Number	Email Address
Pratik Ranjan Verma	+91-8236852038	abm14008@iiml.ac.in
Himanshu Rai	+91-9407872393	himanshu.rai@incture.com
Adarsh Chandrashekar	+91-9617034532	adarsh.chandrashekhar@incture.com

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Section IX: Preliminary Project Plan

Our preliminary project plan is outlined on the following:

Project Specification and Contract:

- **Statement Of Work**
  It will include mutually agreed project-specific activities, deliverables and timelines. It will also include the terms and conditions.
- **Project specification sheet**
  It will include design architecture, wireframes, user stories, functionality definition, case scenarios, booking rules and flow, user definitions and rights detail, integration scope, reports detail, billing medium etc
- **Signing of contracts**
  After mutual approval on project specification and statement of work, contract will be signed and work will begin.

Resource Assignment:

The following resources have been identified and will be assigned to the project. A tentative time allocation is also indicated as per our understanding of the scope of work.

Job Resource Title	Proposed Head Counts	Total Proposed Hours
Senior Management (SM)	2	400
Senior Developer (SD)	3	600
Junior Developer (JD)	3	1000
Testing Team (TT)	2	400
Setup and Configuration Team (SCT)	2	200
Training and Support Team (TST)	2	200
Total	14	2800

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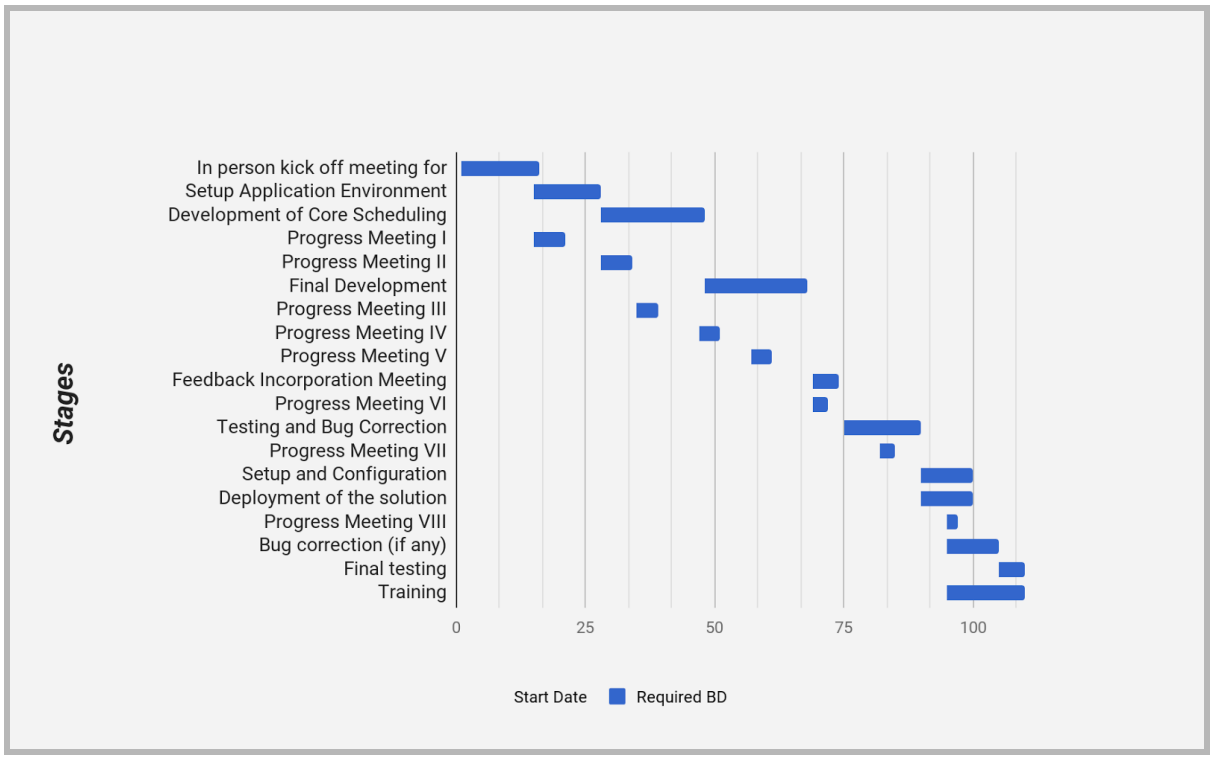
Project Timeline:

The complete development, deployment and testing of the software will take 110 BD.
Core scheduling development will be complete by 48 BD , final development by 68 BD and deployment by 100 BD. It includes 8 progress meetings (approx, twice every month).
The project timeline is after the contract has been signed.



Project timeline

Stages:	Start Date	BD Required	End Date
In person kick off meeting for Business Blueprint To discuss the development stages, designs, use cases and functional requirements.	1	15	15

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Setup Application Development and Testing Environment	15	13	28
Development of Core Scheduling: Includes Functionality from requirements matrix (Scheduling module, leave management module, business rules module, notification module, attendance tracking, etc)	28	20	48
Progress Meeting I: To discuss the development progress of phase 1 (till date) and take feedback.	15	6	21
Progress Meeting II: To discuss the development progress of phase 2	28	6	34
Final Development: Complete development of requirements includes integration with NEATS, LDAP, reports etc	48	20	68
Progress Meeting III: To discuss the development progress of phase II (till date).	35	4	39
Progress Meeting IV: To discuss the overall development, possible improvements and testing stages.	47	4	51
Progress Meeting V: To discuss the overall development, possible improvements and testing stages.	57	4	61
Feedback Incorporation Meeting To incorporate changes from the last meeting (if any).	69	5	74
Progress Meeting VI	69	3	72
Testing and Bug Correction: User Accessibility Testing To test the development and carry out bug corrections.	75	15	90

Progress Meeting VII: Delivery of required documentation	82	3	85
Setup and Configuration: The account and solution is configured as per your requirement from NDOC.	90	10	100
Deployment of the solution	90	10	100
Progress Meeting VIII:	95	2	97
Bug correction (if any)	95	10	105
Final testing	105	5	110
Training: Documentation and videos are shared, web based training is provided.	95	15	110

Detailed project timeline and deliverables have been specified in Project Management Plan in subsequent phases.

Project management

Project plan:

- **Effective staffing**
  - A detailed document clearly outlining the roles required in the project and skills associated with these roles will be drafted.
  - Designated staff will be assigned to these roles in accordance to their relevant knowledge, skills, and abilities.
  - For each designated staff, the objectives, end goals, and next steps will be mentioned for all tasks in the project planning stage.
- **Scrum within the Agile framework**
  - A cross functional team will be formed with defined timeboxes.
  - Sprint Master and Product Lead will be assigned.
  - Backlog list, objectives and timeframes will be created.
  - All MoMs, short iterations and early wins will be documented and shared.
- **Coordination**
  - **Decision making hieharchy**

        - Team structure will be divided into multiple layers, with each layer consisting well defined roles. This will ensure an organisational structure which is vertically deep and horizontally broad.
    - **Communication plan**
        - A well defined interaction/discussion plan will be provided with

Quality Assurance

- **Bench testing**
  Developed application modules will be compared and tested wrt industry standard.
- **Functional Testing**
  Developed functional modules will be tested both:
    - Manually by testers
    - Automatically by softwares.
- **Load Testing**
  Load range (max/min) will be calculated and continuous testing will be carried out to understand application behaviour.
- **UAT**
  The software will be released for the key stakeholders to make sure it can handle required tasks in real-world scenarios, according to specifications
- **Beta Testing**
  The developed solution will be released for select few location/post for real situation testing.

Metrics management

- **Planned effort vs actual effort**
    - Actual effort metrics is documented and shared.
    - Variance (schedule/effort/resources) is calculated by predefined performance metrics.
- **Productivity metric**
    - Predefined productivity measurements will be defined and shared.
    - Productivity monitoring team will be created. Project Manager will lead the team.
- **Number of days ahead/ behind schedule**
    - Progress reports including productivity analysis will be shared periodically.

Design & development process

- **Development & analysis of alternatives/ requirements**
    - All possible alternatives will be identified for the development requirements.
    - Required information will be furnished for the selected option.
    - Development list will be created and shared.
- **User interaction diagrams/ planning**

    - Stakeholders roles, usage and touch points will be discussed and documented in a flow diagrams and interaction plans.
- **User roles specification**
    - Required user roles will be discussed and defined and specific roles and rights will be granted.
- **User journeys**
    - User journey will be drafted as per discussion and review of the scheduling process in business blueprint.
- **Mock system design (Wireframes)**
    - Sample Screen Designs and wireframes will be created and shared for approval.
    - Approved screen designs/ wireframes
- **API/ Database design**
    - Documentation of API and database structure will be shared with you for technical review.
- **Complete SRS**
    - Software Requirements Specification will created and shared for approval.
    - It will include all functional and non-functional requirements as stated by the State, with user roles, sample screen designs

Configuration management

- Configuration Management plan will be created which includes
    - Configuration identification
    - Team
    - Timelines
    - Resources
    - Dependencies
- Configuration identification, accounting and validation process are defined.
- Configuration validation and audit is carried out.

Peer review management:

- **Walkthrough and Technical Review Process:**
    - A team of technical and non-technical company staff (5-6 members) will be created.
    - Review team lead and project consultant will be assigned.
    - Software review plan and process is created which includes discussion on the following:
        - Technical Architecture
        - Possible errors
        - Development standards

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Project Software tools

Software	**Utility**
GIT	Version Control, Tracking of changes
NPM, Gulp, Docker	Automation Tools
GIT + JENKINS	Build and Release Management
Docker	Containers
Kubernetes	Orchestration of Docker Images
Visual Studio, Jetbrains Suite of IDEs	Development

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Section X. Requirements Matrix

1.	The application must be fast.

	The proposed solution will be based on industry leading technologies and architectural patterns:
	1. *Presentation Layer*
	  a. *HTML5, CSS (Sass, Bootstrap) with Material Design Concept*
	  b. *Angular 5*
	2. *Application Logic Layer*
	  a. *.NET Core 2.0*
	  b. *MVC Architecture*
	
	In the proposed distributed architecture:
	● *Frequently accessed data will be cached at several levels (Web Clients, API) at each facility for maximum speed.*
	● *Communication will happen over efficient and fast binary protocol, HTTP/2.*
	● *Efficient data exchange and storage formats will be used, MessagePack, Protocol Buffers.*
	● *Inter service/process communication will happen through bandwidth efficient, high speed RPC framework, gRPC.*
	
	Our current off-the-shelf solution, with a 100MB/s network connection, has the following response time:
	1. *Typical case: Instant ～200 milliseconds*
	2. *Worst case: 1 second*

2.	Bandwidth friendly – LCC is currently limited to approx. 20 meg/sec for the entire facility.

	● *Proxy layer to access SQL Databases will allow to:*
	  ○ *Replace the high overhead SQL connection, with resource friendly binary protocol, HTTP/2.*
	  ○ *Handle large volumes of low memory connections to the proxy layer which in turn batches/coalesces queries over internal SQL connections.*
	  ○ *Cache database queries to return data instantly.*
	● *Data from other facilities will be efficiently synchronised on demand (Lazy Loading). Example:*
	  ○ *Users '1', '2' simultaneously request same data of facility 'A' from facility 'B'.*
	  ○ *User '3' requests same data after users '1' and '2'.*
	  ○ *The first two requests are coalesced into a single request to the facility 'A' and result is returned to both users. Data is also updated in the local database and local cache.*
	  ○ *The third user is returned data from cache limiting inter facility bandwidth usage.*

	• *For fine grained retrieval of data GraphQL can be leveraged to retrieve only the data that is needed effectively in a single request.*
3.	User Friendly.
	The proposed solution will follow material design concept developed by Google. Some of the key features that make the solution user friendly are: 1. ***Clear Language:*** *Optimal use of font, text size and language.* 2. ***Error Notifications:*** *Error notifications for incorrect data entries. Error messages are in red to enhance meaning.* 3. ***Automatic Validation:*** *Data Validation for all input fields, according to character type (numbers, letters etc.) and format. Eg: Only numerical entry allowed in Phone Number field.* 4. ***Headings:*** *Field names are easy to understand, with minimalistic language. Icons are provided with each field to enhance understandability.* 5. ***Loading Indicators:*** *Loading bar and Loading Spinners are used in processes which take human perceivable time.* 6. ***Menus:*** *Reduced data entry time by making use of drop-down menus.* 7. ***Speed:*** *Instantaneous display of drop-down options, robust animation and display of notifications.* 8. ***Minimum Clicks:*** *The UI is designed to complete the task in minimum number of clicks and character entries in total.* 9. ***Layout Accessibility:*** *Logical Structure and meaningful flow throughout the application.* 10. ***Hardware Accessibility:*** *No keyboard traps, and full accessibility through mouse or keyboard.* 11. ***Tooltip:*** *Small description messages appear when a cursor is positioned over an icon, image, hyperlink.* 12. ***Colour Contrast:*** *Contrasting colours used for various buttons, links and other Call to Actions.* 13. ***Compatibility with Accessibility Tools:*** *Supports various accessibility tools like Dragon, JAWS, Read and Write Gold, Zoomtext.*

