

**FUNCTIONAL SPECIFICATION
DOCUMENT**

ZSHIFT

DOCUMENT VERSION 1.0

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1. INTRODUCTION

ZShift is a scheduling solution for spas and salons. For managing spas and salons it is important for the managers to schedule employees quickly and efficiently so that the front desk is always manned and there are enough stylists/ massage therapists available to serve the visiting customers. In case of spas and salons with branches at multiple locations and more than a hundred employees per location, efficient scheduling is what would make the business successful.

1.1 Purpose of the document

This document is created based on the high-level requirements identified from the initial analysis of the problem and provides details on the functional specifications with respect to the business requirements. Included in this document will be the detailed functional requirements including use cases, system inputs and outputs, process flows, diagrams, and mock ups.

1.2 Scope

The functional requirements include –

- i. Business configurations – Define the business on the system and onboard the employees
- ii. Create, Update, Delete and View Schedules
- iii. Creating Leave Requests. Subject to Manager's approval
- iv. Creating Schedule Swap Requests. Subject to Manager's approval
- v. Notifications for the employees based on the schedule updates

1.3 Assumptions and Constraints

a. Assumptions

- i. The shift timings are based on company policies and business requirements, and will not change once configured.
- ii. The roles/positions are well-defined and there are no overlaps among the employee roles.
- iii. The present system has all the required data for ZShift to function properly.
- iv. ZShift will only be used at locations within India, in the initial phases.
- v. Every Location has an Area manager
- vi. Every Salon/Spa branch (job site) has a manager

b. Constraints

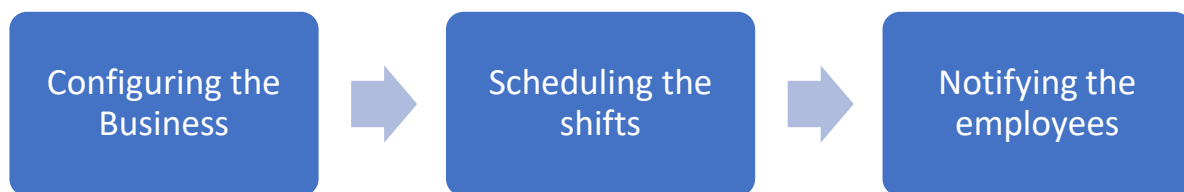
- i. In order to keep the flow simple, the current solution will not handle schedule conflicts. In case of a conflict, a message will be shown that the action cannot be performed.
- ii. Employees can only raise leave requests from the system. The leave requests will not handle the changes in the employee compensation (if any) and the number of leave requests per employee are not limited. The limit is usually set according to the company policies, employee role, designation etc. and handling the same is currently not in the scope.

2. SYSTEM OVERVIEW

ZShift provides a cloud-based solution for managing employee schedules for spas and salons. The system will enable the users to create, modify, map and view the employee schedules. The access for viewing, modifying, mapping and creating the schedules will be specifically defined based on the user roles. In addition to that the system will also have a notification framework to notify the users of their shifts and other related information.

2.1 Process Flow

On a high level the entire process would involve 3-basic steps –



Configuring the business

The first step is onboarding any new business onto the ZShift platform. This should be a onetime step for every new business being on-boarded. Includes capturing the following details –

- i. Type of business – Salon/Spa in this case. Can be configured for other businesses as well like Restaurant, Gym etc.
- ii. Job sites – Locations where the businesses are located. E.g., There are 4 Lakme Salons in the Ghaziabad area, so all these locations to be mapped to the business.
- iii. Positions/Roles –
 - a. The positions/roles for the employees i.e., Manager, Beauticians, Therapists, Receptionist in this case
 - b. The shift timings for each role/position – E.g., Receptionist, Beauticians, Therapists need to be present for 15 hr a day therefore, their shift timings will be from 6am-11am, 11am-4pm, 4pm-9pm etc. On the other hand, a manager may not be required for the entire business day so his/her shift timings will be 9am-6pm.
- iv. Employees – Every employee must have his own account. The next sub-step would involve creating employee accounts by capturing employee details. E.g., the name of the employee, email and phone number (for notifications), preferred shift timings, role/position of the employee, mapping with the job site for the Salon/Spa Manager, reporting manager details for the staff etc.