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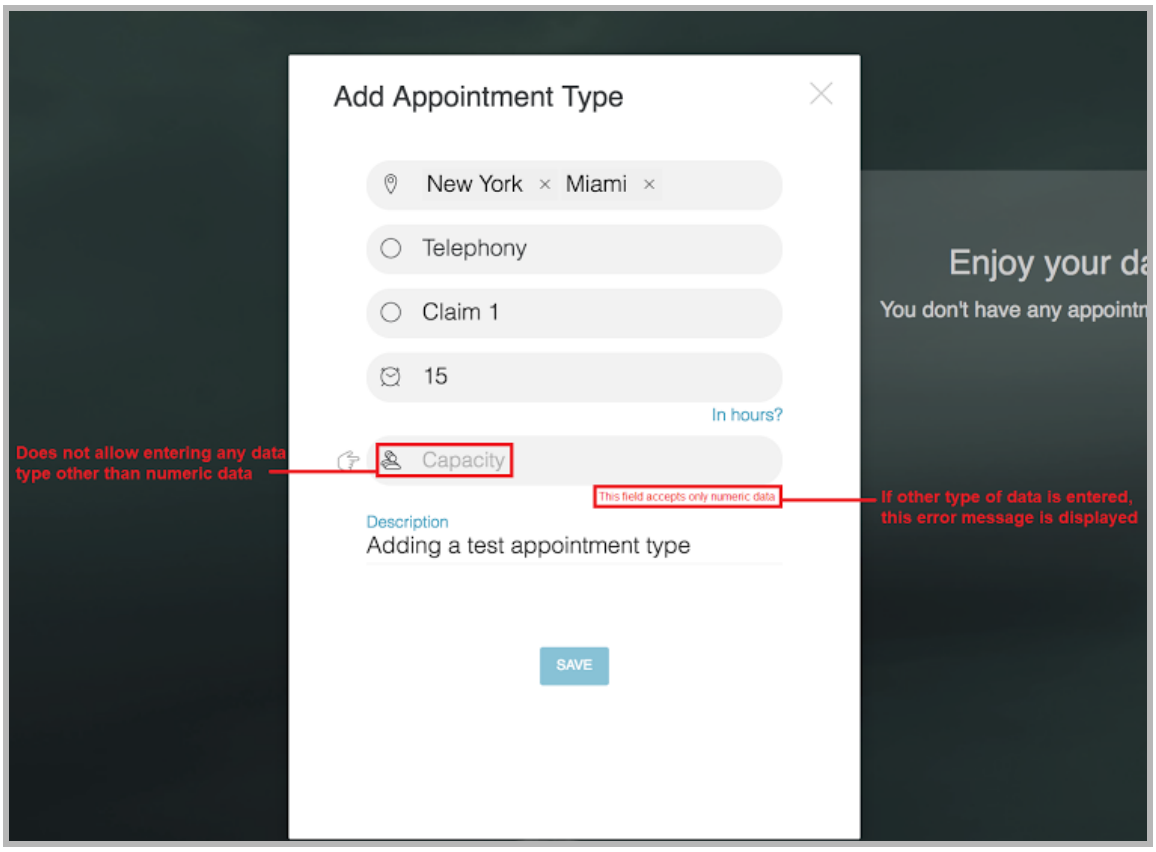
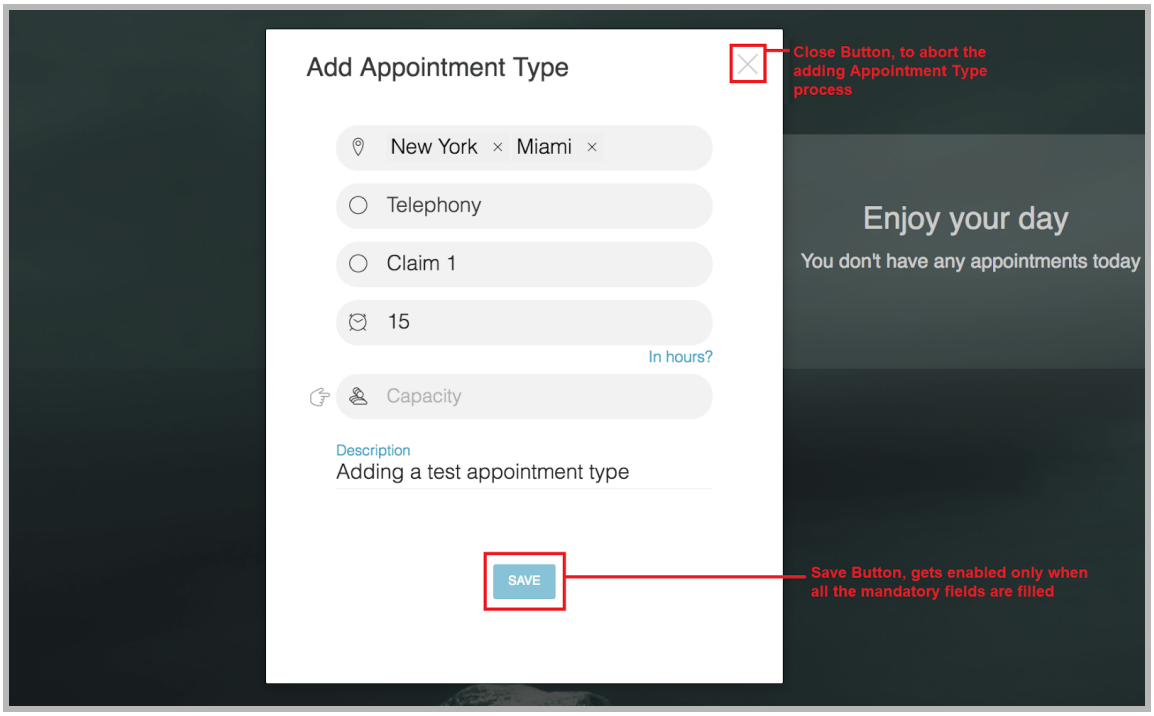
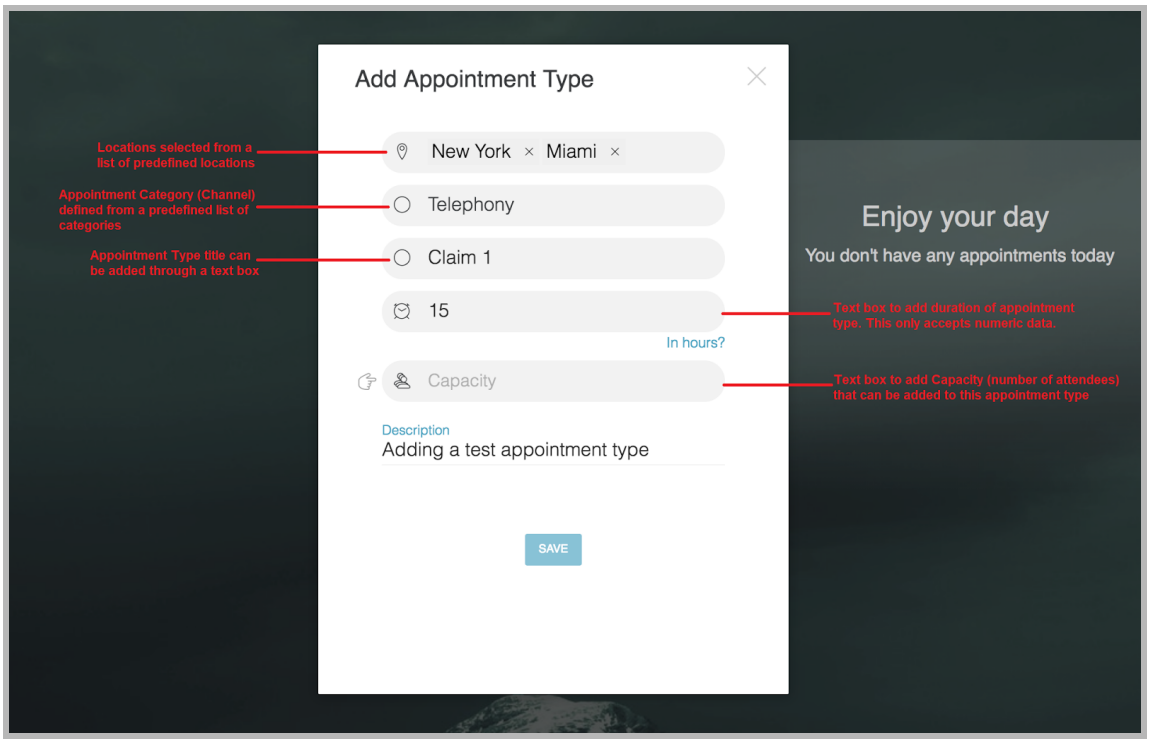
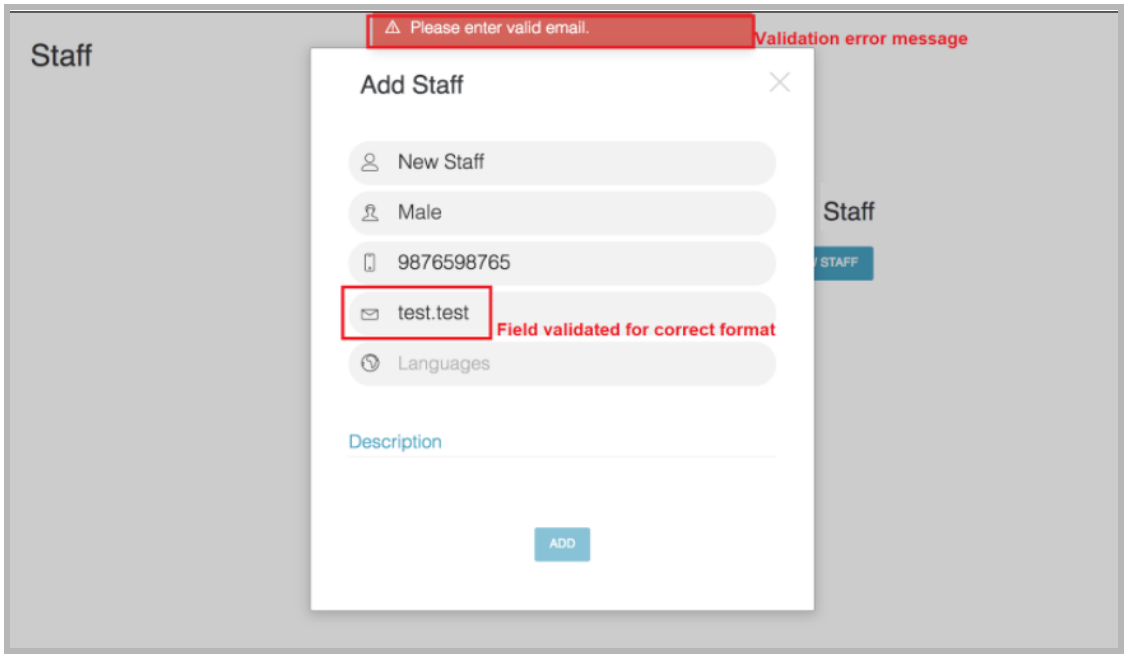
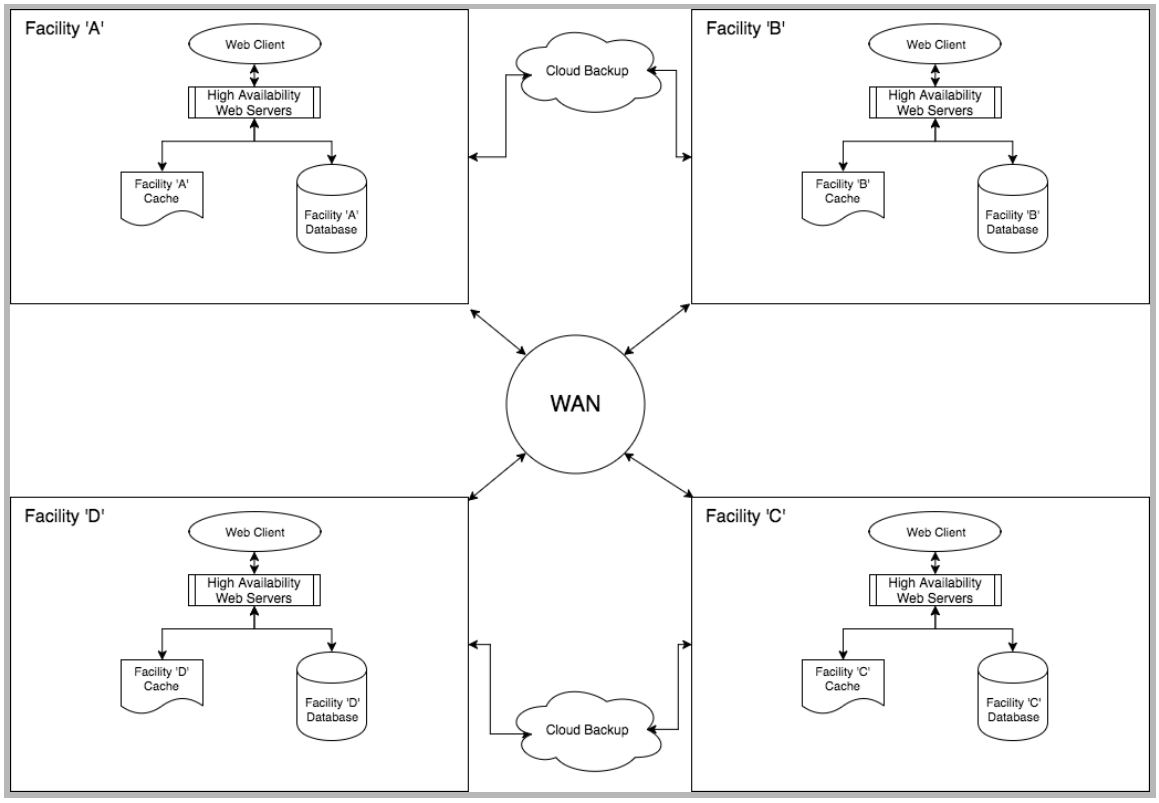
Some sample screenshots of our product are as follows:




Add Appointment Type
Close Button, to abort the adding Appointment Type process
New York × Miami ×
Telephony
Claim 1
15
In hours?
Capacity
Description
Adding a test appointment type
SAVE
Save Button, gets enabled only when all the mandatory fields are filled
Enjoy your day
You don't have any appointments today


Add Appointment Type
Locations selected from a list of predefined locations
New York × Miami ×
Appointment Category (Channel) defined from a predefined list of categories
Telephony
Appointment Type title can be added through a text box
Claim 1
15
Text box to add duration of appointment type. This only accepts numeric data.
In hours?
Capacity
Text box to add Capacity (number of attendees) that can be added to this appointment type
Description
Adding a test appointment type
SAVE
Enjoy your day
You don't have any appointments today

	
4.	Web Based.
	The proposed solution is a web-based solution which is a: 1. ***Progressive web app:*** *It is reliable, fast, loads instantly and provides an immersive user experience. It works even in uncertain network conditions.* 2. ***Responsive web app:*** *It provides an optimal viewing experience, is cross browser compatible and has minimal reliance on plugins and add-ons. All users can access complete functionality of the product across all devices (laptop, mobile, tablet, PC) through the web app.*



Proposed architecture diagram as per our current understanding

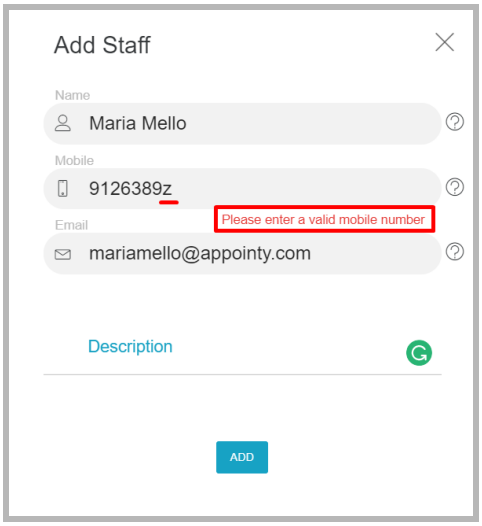
In the proposed architecture:

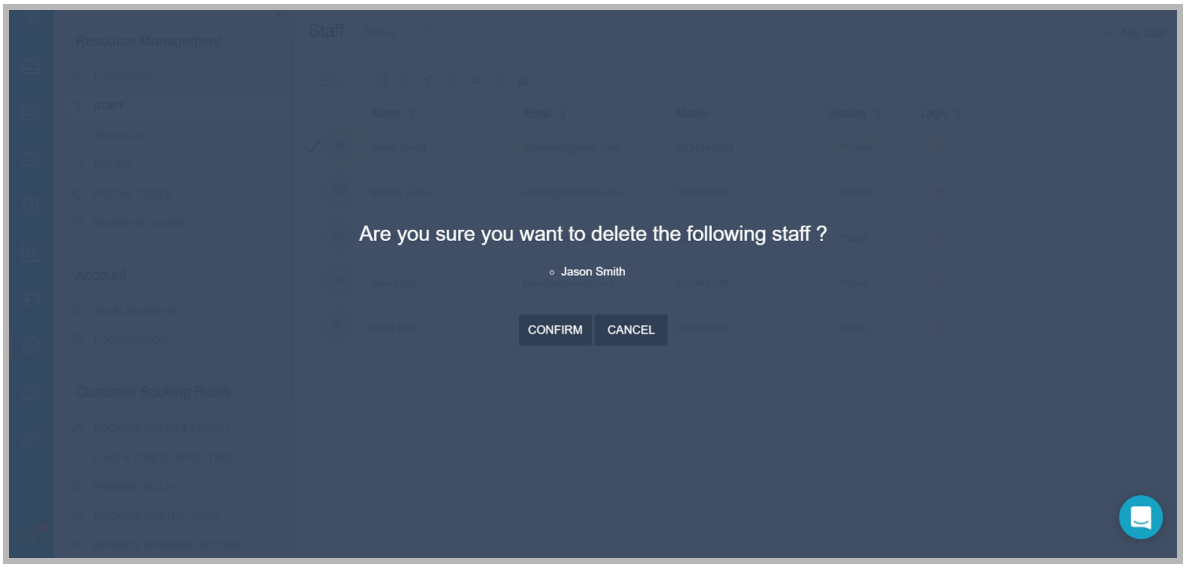
- *Each location will have its own database.*
- *Each location will have its own caching mechanism.*
- *Each location will have its own high availability web servers.*
- *Each location's web server intelligently routes traffic to appropriate location(s) when network connectivity is available.*
- *Each location's data will be periodically backed up in the cloud. Backups will be encrypted.*

Advantages:

- *Each location will function independent of failures in WAN, or failures in other locations.*
- *Immune to hardware failures with frequent backups in the cloud.*
- *Decentralised data ownership (i.e. each location alone owns its own data) increases the security of the application.*
- *Allows for rolling maintenance/updates with minimal downtime.*

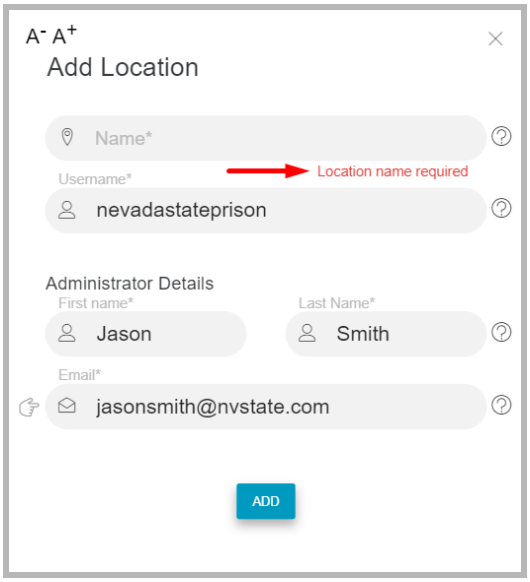
5.	Electronic supervisory file related statuses (limited access – Perf Cards, LOI, LOR) as it impacts assignment to specific post.

	Vendor to elaborate on authorization profiles w.r.t limiting access to disciplinary related statuses.
	The proposed solution will use a role based access control model (RBAC) for developing authorization profiles. *This allows us to grant or restrict access to various roles for areas like:* *1. Functionality* *2. Features* *3. Data - reports, information, etc.* *This also allows us to grant read or write access to resources and features.* *Partial access can also be granted to a user role.* *For example: Access to reports* *1. Global admins have access to all reports across facilities.* *2. Local admins have access to all reports only in their facility.* *Our proposed solution will allow developing customized roles and authorization profiles as per your use case.*
6.	Application issued pop-up warnings.
	The proposed solution will issue warnings and alerts in all cases when there is an erroneous validation and when important actions are performed within the system. *For example:* ***1. Wrong input format:***  ***Error message on invalid input*** ***2. Confirmation warning when deleting a staff:***



Warning pop-up to confirm a staff deletion

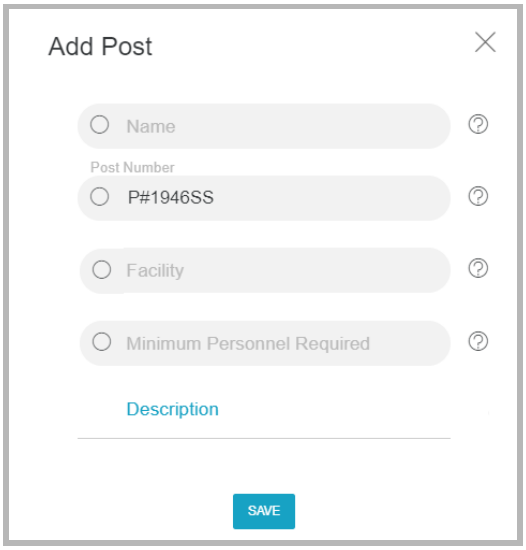
3. A field is left unfilled:



Error message when a field is left unfilled

7.	The ability to specify a hospital/off-site medical facility to which staff are conducting escorts and have the application prompt for a back/prisoner ID number.
	In case a staff is assigned to conduct escorts to the off-site medical facility, the system will require the following information: ● *Medical facility name* ● *Facility location*

	● *Inmate (prisoner) ID number* *All the above fields can be configured to be mandatory fields.* *Admin will be able to run report on medical facility scheduled for inmates.* ● *The report will enable the admin to filter it by medical facility name.* ● *This will allow admin to track inmate activity to the medical facility. The reports can also be sorted with respect to time.* ● *The system can also recommend which inmates can be tied together to optimise transportation cost.* *The system will need the back number to entered within the application. This will allow mapping the ID numbers to the staff and hospital transport. This will ensure more accurate cost tracking, especially in cases where overtime is required.*
8.	Posts need to be properly formatted into the new system for the hours that they are actually open (like unit 12 gun post, towers, gun rails etc.). Ability to edit post names, add/delete posts, maintain staffing patterns etc. When staff are not on an authorized post they show up on an available staff roster. This would help avoid the hiring of unnecessary overtime.
	Our system will allow defining the following with respect to posts: ● ***Create Post:*** *The system will allow creating new post and entering all the relevant details about the new post like:* ○ *Post name,* ○ *Post #,* ○ *Facility,* ○ *Minimum number of personnel required, etc.*

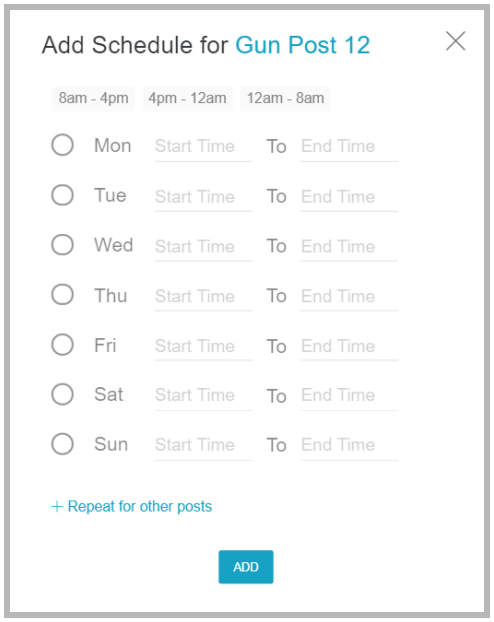


Sample Screen: Create new post

- ***Edit Post:*** *The system will allow defined user roles to modify all information related to a post.*
- ***Deactivate/ Delete post:*** *The system will deleting a post permanently. If required, the system can also be configured to deactivate a post for a defined time period.*

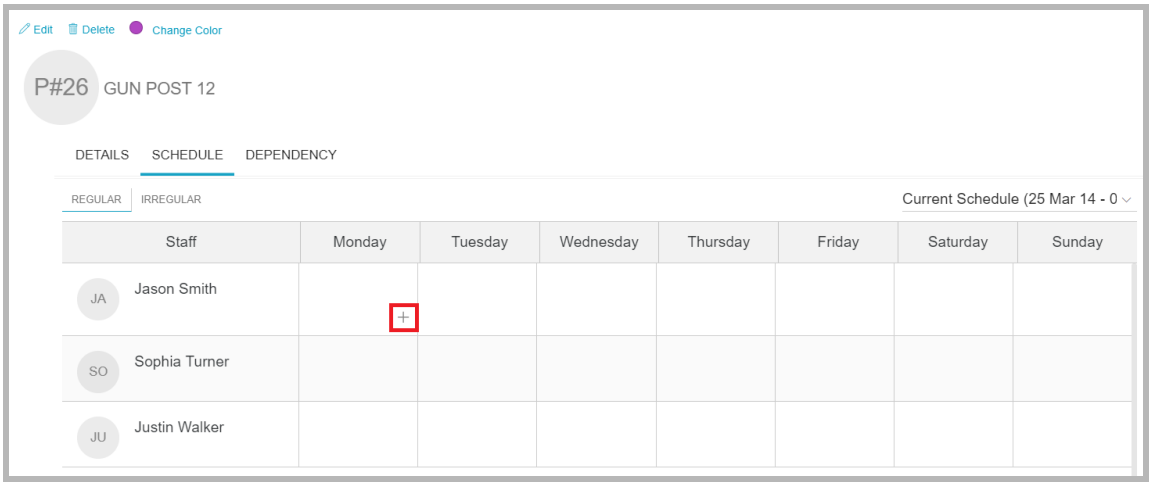
Sample Screen: Edit/ deactivate/ delete post

- ***Open hours of Post:*** *The system will allow adding 'open hours' of a post. This will define the hours when a post needs to have employees assigned to it. The open hours can be from any time to any time (custom set).*



Sample Screen: Open hours for a post

- ***Assign staff to posts:*** *Each post profile will also have an option to schedule staff at this post.*



Sample Screen: Assign schedule to staff for a post

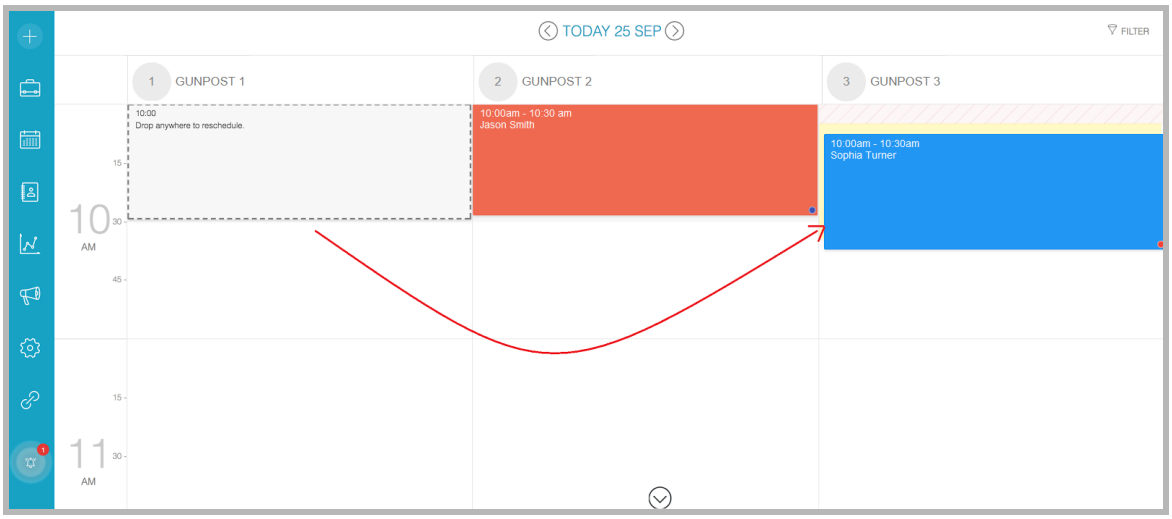
- *If required, the system can be configured to specify that the post cannot be left unassigned. If this option is enabled, the system will prompt a warning before publishing a roster to assign the post with the required number of staff members.*

- *All the available staff will be shown in the available staff roster. The staff can be dragged and dropped from the roster to a post's 'calendar'.*

9.	Time tracking event codes must be configured to match those in NEATS.
	Yes**, in our proposed solution time event codes will be matched to those in NEATS by the following methods:* ● ***Configurable Time tracking event codes in the system: *The Admin will have the right to configure time tracking event code from the admin interface to match those in NEATS.* ● ***Through API:*** *The system will pull the time tracking event codes from NEATS through an API. In case of any changes or a new time tracking event code is introduced, API will automatically update it in the proposed solution (subject to API availability).* *For example: USL = Sick Leave (employee sick leave), UFSL = Family Sick Leave (spouse, children, etc.) POT = Overtime Pay. PRT = Paid Regular Time will be matched in our proposed solution and NEATS both.*
10.	Application must be capable of monitoring rosters against the institution's defined minimum staff numbers, ability to run staff counts (total on duty in real time).

	Yes, our proposed solution will allow the following to proper monitoring and counting by the following:
	● *The system will allow admin to specify minimum staff numbers wrt to facility/location/department (as required by the institution).*
	● *Rosters can be created by the following:*
	  ○ *Automatic: The admin users will first define within the system, the sites where each staff can work. Once this linking is done, the system will intelligently map the available staff members to various required posts/ places, ensuring optimal allotment of shifts to all available staff.*
	  ○ *Manual: This will involve the NDOC admin users manually allocating various shifts to the available staff members.*
	● *Total number of staff counts*
	● *Before the final shift roster is published, the system will prompt the following:*
	  ○ *Warning if any post is not assigned with a staff*
	  ○ *Warning if minimum staff number is not maintained*
	
	To see real time statistics and data, the system will also provide the supervisors and other defined user roles with access to dashboards to view various metrics instantly.

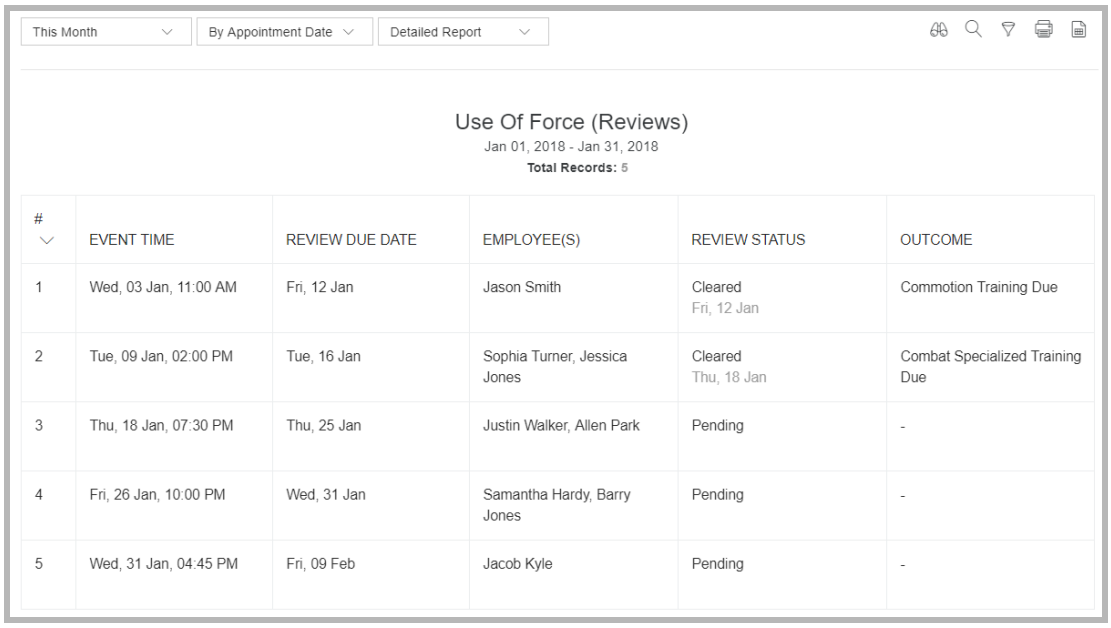
	 Sample Screen: Dashboard showing realtie understaffing level
11.	Identify minimum staffing daily.
	In our proposed solution, all the business rules will be defined within the system during the implementation stage itself. *The minimum staffing can depend on factors like:* *1. A ratio to the number of inmates* *2. A minimum number defined by NDOC* *3. A number calculated using minimum staffing level required at each post in a facility* *Once this logic has been established within the system, the system will identify the minimum staffing level and constantly monitor to maintain this minimum staffing level. The system in both the following cases, will notify the supervisors (and other required users):* *1. The scheduled staffing is below the minimum staffing level.* *2. The scheduled staffing exceeds the minimum staffing level.*
12.	Pop-up notification if current shift overtime hiring has put the facility above minimum staffing level.
	The proposed solution will make use of a trigger based notification system. The notification system will be configured in a way that it fires a notification in each of the following cases: *1. The current overtime shift hiring exceeds the minimum staffing level.* *2. The current shift hiring does not meet the minimum staffing level.* *The system will be configured in a way that the user will encounter this pop-up notification at the time of scheduling itself, to refrain the schedulers from over-hiring.*
13.	The ability to put multiple officers covering same post throughout shift and at the same time for e.g. OJT (on job training), emergency changes etc.