Scheduling the Shifts

Once the configurations are done, the managers would then proceed with scheduling the shifts. This step would provide two basic features to the users –

- i. Scheduler
- ii. Dashboard

The details are explained in the [Functional Specification](#) Section of this document.

Notifying the employees

Every new update in the schedule would trigger notifications. These notifications must reach the employees and the managers on their registered phone numbers and the email ids. The details are explained in the [Functional Specification](#) Section of this document.

2.2 System Actors

User/Role	Frequency of Use	Features used and Access	Additional Notes
Admin	Rare	Features: i. Configure the system for the business – onboard the business onto the system, enter job sites, enter job positions and configure the employee profiles ii. Scheduler iii. Dashboard Access: i. View, modify, map, create and delete employees from the system ii. View, modify, map, create and delete mapped schedules from the system iii. View, modify the business details (entered at the time of onboarding the business onto the system)	Admin would interact with the system for initial configurations and in some cases of modifying information entered into the in the system, which the frequent users don't have the access to
Area Manager	Occasional	Features: i. Scheduler ii. Dashboard Access: i. View, modify, map employees and create schedules ii. View employee profiles, schedules and availability	Has to take operational decisions therefore needs the view access for the schedules across job sites. Can occasionally take part in defining the schedules for the employees
Spa/Salon Manager (Location wise)	Frequent	Features: i. Scheduler ii. Dashboard Access: i. View, modify, map employees and create schedules ii. View employee profiles and employee availability	Would be engaged with the creating and publishing the schedules for the site's employees. Needs complete access to the scheduling table for planning and taking

			operational decisions. Can approve/reject requests for shift swaps.
Receptionist	Frequent	Features: i. Scheduler ii. Dashboard Access: i. View personal schedules and schedules of other employees ii. View only personal profile details.	Needs view access for the workers' schedules to keep the visiting customers informed. Can request a Shift Swap, leaves for self (approval subject to Spa/Salon manager's discretion)
Stylists, Massage Therapists, Beauticians	Frequent	Features: i. Scheduler ii. Dashboard Access: i. View personal schedule. Access to other employees' schedules would be completely restricted. ii. View personal details. Access to other employees' profiles will be completely restricted.	Needs access to personal profile only for staying informed about the shift timings. Can request for a Shift Swap, leaves (approval subject to Spa/Salon manager's discretion)

3. FUNCTIONAL SPECIFICATIONS

Function	Sub-functions	Key Metrics
Business Configuration	1. Entering the business details – type of business, number and details of job sites, shift timings and slots, number of employees, number of positions 2. Entering the position/role details – Manager, Staff (Receptionist, Beauticians, Stylists etc.) and the shift timings for every employee position/role 3. Creation of employee profiles – Employee profiles for all the staff with their chosen preferences and roles/positions mapped to them	1. Number of clicks involved for performing every sub-function 2. Total time taken by the user to perform a sub-function 3. Any external assistance required in any of the steps

		4. Success rate of every step involved in the sub-function
Setting up of schedules	<ol style="list-style-type: none"> Manual setup of schedules <ol style="list-style-type: none"> The access to create, modify, delete and setting up the day-wise schedules would be given only to the managers. Once the scheduling is done, the manager would Publish the schedule. It is important to publish the schedule after every change, failing which the changes must not be reflected. Copy function – to copy the previous day's/week's/month's schedule for an employee System will not handle any scheduling conflicts in this phase therefore if there are conflicts the scheduling will not be allowed. Auto-Scheduling <ol style="list-style-type: none"> Based on the business' shift timings, employee positions, employee's shift preferences and employee's availability a shift roster would be generated automatically. This generated shift schedule would be modifiable by the managers Dashboard View <ol style="list-style-type: none"> To show the number of hours allotted Other KPIs like – Scheduled hours last week, Increase from schedule last week, Higher than 4-week scheduled average The staff would have access only to their personal dashboard (mapped to their personal schedule) Managers would be able to view the KPIs for the entire business categorized by locations, employee positions 	<ol style="list-style-type: none"> Number of clicks involved for performing every sub-function Total time taken by the user to perform a sub-function Any external assistance required in any of the steps Success rate of every step involved in the sub-function
Request for Leave	<ol style="list-style-type: none"> In the Day-wise Schedule View Mode users will get an option to Apply for Leave. Users can apply for any number of leaves. The change in the compensation (based on earned/casual leaves) and the restrictions imposed by the company policies will not be handled by ZShift. 	<ol style="list-style-type: none"> Number of clicks involved for performing every sub-function Total time taken by the user to