	Yes, our system will allow multiple staff to be assigned to the same post at the same time. ● *The system will display the names of all the staff that are assigned to the post.* ● *The system can also give a warning message if the minimum staff required are already assigned to a post. However, the admin/supervisor will have the ability to overrule the warning message.* ● *Each post will have a post capacity assigned to it.* ○ *This capacity can be overridden by supervisors for special case like OJT, emergency changes, etc.*
14.	Drag and drop feature to include off reservation assignments (Off-reservation implying on facility).
	Our current off-the-shelf product has the ability to drag and drop assignments from one resource to another. *The proposed solution too, will have a drag and drop feature, which will allow supervisors (and other required user roles) to move assignments from a resource to another in all cases, i.e.,:* 1. *One resource to another in the same facility* 2. *One resource in a facility to another resource in some other facility.*
15.	Ability to use drag and drop to post assignments or move employees to a new post.
	Our current off-the-shelf product allows moving assignments from one staff's calendar to another staff's calendar. *Similarly, the proposed solution will allow 'dragging-and-dropping' post assignments from one resource to another. The solution will also allow moving of employees from one post to another.*  **Sample Screen: Dragging and dropping a staff from one post to another**
16.	The ability to see 'Use of force' reviews that have not been completed (Date, and when cleared).

The proposed solution will allow generating reports on 'use of force' reviews.

The reports will contain all information about the 'use of force' incidents, including (but not limited to) the following:

1. *Date and time of 'use of force'*
2. *Employees involved*
3. *Review due date*
4. *Review receipt status: received/ not received*
5. *Review outcome*



This Month | By Appointment Date | Detailed Report

Use Of Force (Reviews)
Jan 01, 2018 - Jan 31, 2018
Total Records: 5

#	EVENT TIME	REVIEW DUE DATE	EMPLOYEE(S)	REVIEW STATUS	OUTCOME
1	Wed, 03 Jan, 11:00 AM	Fri, 12 Jan	Jason Smith	Cleared Fri, 12 Jan	Commotion Training Due
2	Tue, 09 Jan, 02:00 PM	Tue, 16 Jan	Sophia Turner, Jessica Jones	Cleared Thu, 18 Jan	Combat Specialized Training Due
3	Thu, 18 Jan, 07:30 PM	Thu, 25 Jan	Justin Walker, Allen Park	Pending	-
4	Fri, 26 Jan, 10:00 PM	Wed, 31 Jan	Samantha Hardy, Barry Jones	Pending	-
5	Wed, 31 Jan, 04:45 PM	Fri, 09 Feb	Jacob Kyle	Pending	-

Sample Screen: Use of Force reviews report

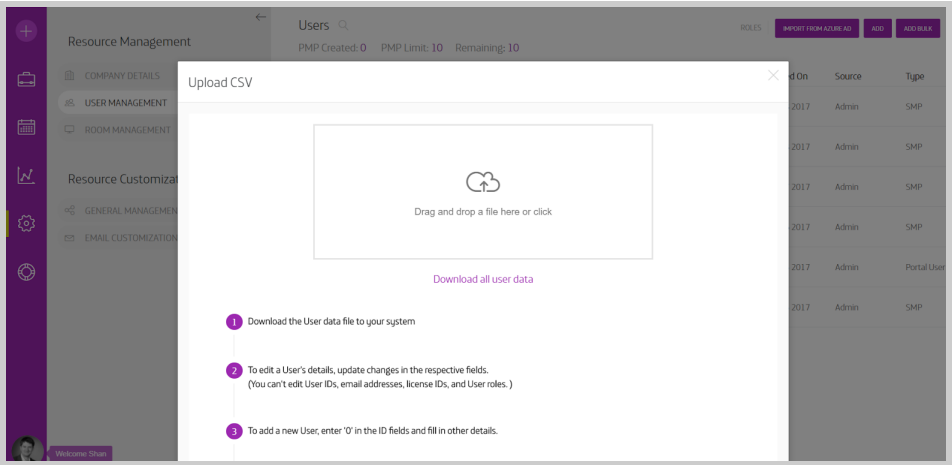
17. Allow facility administrators to track actual staffing expenses versus budgeted staffing expenses in real time.

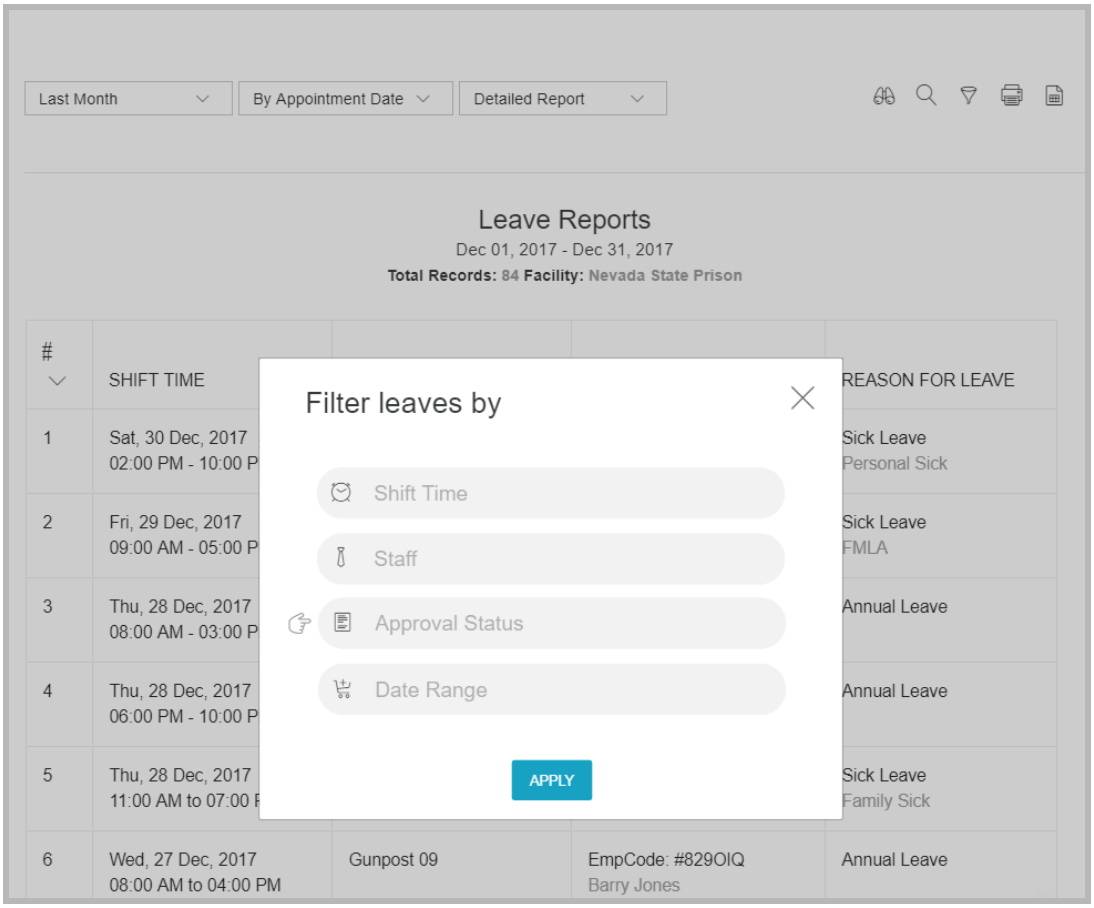
The administrator will be able to track the requirement by the following:

- *Admin will define the budgeted staffing expenses. Budgeted cost can be specified in the system by the following:*
  - *Enter the total budgeted staffing expenses*
  - *Integration with the Payroll system*
  - *Define the monthly pay against correctional officer or pay per shift hour. Monthly cost/ pay per shift will be used to calculate budgeted cost as per your case.*

  The system will calculate actual staffing expenses by adding budgeted staffing cost and overtime costs.
  - *Actual staffing expenses= Budgeted Cost + Overtime cost till date (due to absences) + Overtime cost till date (non-absences).*
  - *Overtime codes associated with time slots will be used to calculate time of*

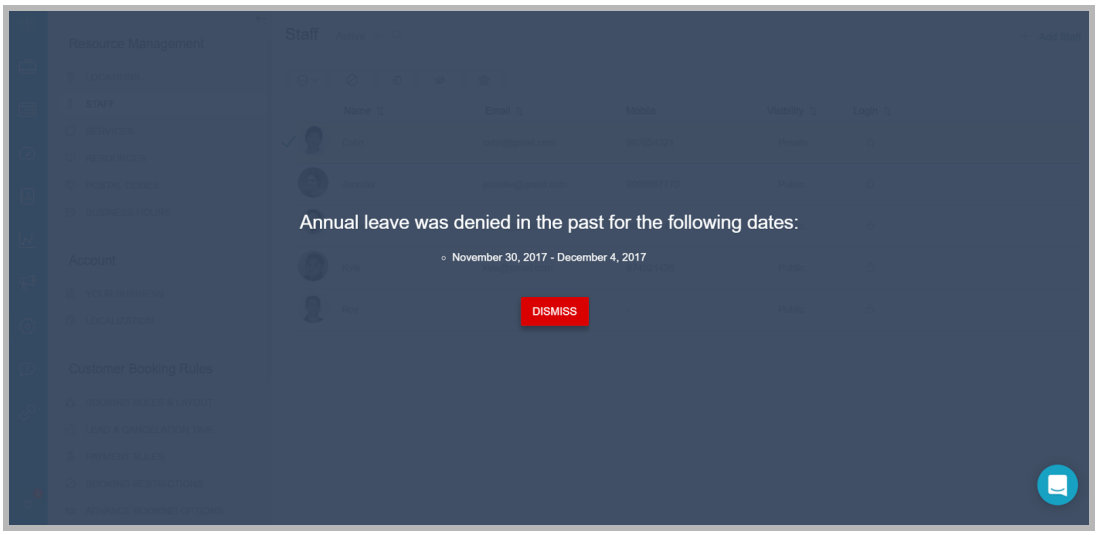
	overtime. ○ *The admin will have to specify avg overtime cost per hour or overtime cost per hour of each overtime code, to calculate the overtime cost.* *The facility administrators will be able to track actual staffing expenses vs budgeted staffing expenses in real time on a graph.*
18.	Integrate with NEATS for timesheet purposes. (Nice to have)
	Appointy uses RESTful API to pull and push data. All communication and cross functionality with NEATS will be supported (subject to API availability of NEATS). *The data can be transported in the following ways:* ● ***Real time:*** *Enables data transfer in real time.* ● ***Near real time:*** *Enables importing and exporting data at predefined time intervals (every X minutes).* ● ***Manually:*** *On an ad-hoc basis, through click of a button data.* *We have integrated several other APIs. Notable among them is the Cisco CMS API, Google Calendar, Square, Stripe, Outlook Calendar.* *If an API is not available for NEATS, data can be imported into the system in specific formats like:* ● *CSV* ● *Excel* ● *JSON* ● *XML* ● *BSON* ● *SQL* *Data can be also be exported in the above formats that can be integrated into the NEATS system, if supported.*
19.	Automatic integration of overtime, leave, etc. into timesheets (Nice to have).
	Integration of overtime, leave, etc. into timesheets can be done in real time via APIs. *Appointy uses HTTP API to push data. We integrated with various APIs like RESTful JSON API, SOAP API. Required information (as defined by the State) will be pushed to your APIs in real time to automate the integration.*
20.	Track leave annually (to include absent staff and off post option).
	The proposed solution will track leaves. The tracked leaves will be viewable for a week, month, year, or a custom date range.

	The system will show details like the following: *1. Date on which leave was applied* *2. Date(s) for which leave was applied* *3. Type of leave applied* *4. Number of leaves used by leave type* *5. Leave balance by leave type* *6. Absence reason*
21.	Import past leave history from NSIS.
	Data can be imported into the system by the following two ways: ● ***API Integration**:* ○ *Import data by integrating with the NSIS to make a one-time import of data from NSIS to the scheduling system.* ● ***Manually: File upload*** ○ *Upload files in predefined formats (like CSV) containing the data to be imported.*  **File Upload**
22.	Ability to see scheduled leave by shift, over a user-specified date range.
	The system will allow the supervisor to view scheduled leave by shift of all the staff in custom selected date range. ● *The supervisor will be able to run report on absence by staff and leave type.* ● *The supervisor will be able to advance schedule other staff in case of absence of assigned staff (reducing overtime cost).*



Sample Screen: Scheduled leaves filtered by shift, date, etc.

23.	Allow for automated annual leave bidding.
	The proposed solution will allow staff to bid for annual leaves. The staff members will be able to select a date range, type of leave, reason for leave, etc. and finally submit their leave bid(s). *The leave bids can be processed in two ways:* 1. ***Automatic:*** *The system will automatically process the leave bids on a first come, first served basis. While processing the leaves, the system will always keep a check on violation of other business rules.* 2. ***Manual:*** *When a staff bids for a leave, the leave bid is forwarded to supervisors (or other defined user roles) for approval. The supervisor will be able to see all the leave bids along with all the bid details. The supervisor can then approve or cancel a leave bid.*
24.	Application function - when sick leave is being entered, the application will provide a warning of prior denied annual leave request for the similar or overlapping dates.
	The system will allow the user to enter sick leave.

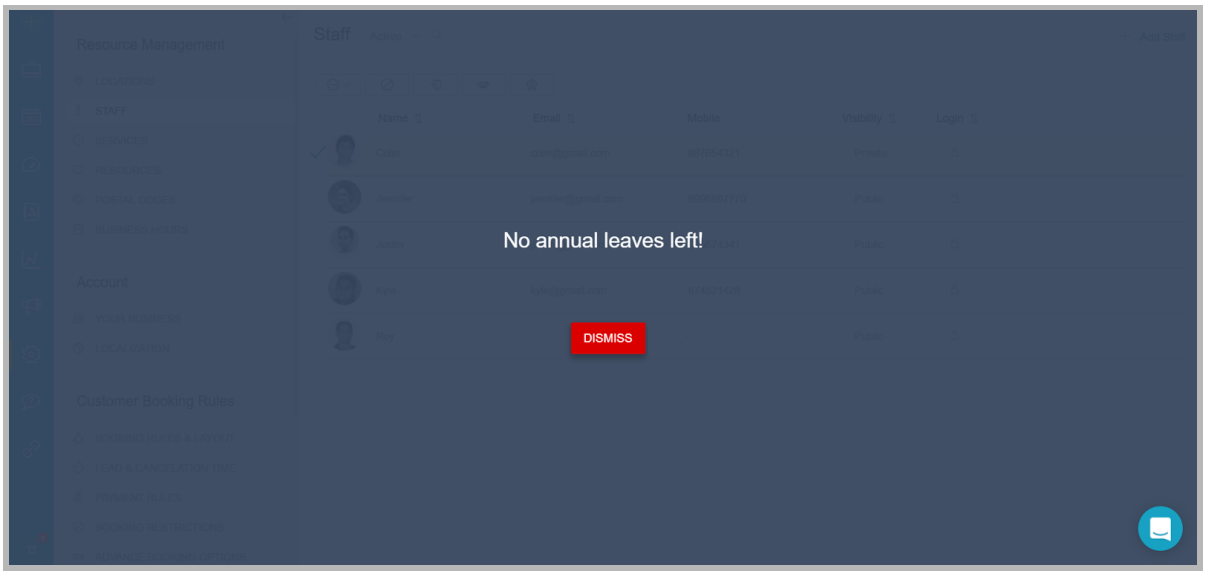
	● *If a leave is applied for a date for which the user has been denied of annual leave (similar or overlapping dates), the system will prompt the user with a warning message.* ● *The warning content will be customisable.* ● *The warning will not be a hard rule, and the system will allow the user to apply for a leave.*  **Sample Screen: Warning pop-up**
25.	Identify individuals who will be in a 'Use-it or lose-it' situation for annual leave.
	The proposed solution will maintain separately a list of all the annual leaves remaining (including 'use-it' or 'lose-it' leaves) for all staff. *At the time of shift scheduling, the system can also show alongside each staff the number of 'use-it or lose-it' leaves remaining for that staff. This will help the schedulers to plan optimally to meet all the staffing needs.* *Alternatively, the solution will also allow the schedulers to generate reports to retrieve data about annual leaves including 'use-it or lose-it' leaves with respect to the number of leaves left, number of days, etc.* *The system will obtain all the required data about the leaves from the Payroll system by:* 1. ***API Integration:*** *Import data by integrating with the Payroll system to import data in real time or as and when required, to the scheduling system.* 2. ***Manually:*** *Upload files in predefined formats (like CSV) containing the data to be imported.*
26.	Pop-up warning of low (or no) sick leave or annual leave.

The admin will first define within the system, the following:

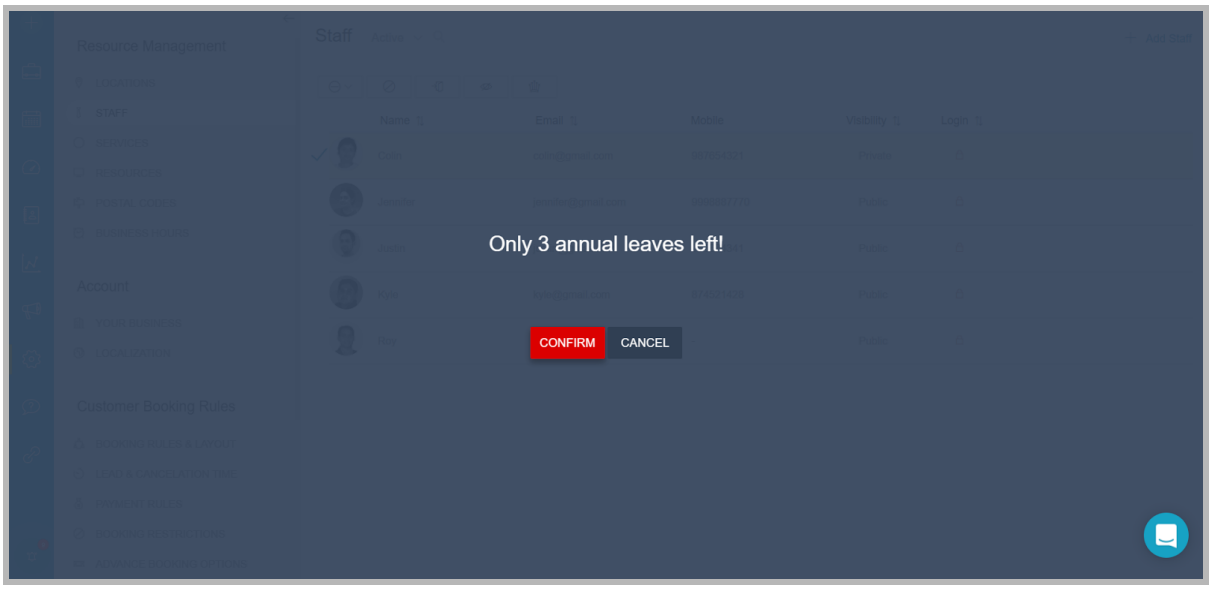
- *Number of permissible leaves per staff/department in a year.*
- *Number of low sick leave or annual leave.*

The system will prompt the user with a warning message on the screen in the following cases:

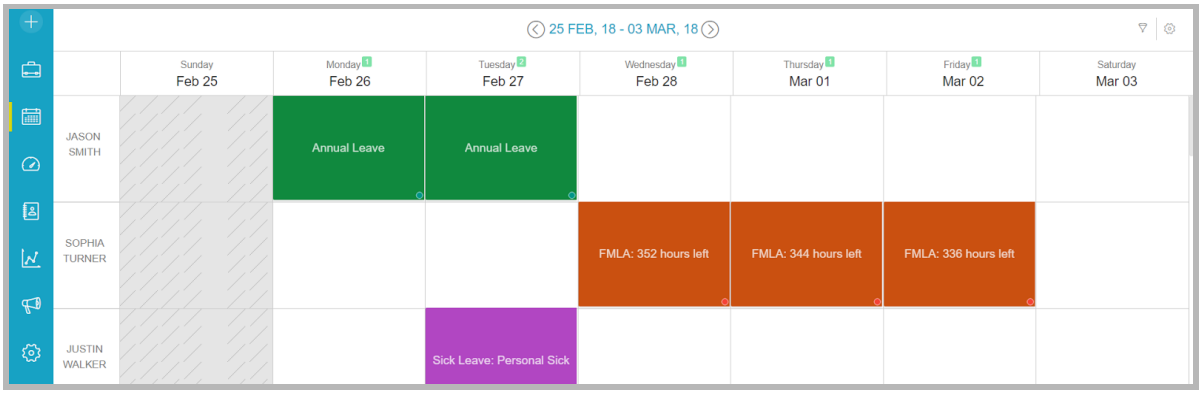
- *Low sick/annual leave*
- *No sick/annual leave*
  The system will also show (in real time) total annual/sick leaves available per user.



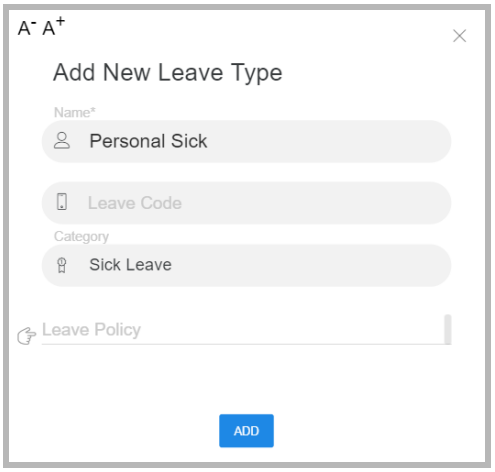
Sample Screen: No leaves left warning



Sample Screen: Only 3 leaves left warning

27.	Leave calendar that lists all leave for all shifts within a specified date range, on one screen/report.
	The proposed solution will house a 'leave calendar' which will show all the leaves that have been applied for by the employees. *The calendar will give options to switch to day view, week view and month view. Alternatively, the system will also allow users to enter a date range and display all the leaves in the specified date range.* *The calendar will also have options to apply filters to view leaves filtered by:* *1. Department,* *2. Role (designation),* *3. Facility, etc.* *The calendar can further be configured in a way that:* *1. Global administrators can see the leave calendar for all the facilities.* *2. Local administrators can see the leave calendar for only their facility.*  **Sample Screen: Leave Calendar**
28.	Ability to support processing of leave requests.
	The proposed solution will support processing of leave request as follows: ● *Users will have the ability to apply for leave from their dashboard.* ○ *User dashboard will show the following details:* ■ *Opening balance* ■ *Closing balance* ■ *Leaves Taken* ■ *Credited Balance* ○ *Users will fill in the following details before applying for a leave:* ■ *Date range* ■ *Leave reason from predefined list (Leave Reason Code)* *If the staff does not have sufficient leave balance, leaves can be applied under LWOP.*

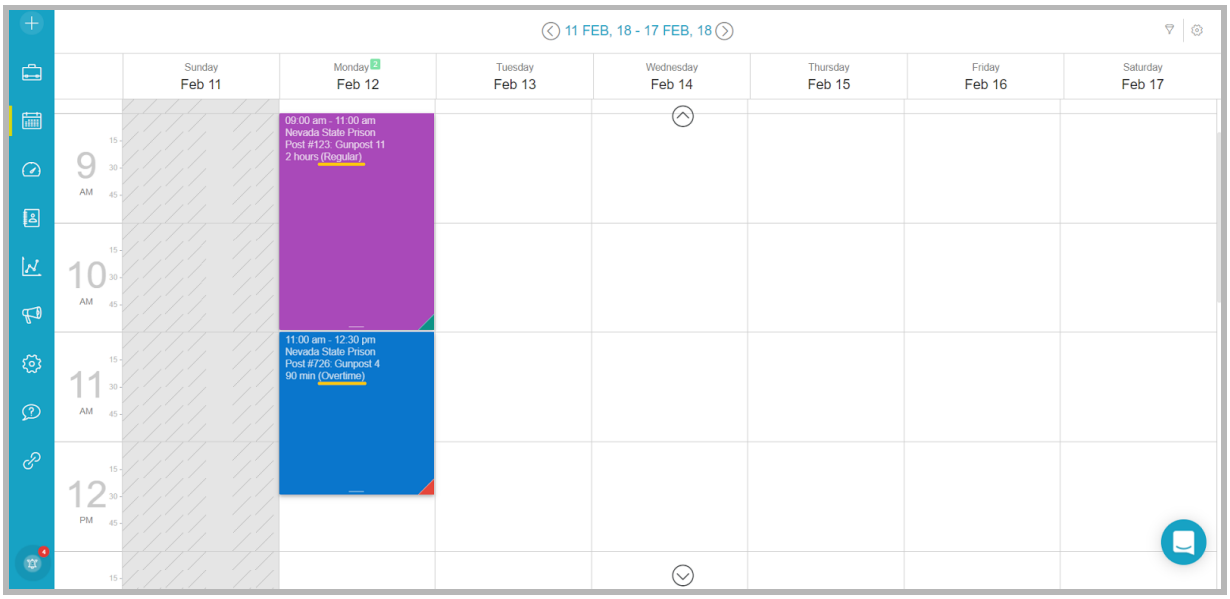
	● *The leave request will be forwarded to the assigned supervisor.* ○ *Status of report is shown in the staff dashboard as:* ■ *Pending, if no action is taken* ■ *Approved, if approved* ■ *Rejected, if rejected* ● *The supervisor will have the ability to accept or reject the leave request.* ○ *If the leave is accepted, the staff is informed by in-app/email notification. Leave is registered in the leave calendar.* ○ *If the leave is rejected, the staff is informed by in-app notification and emails.* ● *The supervisor can apply for leave on behalf of the staff, the leave is automatically approved and registered in the leave calendar.*
29.	Automated production of mandatory overtime lists.
	The State will have to define rules to create mandatory overtime lists. *For example: If reverse seniority is the only criteria to create the overtime list.* ● *The state will have to define staff post (for seniority level) of each staff in the staff profile.* ● *Staff seniority can be defined from a list of predefined staff hierarchy in the system. (pre-defined by admin during system setup).* ● *The state will have to additionally define how to rank staff in the same hierarchy.* *For example:* ○ *Staff in the same hierarchy can be ranked further on the basis of past overtime records. The one with least overtime in the last 'X' days, will be ranked higher in the overtime lists. 'X' will be adjustable from the admin dashboard.* ○ *Staff on leave will have to be excluded from the overtime ists for the particular time period.* *Once the rules are defined in the system, automated mandatory overtime list will be created by the system in real time.*
30.	Sick leave should be broken down in the following categories not all lumped into one thing. Personal sick, Family Sick, FMLA, Workman's comp, Family Death.
	Our system will allow the admin to create any number of leave types/categories and define leave policies for each leave type exclusively. *For example: Personal Sick, Family Sick, FMLA, Workman's Comp, etc.*

	 **Sample Screen: Add new leave type**
31.	AWOL/LWOP have to be separated.
	In case of LWOP: ● *The system will allow users to apply for leave under the category 'Leave Without Pay'.* ● *As the leaves are applied, they will be maintained separately as LWOP in the system.* ● *Users will be able to view and manage leave account balance from their dashboard which will include leaves taken, leaves left, LWOP leaves taken, etc.* *In case of AWOL:* ● *The system will provide supervisor/administrator the ability to specify AWOL against the correctional officer in case of absence.* ● *Admin/Supervisor will have the ability to generate reports on AWOL for each staff.* *AWOL will be maintained in the system separately from LWOP.*
32.	FMLA eligibility dates and parameters are available for each employee.
	In our proposed solution, each staff profile will have a 'leave' section. This section will include all information about leaves including: FMLA eligibility dates and parameters. *This information can be added to the system in the following ways:* 1. *Manually entering data in the system through the admin dashboard.* 2. *Importing this data from the the leave management system in use by uploading data files in formats like CSV.* 3. *Integrating with the leave management system currently in use.*
33.	When entering overtime, a warning of prohibited by AR 326
	When the user is entering overtime, the system will prompt a warning notification/screen as per

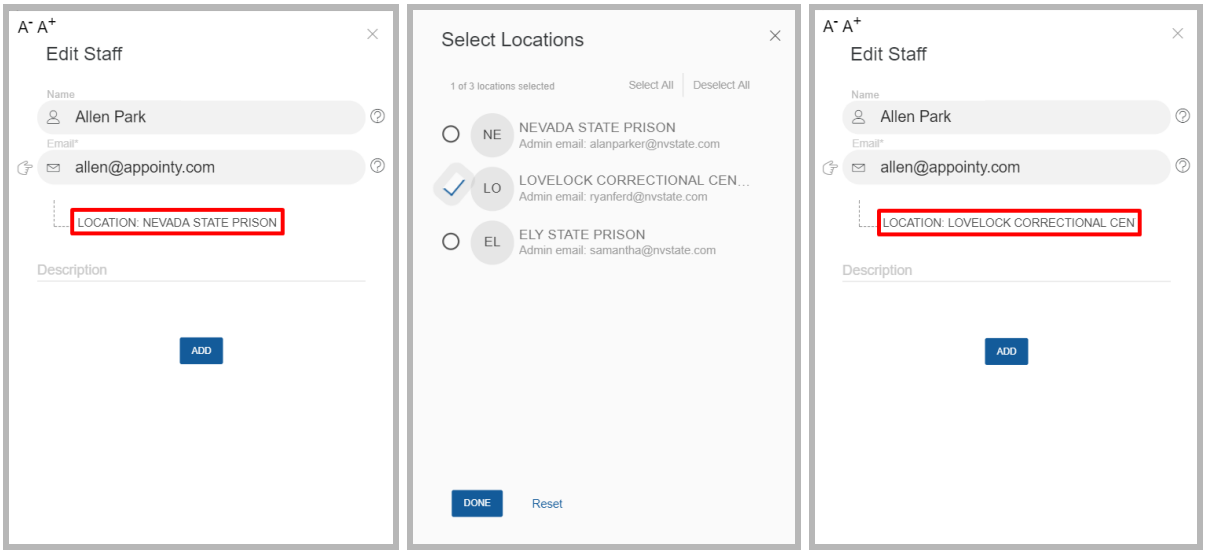
	AR 326. The prompt message will be customizable from the admin dashboard. *For example:* ● *Staff cannot work for more than two double shifts.* ● *Unless an emergency situation occurs, no staff can work for more than 16 hours in a 24 hour time period.* ● *Employees on modified duty assignments are not authorized to work overtime.* *The above mentioned examples of warning content will be customisable.*
34.	Ability to assign overtime codes for officers on overtime.
	Yes, when the staff/officer is being assigned for an overtime duty: ● *The system will request for a mandatory overtime code.* ● *The overtime code will be selected from a predefined list of overtime codes.* ● *The admin dashboard will give admins access to define overtime codes in the system. If required, the system can also allow admins to add new overtime codes.* *For example: Overtime reason code: 04 Administrative Support or 06 Budget Preparation.*
35.	Allow for facility Administrators to track overtime coverage by code on each shift and facility wide.

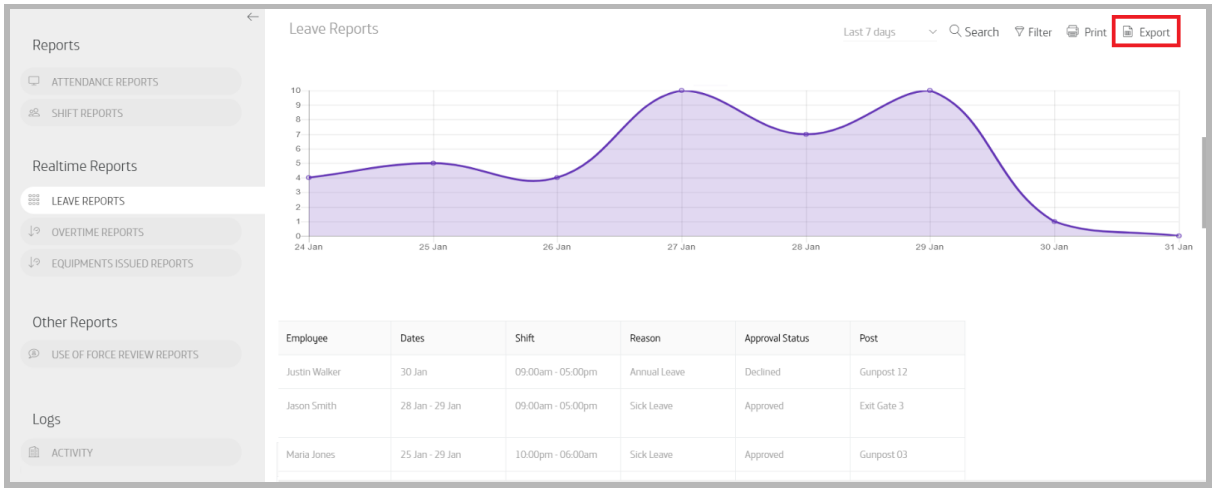
	The system will allow the facility administrator to track overtime coverage code by generating a real time report by shift and facility.
	