	<ol style="list-style-type: none"> 3. The option should also ask for the reason for the request. 4. The access to approve the leaves would lie with the Salon Manager. There must be a text field for the manager to specify the reason for the action (can be left blank) 	<p>perform a sub-function</p> <ol style="list-style-type: none"> 3. Any external assistance required in any of the steps 4. Success rate of every step involved in the sub-function
Request for Shift Swap	<ol style="list-style-type: none"> 1. In the Day-Wise Schedule View Mode users will get an option to Swap the shifts 2. Clicking on the option would enable the user to choose the preferred shift timing for swap 3. This option should also ask the reason for placing the request. 4. The request will then go to the Salon manager for approval. Suggestions will be shown based on the preference specified by the user and the availability of other employees. 5. The Salon Manager can then proceed with modifying the schedule for the request and publishing it. At this point the request can also be denied by the Salon Manager. There must be a text field for the manager to specify the reason for the action (can be left blank) 	<ol style="list-style-type: none"> 1. Number of clicks involved for performing every sub-function 2. Total time taken by the user to perform a sub-function 3. Any external assistance required in any of the steps 4. Success rate of every step involved in the sub-function
Notification system	<ol style="list-style-type: none"> 1. The employees would first receive a notification when their profiles are created. The notification would contain an activation link, clicking on which the user will be able to activate the user account. 2. Once the manager publishes the schedule, the employees will be notified about the schedule through an email and a text message as registered during the onboarding. 3. Every time an employee requests for a Leave or a Shift Swap the respective manager of the Salon will receive an email notification for the request. 4. Once the Salon Manager takes an action on the request (Approve / Not Approve) the requesting employee would receive an email notification accordingly. 5. A reminder notification to be sent to the employee 30 mins prior to the start of his shift 	<ol style="list-style-type: none"> 1. Success rate of every step involved in the sub-function

Mobile application to support the cloud-based solution	<ol style="list-style-type: none"> 1. To support the Day-wise Schedule view function 2. Request for Leave functionality – all sub-functions to be enabled as specified in the 'Request for Leave' function 3. Request for Shift Swap functionality – all sub-functions to be enabled as specified in the 'Request for Shift Swap' function 4. Dashboard view with important KPIs 5. Notifications – to send app notifications based on the notification system specified previously 	<ol style="list-style-type: none"> 1. Number of clicks involved for performing every sub-function 2. Total time taken by the user to perform a sub-function 3. Any external assistance asked by the user in any of the steps 4. Success rate of every step involved in the sub-function
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**Blue row indicates the pre-requisite before proceeding to the core functionality*

**Green row indicates the core function*

**Orange row indicates the BONUS FUNCTIONS or MOONSHOTS. To be developed once the basic functionalities are developed.*

3.1 Detailed functional specification

ZShift is a cloud-based web-application where transactions will happen through APIs. The user interface (UI) mock-up and a brief description of major functionalities are described below -

3.1.1 Business Configuration

This function is important to give the flexibility of integrating different types of businesses with different hierarchical structures with third party solutions like Zenoti. The data will be captured in the following steps in the same order –

1. **Business Details** - This form would capture the details related to the business being onboarded.

BUSINESS DETAILS

Name of the business: Lakme Beauty Salon

Type of business: Beauty Salon

Number of employees: <100

Location: Delhi

Next

- a. Name of the business to be a mandatory field.
- b. Type of business – Dropdown. Dropdown is a list of businesses supported by the ZShift platform.

- c. Number of employees – Dropdown. User to select the number from the list with ranges as follows –
 - <100
 - 101-250
 - 250-500
 - 500-1000
 - >1000
 - d. Location – The area where the salons are located. This is to specify the geography of the business. This would again be a Dropdown with a list of major cities across India.
 - e. Next button – Would take the user to the next section of the Business Configuration form.
2. **Job Sites** - This form would capture the job sites located within the Location specified in the previous section. It is assumed that one area manager would manage one location and would have multiple job sites under the location he is managing.