	● *The report will show total overtime hours and overtime by codes in a specific shift/location for a custom selected date range.*
	
	● *The system will allow the report to be:*
	  ○ *Filtered by overtime codes, shifts, facilities, posts etc*
	  ○ *Sorted by overtime hours, code numbers, etc.*
	
	● *Multiple shift or facility can be selected by the admin.*

36.	Allow for facility Administrators to track overtime per position on each shift.
	The system will allow the facility administrator to track overtime per position on each shift by generating real time reports. *The report will show total overtime hours and overtime by codes in a the selected position for a custom selected date range.* ● *The system will allow the report to be:* ○ *Filtered by overtime codes, shifts, etc*

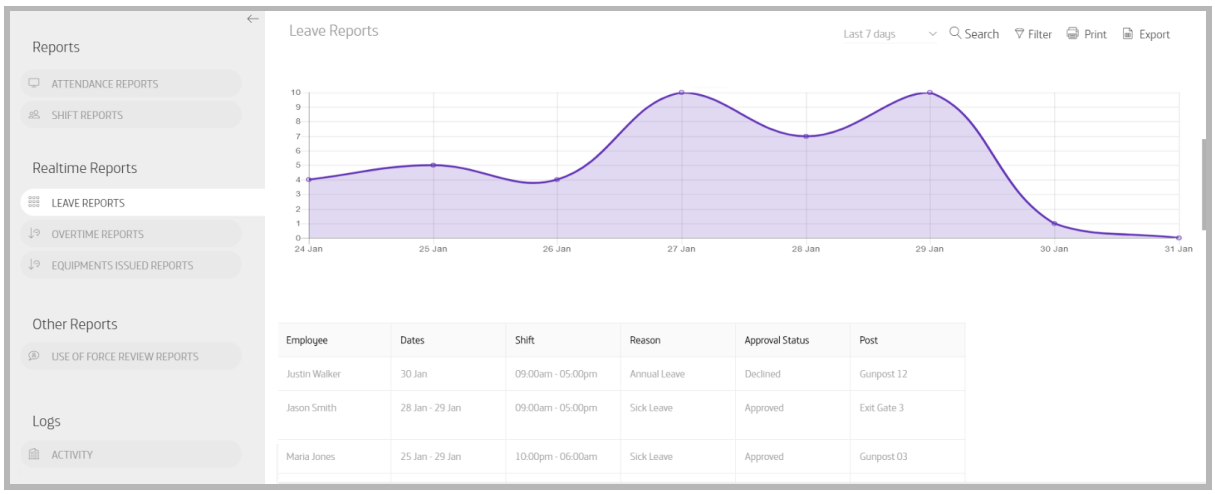
	○ *Sorted by overtime hours, code numbers, etc* ● *Multiple shifts for the position can be selected by the admin.*
37.	Enter OT at anytime during shift.
	The proposed solution will allow adding 'overtime' both during 'shift hours' and 'off-shift hours'. The overtime shift hours and the regular shift hours will be maintained separately in the system. *If an overtime is added during shift hours, the system will only count the overtime hours, once the current shift is over.* *For example: During an 8 hour shift, a 4 hour consecutive overtime shift is added. This will 4 hour shift will be added after the 8 hour shift. The same will be shown in a staff's calendar.*  **Sample Screen: Calendar showing demarcated regular and overtime shift hours** Since the regular shift hours and the overtime hours are separated in the system, the system will also allow generating reports related to regular shift hours and overtime shift hours.
38.	Codes to allow and track cross facility overtime.
	In our proposed solution, each time a supervisor allocates overtime shift hours to an officer, the system will ask the supervisor to enter the reason (with code) for the overtime shift. 1. *This reason will be selectable through a dropdown from a predefined list.* 2. *Each entry in this list will contain overtime reasons with their respective codes.* *Since the reasons for overtime will be entered from a dropdown, each with a unique code, the*

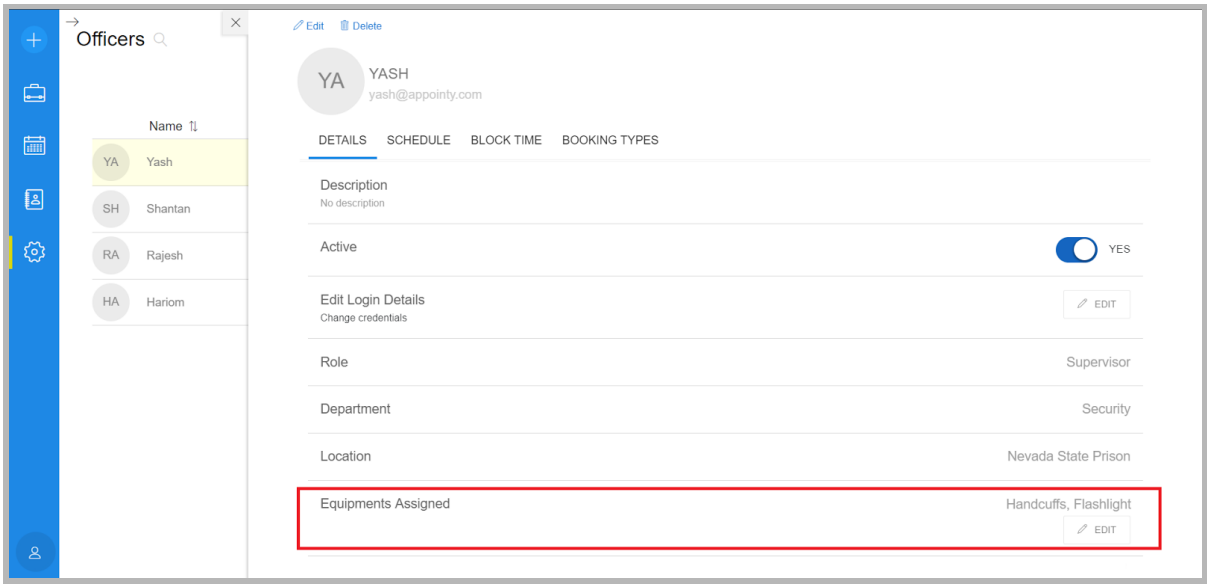
	overtime shift hours will be completely trackable and the system will be able to generate reports. *The global administrators will be able to see the overtime reports across facilities. The reports will allow comparing the overtime statistics in subsequent time periods (week, month).*
39.	Allow facility Administrators to track overtime per FTE and compare with the other facilities.
	The facility administrator will be able to track overtime per FTE by the following: ● *The system will calculate total number of overtime shift hours by associated overtime codes.* ● *FTE will be calculated by total count of the staff marked as FTE.* ● *FTE will be assigned to specific facility.* ● *Overtime per FTE for different facilities, can be compared on a graph*
40.	System alert to a staff member being allocated overtime when this is prohibited due to various reasons like range failure, denied leave etc.
	The proposed solution will validate each and every time when a shift is assigned to a staff member. The validation along with other factors like certifications, training, etc. will include checking for any prohibitions due to reasons like range failure, denied leave, AR's policies, etc. *In all such cases, the system will notify the schedulers about these prohibitions. Further, the system can be configured in the following two ways:* 1. *Allowing the schedulers to dismiss the alert and continue with the allocation process.* 2. *Restrict the schedulers from making an allocation.*
41.	Ability to transfer officer from one institution to another.
	Our proposed solution allows selecting the location(s) at which a staff (here, officer) is to be made available. *The admin users can at a later stage change this location and select some other location where the officer is to be 'transferred'.*

	 **Changing location assigned to a staff**
42.	Administrative data related to an officer should not be deleted if the officer changes shifts, however if shifts are changed, the requested and possibly even already approved leave falls in the queue and is subject to first come first served prioritization.
	The proposed solution will allow changing shifts for a staff. The change in shift would only bring about a change in the working hours of a staff. No other data and information related to the staff will be modified or removed. The supervisors will be able to set new working hours from: 1. ***A staff's profile:*** *Through the 'schedule' section.* 2. ***Shift calendar:*** *The shift calendar provides option to reschedule shifts and assign new times for a staff's shifts. Once the new shift time is entered, the system will automatically assign this new shift time to the staff.* *In cases, when a change in the shift brings about a clash with a requested or an already approved leave, then the new shift will persist and the leave will be added in the 'leave queue'.* *This leave will then be processed along with other leaves as following the first come first served prioritization rule.*
43.	Historical roster data retrieval capability.
	Our proposed solution will allow admins to generate reports with custom date range and time on historical roster data from the point in time when the solution was deployed (upto 5 years into the past). *The reports will allow filter, sort and print capability. Roster data can be filtered with respect to facility/department/location.* *Historical data before the solution is deployed can be imported into the system through API or data import through predefined CSV format. The data can be retrieved with custom date range.*

44.	Allow for data exports to external reporting applications.
	The proposed solution will allow exporting and printing all the reports generated within the system. *The exported data file can be configured in formats like the following:* ● *CSV* ● *Excel* ● *JSON* ● *XML* ● *BSON* ● *SQL*  **Export reports**
45.	Ability to produce reports to track various types of leave, off-post hours overtime trends etc.

	The proposed solution will house all the reports that are required by NDOC. This will include the aforementioned reports like types of leave, overtime trends, etc.
	
	For example, the reports will be categorized like:
	1. *Leave reports:*
	  a. *Personal sick,*
	  b. *FMLA,*
	  c. *Family sick, etc.*
	2. *Overtime reports*
	
	All the reports will give the users an option to view these reports over a week, month, year, defined date range.

	The reports section has an 'Advance Search' and 'Filter' functionality which allow: 1. *Selecting the data (columns) required for a report.* 2. *Applying relevant filters.*  **Sample Screen: Reporting Section**
46.	Ability to capture equipment issued to an individual officer.
	In our proposed solution, each staff (officer) profile will have a section showing the equipments assigned to an officer. *This section will provide the admin users to:* 1. *Select from a dropdown list, the equipment assigned to an officer.* 2. *The system will allow assigning more than one equipment to an officer.* 3. *If required, once an equipment is selected, the system can be configured to show a text box to enter the equipment ID.* *The admin users, at any time, can visit the profile of an officer to view the equipments assigned to the officer.* *If required, reports can also be generated to see the allocation of equipment to various staff members.*



Sample Screen: Equipments assigned to an officer

47.	Configurable system alerts for outstanding/incomplete reports, for e.g. Incident Reports (IR), Offence In Custody (OIC) reports etc.

The system will allow the supervisor to create a Report Reminder against a staff within a time frame. The supervisor will have to specify the following:

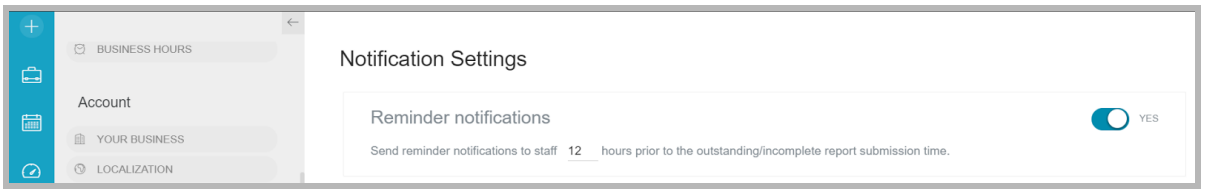
- *Report Title*
- *Report description*
- *Report Submission date*
- *Assigned Staff*
- *Reminder: 'X' days before the submission date (configurable)*

The system can have two option to mark the report as complete:

1. *Upload the report and mark as done. The submitted report will be sent to the assigned supervisor.*
2. *Mark the request as complete from the dashboard.*

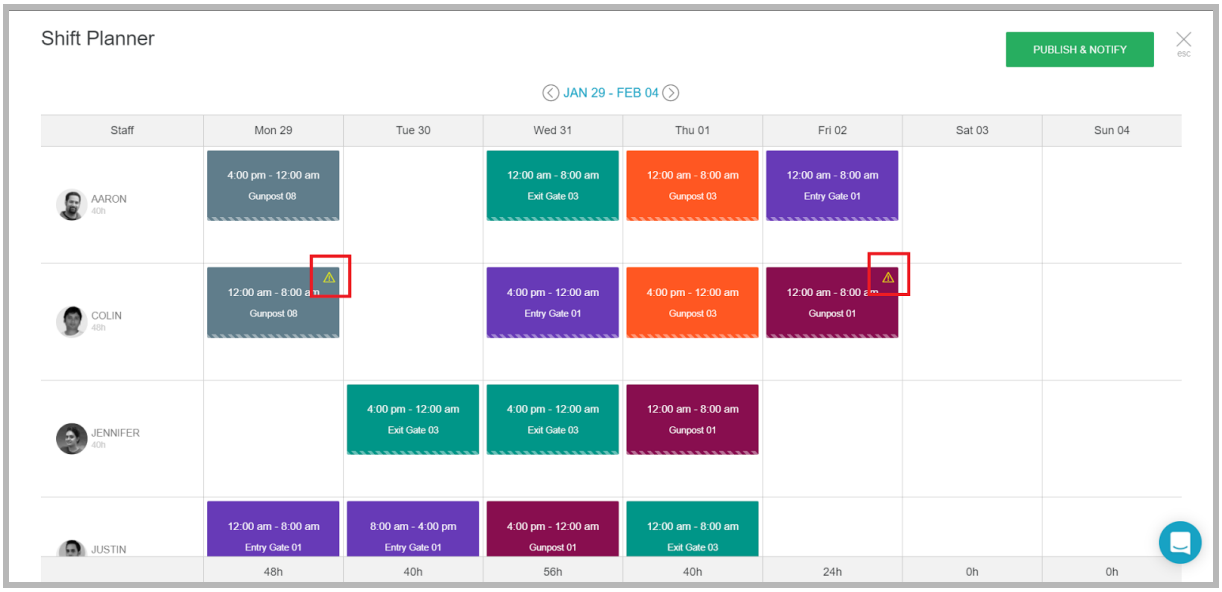
If the report is not marked as complete from the supervisor, an alert will be sent to both supervisor and assigned staff.

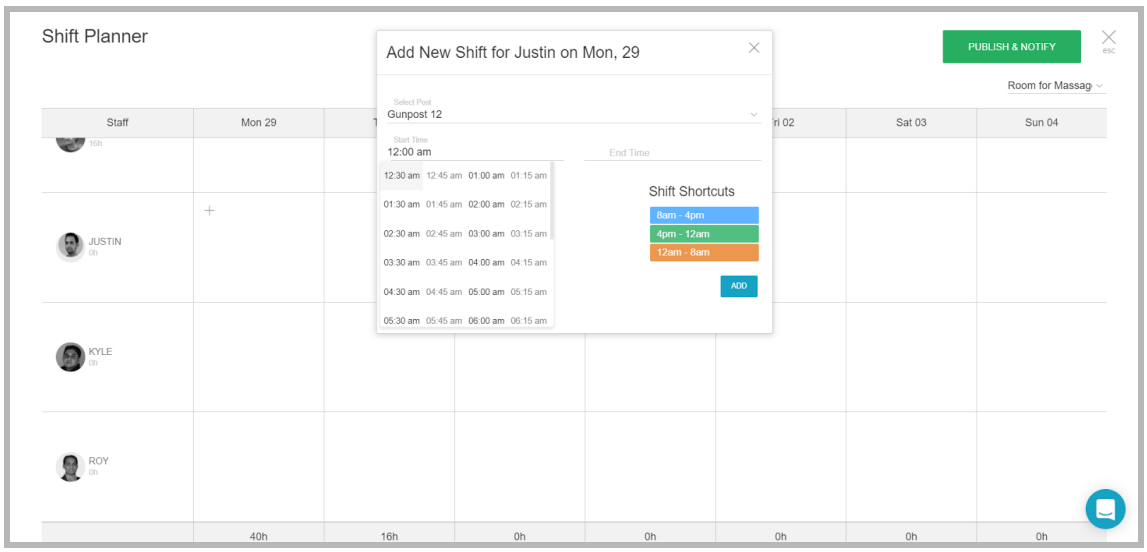
- *The reminder alert can be in-application or email or both.*
- *The reminder alert can be sent at configurable time from the admin dashboard. Example: Send an alert 'X' hours/days before the deadline.*

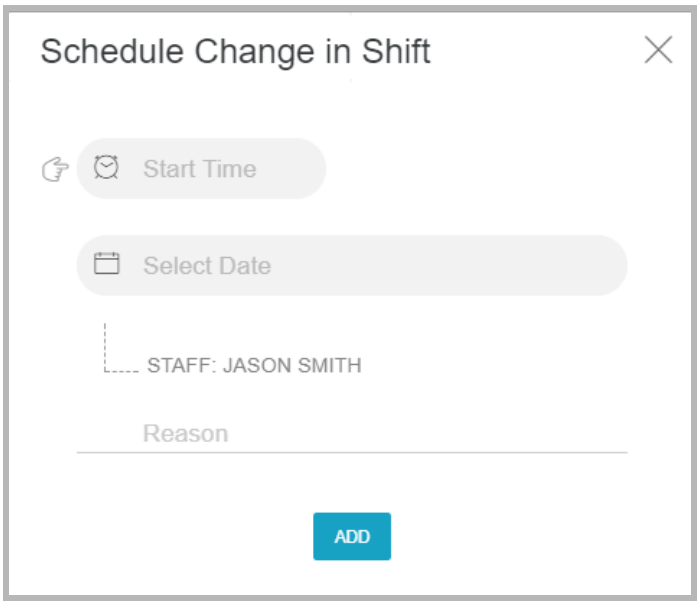


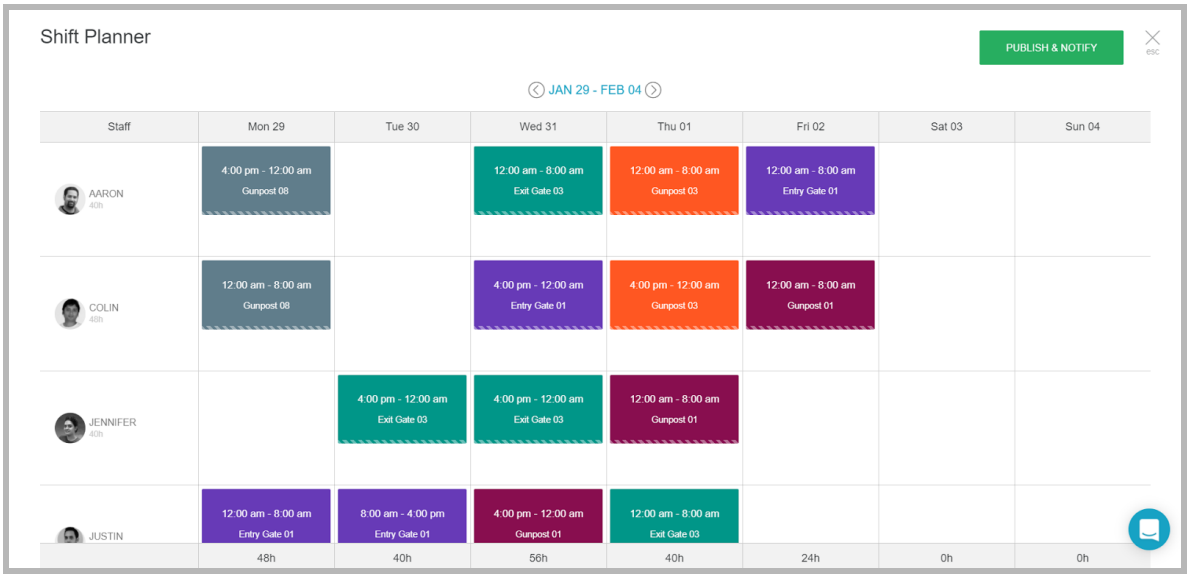
	Sample Screen: Configurable reminder notifications
48.	Options to build customizable/flexible shift durations.
	Yes, our system will allow admin to create shifts of customisable durations in multiple locations: ● ***Shift time:*** ○ *It will be selectable from drop down menu in the multiple of 'X' minutes. 'X' will be configurable from the admin dashboard.* *For example:* *X → 1 hour, So shift can be 1, 2, 3, 4, 5 (multiple of 1 hour)* ○ *Manually enter shift hours from admin dashboard.* *For example: Enter Shift hours → 6 hour shift or 12 hour shift.* ● ***Multi-location shift:*** *Multiple posts (positions) can be allocated in a single shift. The duration at each post can be custom set.* *For example: In a 6 hour shift, first 2 hour shift at Post 12 and the nex 4 hour shift at Post 48.*
49.	Allow for automated shift bidding to facilitate data, but still allowing for supervisor review and approval.
	The proposed solution will allow staff members to bid for their shifts. *The supervisors will then be able to review the shifts that the staff members had raised bids for, and approve or decline these shifts.* *Following this method will help in:* 1. *Increase efficiency* 2. *Reduce time taken to assign shifts* 3. *Reduce margin for error by avoiding multiple entry of same data* 4. *Reduce redundant efforts* *The supervisors will be able to see a consolidated list of all the shift requests raised by the staff along with the timestamp of each bid request. This will help the supervisors in assessing the sequence in which the shift bid requests came in.* *The number of bids raised will always be more than the number of shifts required. The system will then assign shifts to staff based on a the chosen logic like:* 1. *Most free staff (timewise),* 2. *Most free staff (shiftwise),* 3. *First come first serve, etc.* 4. *Any other logic customised for NDOC.*

50.	Mandatory overtime lists (by shift) account for officers having worked prior double shifts, annual leave, sick leave and other requirements to stay within the guidelines of AR 326.
	The State will have to define rules to create mandatory overtime lists. *The list will be in the order of reverse seniority.* ● *The state will have to define staff post (for seniority level) of each staff in the staff profile.* ● *Staff seniority can be defined from a list of predefined staff hierarchy in the system. (pre-defined by admin during system setup).* ● *To account for guidelines of AR326. State will have to define the rules according to which the list will be created.* ○ *Staff who have done double shift can be removed from the list or ranked lowest in the same hierarchy.* ○ *Remove the staff who are on leave for the time period.* ○ *Similar rules will have to defined.* *Once the rules are defined in the system, automated mandatory overtime list will be created which will take into account guidelines of AR326.*
51.	Ability to track officer's 'Training file,' capturing range scores, certifications etc.
	The proposed solution is well equipped to interface and import data from other resources: *Tracking of officer's 'Training File' can be automated (Subject to Crown Point's API Availability)* ● *Scheduled (near-real-time):* ○ *Data is synchronised at regular intervals of time between the two systems.* ○ *This interval will be configured to 30 seconds to maintain near-real-time data replication and data integrity between the two systems.* ● *On Demand (real-time)* ○ *Occurs whenever a user performs an action that impacts Training File enrollment data.* ○ *Data can be received from Crown Point, if Crown Point provides push API.* *The system can also be configured to send alerts to defined user roles:* 1. *Approaching deadlines: When certifications are going to expire, training are due for staff.* 2. *Missed deadlines: When certifications expire, training are overdue for staff.* *Manual import of data is also possible with formats like:* ● *CSV* ● *Excel* ● *JSON* ● *XML* ● *BSON*

	• *SQL*
52.	Advance scheduling of known absences like training, physicals, A/L, S/L, FMLA, etc.
	The proposed solution will allow users to schedule absences in advance. *The system will automatically send notifications to supervisors as and when these known absences are scheduled and approved.* *This will allow the supervisors to plan the future shifts considering the scheduled absences.* *The shift rosters will also show a 'warning sign' against existing scheduled shifts for which absences have been scheduled.*  **Sample Screen: Warning sign against existing scheduled shifts for which absences have been scheduled**
53.	System alert when entering overtime, in excess of two consecutive double shifts.
	In case of overtime, the system will alert the user if more than two consecutive double shifts are being assigned to the same officer. *Additionally, the admin will have the right to configure if a staff 'can' or 'cannot' be scheduled for more than two consecutive double shifts. If the admin configures:* • *Can be scheduled : The supervisors will be able to schedule staff in spite of the warning alert.* • *Cannot be scheduled: The supervisors will not be able to schedule staff after the warning alert.*
54.	Application to maintain officer's bid history.

	Officer's bid history will be maintained in the system. ● The system will allow admin to run reports on bid history. ● When scheduling staff shift, the supervisor will have the ability to quickly refer to the previous years staff posts in a few clicks. ● The system will intelligently warn the admin if the officer has requested for the same post for more than 2 years in a row (as per AR 301). This can be done by: 1. The system can be configured such that the system will not allow an officer to be scheduled for the same post for more than 2 years in a row (if required). 2. The system can warn proactively if a situation like this arises, but the supervisor will have the ability to overrule the warning. In the initial stages of deployment (when previous bid history is unavailable), officer's bid history can be migrated into the system by a one time data import to comply with AR 301.
55.	Options for ANY shift (not ONLY 8, 10 and 12 hour shifts – we have a couple shifts different from these).
	Yes, our system will allow shifts of any desired hours in the following ways: ● *Manually enter shift hours from the dashboard.* *For example: Enter Shift hours → 6 hour shift or 12 hour shift.* ● *Shift time will be selectable from drop down menu in the multiple of 'X' minutes. 'X' will be configurable from the admin dashboard.* *For example:* *X → 15 minutes, So shift can be 15, 30, 45, 60, 75 (multiples of 15 minutes)* *X → 1 hour, So shift can be 1, 2, 3, 4, 5 (multiple of 1 hour)*  **Sample Screen: Adding shift for a staff**
56.	Ability to have an immediate change over from old roster to new roster on the facility chosen implementation date.

	Yes, the proposed solution will allow instantaneous change over from an ongoing roster to a new roster. *The admin will be able to assign a new set of shift timings (roster) to a staff from any desired date. If the old roster has existing schedule assigned even after the implementation date, then the new roster assigned will override and replace the old roster.* *If required, this switch from an old roster to a new roster can also be automated by scheduling a date, from which the new roster is to be made active.*  **Sample Screen: Schedule Change in Shift**
57.	New application's roster must, at the very least, contain the same information as the current roster has: for e.g. Post, Time in Position, Name, Off-post positions.
	The proposed solution will display all the required information in the rosters including the aforementioned information: post, time in position, name, off-post positions.

<table>
<tr><td></td><td>


Sample Screen: Shift Planner

Within each ‘shift tile’, all the information to be displayed can be added.
</td></tr>
<tr><td>58.</td><td>System generated Mandate lists, tracking of overtime disqualifications, and officers on 'furnish proof' status.</td></tr>
<tr><td></td><td>

The system will allow statuses to be defined against an officer. A check box in the staff profile will allow the following:

- ***Track overtime disqualifications***
  - *The admin/supervisor will have the ability to specify if a staff is disqualified from overtime by a checkbox in the staff profile.*
  - *A staff can be disqualified for a specific time period, which can be specified in the system.*
    For example: Disqualify staff from 21 Feb 2018 - 19 March 2018.
    After the last date, the staff will automatically be shifted to work overtime.
  - *List of all the staff who have been disqualified for overtime can be created by filter in staff reports.*
  - *The supervisor will have the ability to uncheck the checkbox manually.*
- ***Furnish proof status***
  - *The supervisor will have the ability to mark ‘furnish proof’ status against an officer.*
  - *The supervisor can specify a date by which the staff needs to provide a proof.*
  - *A reminder (in-app) can be sent to both staff and supervisor. The time at which the reminder be sent can be configured from the admin settings.*
  - *The supervisor will have the ability to uncheck the checkbox manually.*

</td></tr>
<tr><td>59.</td><td>FMLA usage tracking.</td></tr>
<tr><td></td><td>*The proposed solution will track all leaves including number of leaves, number of hours, etc for*</td></tr>
</table>

	every employee. *The system will allow the admin to track FMLA usage for each staff from their staff profile. The usage tracking will include the following:* ● *Total FMLA eligible hours,* ● *Total FMLA hours used,* ● *Total FMLA hours left, etc.* *The reporting section will also allow generating reports on FMLA usage, per employee, department, etc. The system will allow printing and exporting these reports.*
60.	Detailed attendance card.
	I*n our proposed solution, each staff profile will have its own attendance card. This will show a detailed account of a staff's attendance over a period of time like a week, month, year, custom date range.* *The attendance card will have various attendance metrics like:* *1. Time of shift,* *2. Check-in time,* *3. Check-out time,* *4. Shift type: regular/ overtime, etc.* *5. Leaves taken: FMLA, sick leaves, etc.* *The system will also provide options to export and print the attendance cards.*

Attendance Card

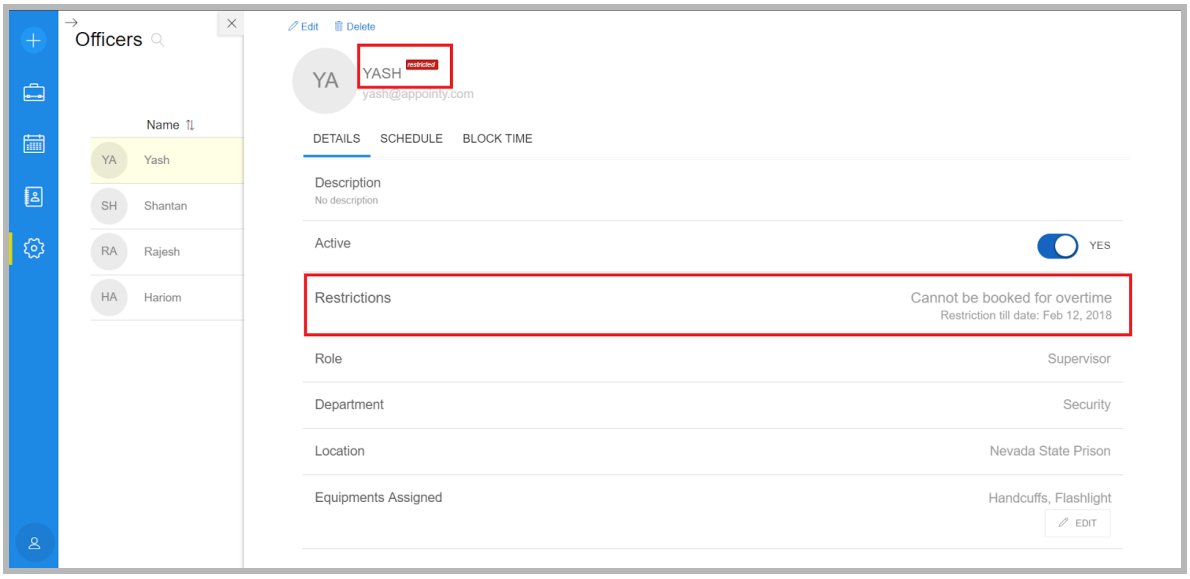
Jan 01, 2018 - Jan 31, 2018

Total Records: 42 **Absences:** 3

#	SHIFT TIME	CHECK-IN TIME:	CHECK-OUT TIME	SHIFT TYPE	LEAVE TYPE
1	Jan 01, 09:00 AM - 05:00 PM	08:58 AM	05:01 PM	Regular	-
2	Jan 02, 09:00 AM - 05:00 PM	09:03 AM	05:03 PM	Regular	-
3	Jan 03, 11:00 PM - 07:00 AM	11:00 PM	07:01 AM	Regular	-
4	Jan 04, 09:00 AM - 05:00 PM	09:00 AM	04:59 PM	Regular	-
5	Jan 04, 06:00 PM - 10:00 PM	05:55 AM	10:03 PM	Overtime	-
6	Jan 05, 09:00 AM - 05:00 PM	09:06 AM	05:10 PM	Regular	-
7	Jan 06, 9:00 AM - 05:00 PM	08:57 AM	05:07 PM	Regular	-