JOB SITES

Site 1	Hauz Khas	✖
Site 2	Pitampura	✖
Site 3	Dwarka Sec-22	+ ✖

Next

- a. The plus button (Green) would add more items to the list of job sites
 - b. The delete button (Red) would delete the item
3. **Positions/Roles** – This is to enter the roles or positions of the employees working for the business. These roles would help in **specifying the access levels** as categorized in the [System Actors](#) section.
- a. Each role can have multiple shifts depending on the business requirements. (As shown in the mock-up for the role Receptionist).
 - b. Shifts are defined according to the company policies and the business requirements.
 - c. Access are defined based on the roles. The details have been specified in the System Actors section.

ROLES			
	Name	Shifts	Access
Role 1	<input type="text" value="Receptionist"/>	<input type="text" value="6am-11am; 11am-4pm; 4pm-9pm;"/>	<input type="text" value="View Schedules; View Profile (Personal);"/>
Role 2	<input type="text" value="Stylist"/>	<input type="text" value="6am-11am; 11am-4pm; 4pm-9pm;"/>	<input type="text" value="View Schedules (Personal); View Profile (Personal);"/>
Role 3	<input type="text" value="Therapist"/>	<input type="text" value="6am-11am; 11am-4pm; 4pm-9pm;"/>	<input type="text" value="View Schedules (Personal); View Profile (Personal);"/>
Role 4	<input type="text" value="Salon Manager"/>	<input type="text" value="9am-6pm"/>	<input type="text" value="View Schedules; Create Schedules; Update Schedules; Delete Schedules; View Profiles;"/>

Next

4. **Employee Details** – This is the final part of the Business Configuration. The employee details will be captured in this section.

USER DETAILS	
<div> <div> Create New User </div> <div> Name of the employee Email-id Phone no. Job Site Role Reporting Manager Preferred Shift Timings Enter password Re-enter password </div> <div> <input type="text" value="Prachi Sharma"/> <input type="text" value="Prachi.S@zensi.com"/> <input type="text" value="8989898989"/> <input type="text" value="Pitampura"/> <input type="text" value="Receptionist"/> <input type="text" value="Yash Vaish"/> <div> Monday 6am-11am Tuesday 6am-11am Wednesday 6am-11am Saturday 11am-4pm Sunday 11am-4pm </div> <input type="password" value="XXXXXXXXXX"/> <input type="password" value="XXXXXXXXXX"/> </div> <div> Submit </div> </div>	

Create Multiple Users

Select one of the following to proceed
1. Onboard users through HTTP API
2. Contact Admin

- a. There are two sub-sections in the employee details part –
- **Create New User:** For manually adding a new user to the system. The fields are self-explanatory.
 1. Email-id and phone number to be validated based on the standards.
 2. Password field to be masked
 3. Submit button would trigger the user creation API request. Password encryption must be taken care of at this stage. This would **create the user profile in inactive mode.**
 - **Create Multiple Users:** The admin will have to onboard multiple users (around 100 employees) onto the system. The manual user creation process

would become tedious therefore, this section gives the flexibility to onboard multiple users with minimum effort and time. Here based on the business' existing IT capabilities, two options are provided –

1. The client can hit the following API request to onboard multiple users by pulling the data from his database and pushing it to ZShift through this API –

```
URL: https://zens.com/user/create
Header: "Content-Type: application/json"
Method: POST
Data:
{
  name: "Lakme Beauty Salon"
  [{
    name: "John Doe",
    emailId: "john.d@zens.com",
    phoneNo: "8909675634",
    jobSite: { id: 23,
      name: "hauz khas"
    },
    role: { id:12,
      name: "Hair-stylist"},
    reportingManager: { id: 1234,
      name: "Yash Vaish"},
    shiftTimings: [{day: "Monday", shift: "6am-11pm"},
      {day:"Tuesday", shift:"6am-11pm"}
    ]},
    password:"jsfa546511sbka3"
  }
}
Response Code: 201 Created.
```

The client must have the software development capabilities to develop an API which would pull data from their database and then push it to ZShift.