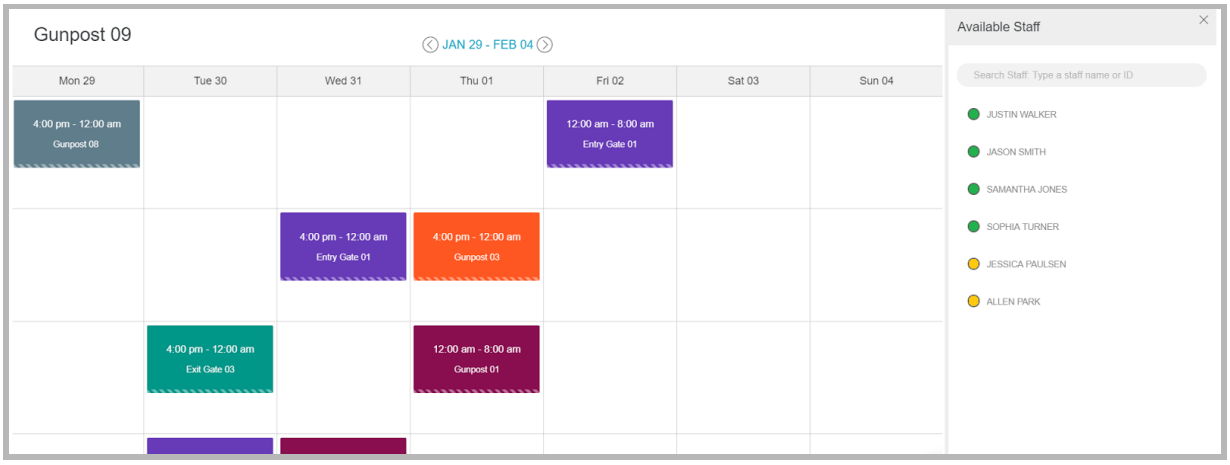
Sample Screen: Attendance card of an employee

61.	Identify staff that are on light duty or administrative assignment and what their assignment restrictions are.
	In our proposed solution, each staff's profile will have a dedicated status field to show if the staff is under restrictions. If under restrictions, the restrictions and till what date the restrictions apply will also be displayed. *Moreover, in the available staff roster, staff members who are on light duty or administrative assignment (or under any other form of restriction), will be visually demarcated from other available staff by a 'information icon' beside the staff name.*



Sample Screen: Staff profile with restrictions

62.	Warning if staff are scheduled for more than 16 consecutive hours.
	The proposed solution will make use of a trigger based notification system. The notification system will be configured in a way that it fires a notification whenever a staff is scheduled for more than 16 consecutive hours in a 24 hour period. *The proposed solution will be configured in a way that the user will encounter a pop-up notification, if a staff whose working hours will exceed 16 consecutive hours.* *The supervisor can then those to:* *1. Consider the warning and cancel the assignment.* *2. Dismiss the warning and allow the assignment.* *Moreover, in the availability roster, the staff who are close to reaching their daily working limit will be highlighted with a different color. This will ensure that the scheduler knows who is close to their working limit.*

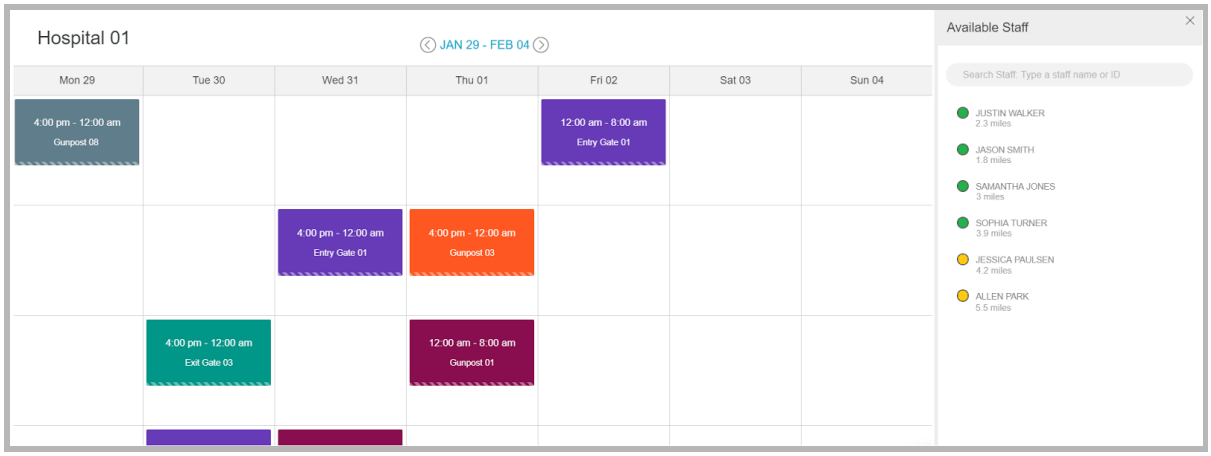


Sample Screen: Available staff demarcated using colors as per their daily working limit

63.	Identify staff that live close to hospitals for duty assignment.

In the proposed solution, each staff profile will require an address to be entered.

The system will utilize this address to identify staff members who live close to the hospitals. The system will always suggest these staff members for hospital duty assignments. This will make it easier for the supervisors to allocate optimal shifts.

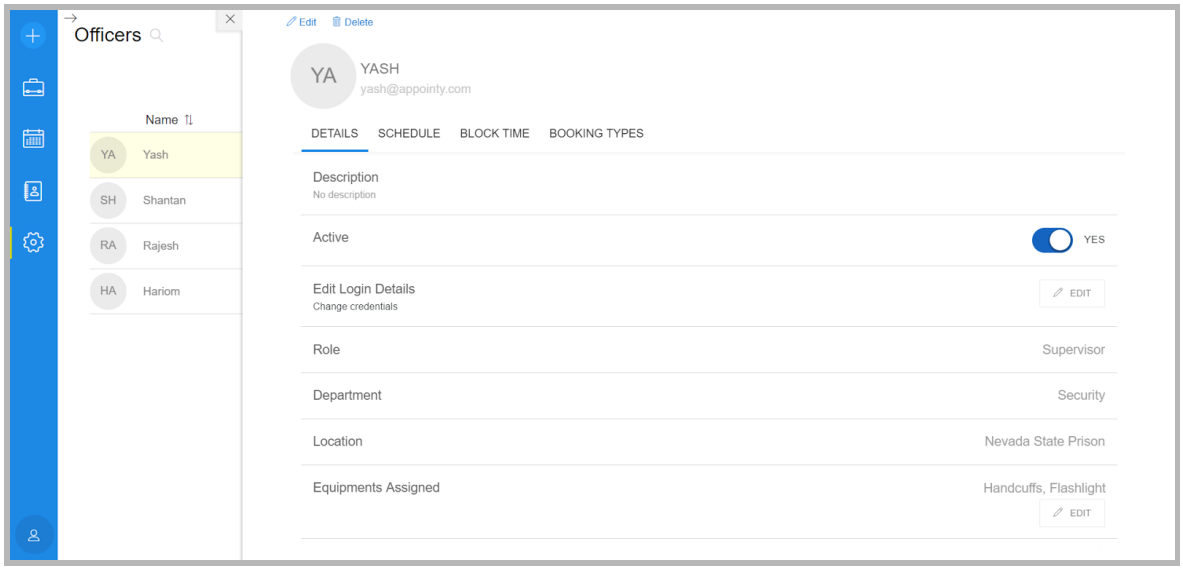


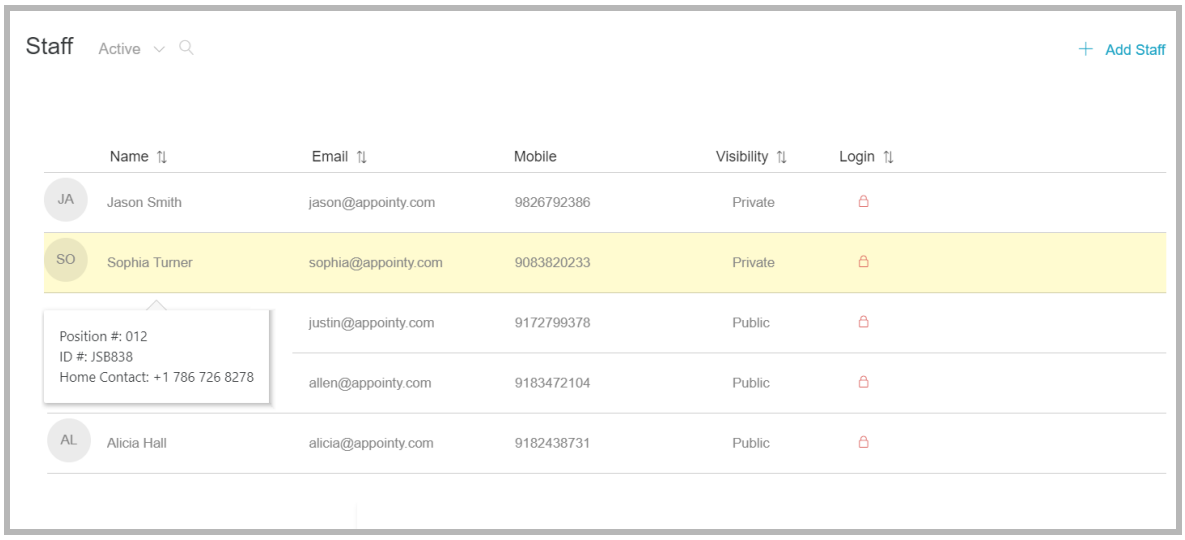
Sample Screen: Available staff displayed with distance from the hospital

64.	Attendance card for each officer, maintained by year.

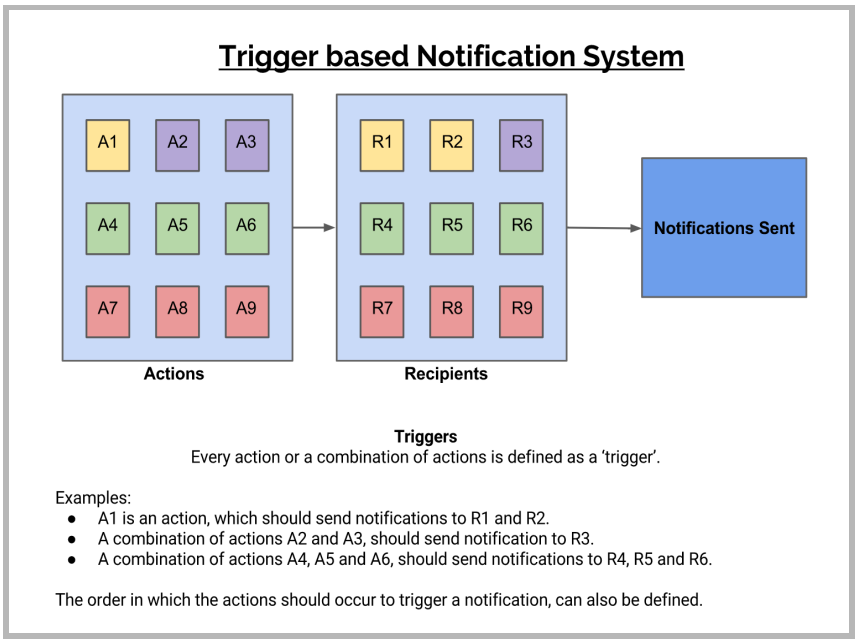
In our proposed solution, each officer will have a dedicated attendance card. This card will show all details about an officer's attendance over a period of time like a week, month, year, custom date range.

The attendance card will have various attendance metrics like:

	1. Time of shift, *2. Check-in time,* *3. Check-out time,* *4. Shift type: regular/ overtime, etc.* *5. Leaves taken: FMLA, sick leaves, etc.* *The system will also provide options to export and print the attendance cards.*
65.	Pull up screen of each Officer with pertinent information such as: 1. Special Qualifications 2. Training Tracking (IST) 3. Gas and Taser Cert 4. Recall and Emergency Contact Info
	The proposed solution will have pull up screens for each staff member. *While the list view only shows the basic details about a staff member, clicking on the staff profile, opens up a pull up screen. The pull up screen, along with providing options like activating/ deactivating staff, modifying login information, also shows information about a staff like:* *1. Special qualifications,* *2. Training tracking,* *3. Gas and taser cert,* *4. Recall and emergency contact info,* *5. Equipment assigned, etc.*  **Sample Screen: Pull up screen of a staff**

66.	Application to respond to authorized level/ user holding the mouse cursor over a staff member's name, by displaying Position #, ID # and home contact phone #.
	The application will show the following information when a mouse is hovered over a staff member's name: • *Assigned Position* • *Staff ID* • *Home Contact information* • *Assigned shift time and duration (if required)*  **Sample Screen: Staff information displayed on mouseover**
67.	Application capable of cross referencing required certifications against officers acquired certs.
	• *The admins will be able to define required certifications in the system.* • *Staff can be assigned with certification from a list of drop down options (predefined certifications).* • *Staff can be cross referenced, searched and filtered according to the acquired certifications.* • *If required, the certificates can be saved at your end through a link in the system for certificate verification.* • *If required, some posts can be specified to have a minimum certificate eligibility. Only those staff can be assigned to these posts, who match the minimum certification requirement criteria. The system will cross reference the certifications of all available staff with the required certifications and display in the available staff roster, only the staff who have the required certifications.* • *Admin will be able to generate reports on certificates by staff.*
68.	Role-based Authorization profiles.

	For access permissions and constraints, we follow the Role Based Access Control (RBAC) model. In this model: ● *Each user is assigned one or more roles.* ● *Permissions are assigned to roles and not to the users directly.* ● *The users inherit permission from the assigned roles.* *We have, in the past, developed custom role based authorization profiles. For one of our clients, we developed the following role based user role profile:* *1. Global Administrator:* *a. Can create/edit/delete Global Co-admin.* *b. Has access to all the functionality of the software, general configuration, reports, etc.* *c. Can view all the activity log/actions by department/company/users/dates, etc.* *d. Can view error logs in the system.* *2. Global Co-Administrator:* *a. Has access to all the functionality of the software, general configuration, reports, etc.* *b. Can view all the activity log/actions by department/company/users/dates, etc.* *c. Can view error logs in the system.* *3. Local Administrator:* *a. Can create/edit/delete Local Co-Admin* *b. Has access to the location/department specific functionality, configuration, reports, etc.* *c. Can view only the activity log/actions of a specific location with respect to users, dates, etc.* *4. Local Co-Administrator:* *a. Has access to the location/department specific functionality, configuration, reports, etc.* *b. Can view only the activity log/actions of a specific location with respect to users, dates, etc.* *5. Assistant:* *a. Admins and Co-admins appoint users as their assistants.* *b. Can view and manage all their meetings on admin's/ co-admin's behalf.* *6. Users:* *a. Can book meetings in accessible rooms.* *b. Manage their existing bookings.* *A custom role-based authorization profile will be developed to match your exact use-case.*
69.	Send automated email reminders to staff (Training, A/L, timesheets due, upcoming physical, etc.).
	The proposed solution will send notifications using a Trigger-based notification system, wherein, each time a predefined action is triggered or a status is updated, notifications are sent to all designated personnel. *The notification system allows configuring the following:*

	1. *Triggers or actions when notifications are to be sent.* 2. *Recipients, to whom the notifications are to be sent when an event is triggered.*  **Trigger based Notification System**

All reports as mentioned in the Reports Requirement Matrix will be customised as per your requirement.