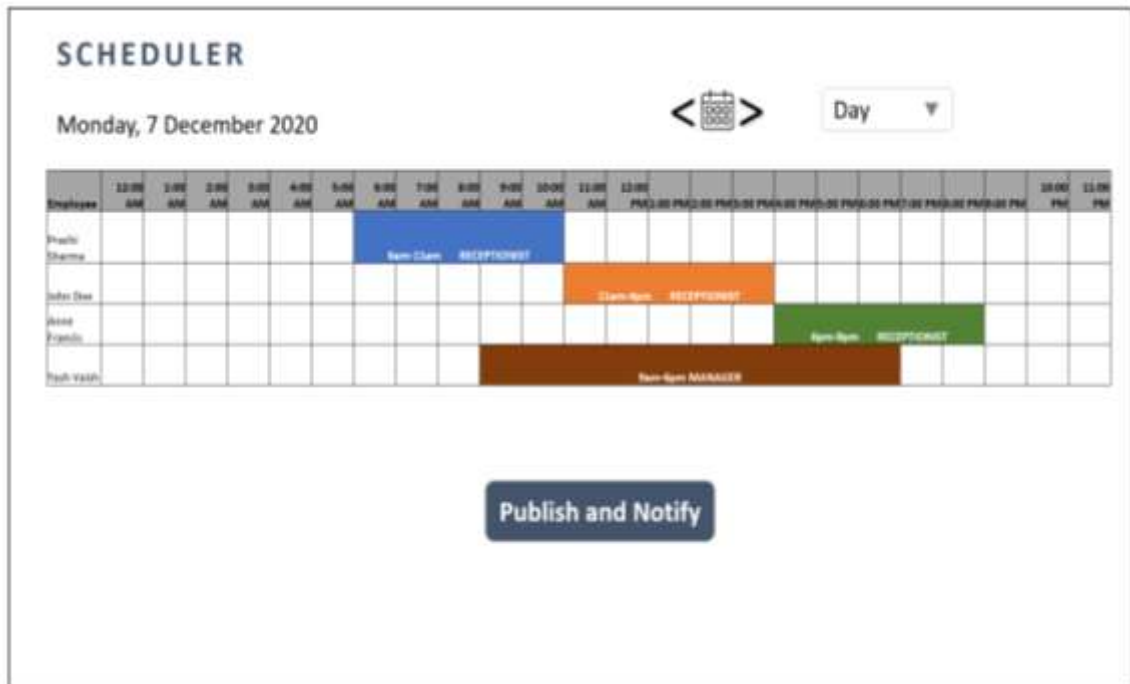
2. Second option is to contact the admin. The workarounds would be figured out to deal with the data available with the client. E.g., Direct entries to the ZShift database could be made for one-time.

Once the employee profiles are created, the employees will be notified through an email and will be **asked to activate their accounts** with link mentioned in the email.

3.1.2 Setting up of Schedules

Once the employees are onboarded, the employees can then login to their respective accounts using the email id and the password. The managers can then proceed with creating the schedule. This is the core functionality which ZShift offers. It Must contain the following features -

1. Scheduler



- By default, the scheduler opens in the day-wise mode. This can be changed by selecting a different option from the drop down on the top right. (Available options – Day, Week, Month)
- Managers can navigate the dates by clicking on the date icon.
- In the day-wise mode the schedule for the entire day would be visible with every grid representing an hour. On-clicking the grids against the employee name, the shifts window will open where the data will be pre-populated based on the preferences specified by the employee during the configuration phase. The Manager can then proceed with creating the shift for the employee.
- The shift assigned to every employee would be color-coded in different colours for better visual identification and demarcation.
- Once done, the Schedules can be published by clicking the **Publish and Notify** button. This would also trigger the update notifications to the employees (as specified earlier).
- For employees, who do not have the Create Access will only be able to view the schedule. Edit options, Publish and Notify button will be disabled.

2. Dashboard



The Dashboard would display the relevant KPIs. Users can get an idea about the progress (or no progress). This is only for viewing purposes and no data on this page should be kept editable.