Software Requirements Specification

For

Laundry Wala

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1. Introduction

1.1 Purpose

Laundry Wala helps laundry manager to manage orders by overseeing the orders collected by the employees, sending invoices to customers through mails and constantly updating the status of the orders. An Employee has the errand of collecting and delivering orders correctly based on the orders assigned to him. A customer should be registered first by the employees of the laundry then he will be assigned username and password through which he can further book orders online. Eventually, the application aims at relieving customers to walk to laundry to book an order by allowing them to book online and employees are sent to their doorsteps to collect the orders online.

1.2 Document Conventions

The font used in this doc is Times New Roman with a size of 12 for the regular text, for sub-headings the size is 14 and size of headings is 18.In this doc we try to give the specs for each requirement to the possible extent, but may miss some minor details.

1.3 Intended Audience and Reading Suggestions

The doc mainly aims at developers. Starting with the overview one can go through the overall description for product, interface requirements, system requirements and non-functional requirements for better understanding of the report.

1.4 Product Scope

The product is an online web-site which is intended for management of laundry of customers and their bills. It has all the events of the customers recorded like dropping clothes for laundry, payment and collecting their clothes. This way the management of customers becomes easy rather than maintaining books for that purpose. This helps in easy maintenance and helps in making bills, calculating the profits, investments etc.

2. Overall Description

2.1 Product Perspective

This product is being developed to reduce the burden of laundry people of the burden of keeping track of the clothes being given and taken and the bills of the customers and their payments. The purpose is to finish off all these works in less time so that the laundry work can be done quickly and also more new orders can be taken as the old ones are given away. This drives more business for the laundry people and the customers can also quickly receive their clothes.

In Laundry Wala, there are two kinds of users, admin and employee. The admin has access to the entire system whereas the employee has limited access.

2.2 Product Functions

The application allows the admin view the statistical analysis of the clothes with most order, customers with maximum order, section of orders which has got most revenue. The admin can manage orders by constantly updating status of the order based on which an email is automatically generated and sent to the email id of the customers. A daily report containing no. of pending, delivered orders, no of clients registered and revenue generated is shown in the form of a table which gives the daily expenditure. Any problem regarding clothes or any service problem can be conveyed to the customer through email through the contact customer section. The admin or the manager can print the invoice of the customer and hand it over to the employee when he is assigned a delivery.

2.3 User Classes and Characteristics

The different users of this laundry Wala are laundry managers, laundry employees and the customers. The admin can manage orders by constantly updating status of the order based on which an email is automatically generated and sent to the email id of the customers. The admin or the manager can print the invoice of the customer and hand it over to the employee when he is assigned a delivery. The customer on the other hand has a separate login credentials where can view the orders he has booked and the status of those orders. He can book orders online once he logs in. He can update his profile once he logs in which includes his password. This gives flexibility to the customer to change passwords. The laundry employees can update the customer orders into the system.

2.4 Operating Environment

Hardware Requirements:

- Computer Machine with atleast 2GB RAM and 64 GB ROM
- External Disk
- Database atleast 10 GB large for long run use of this application
- Reliable web server

Software Requirements

- Composer
- Operating system : Windows XP or above
- Languages used: HTML, CSS, Bootstrap, JavaScript, Ajax for the front end and PHP as the backend language.

2.5 Design and Implementation Constraints

- Since, the Laundry people may or may not afford high-end desktops the application should be made feasible to run on systems with RAM starting from 2GB having Windows OS from XP version.
- MySQL database is used since it is open source and need not be paid for.
- The application must be light weight so that it does not require very high speed internet connection.
- The storage also should limit to 10 to 20 GB.

2.6 Assumptions and Dependencies

It is assumed that the computers used by the Laundry Wala will at least have the minimum required specifications to run the application. Otherwise, this application may not be used by the target clients and will not be a success. Also the application depends on sql server. So, if these assumptions and dependencies fail then the application will fail.

3. External Interface Requirements

3.1 User Interfaces

- Login
- Sign up
- Booking
- Printing Invoices
- Logout

3.2 Hardware Interfaces

The system shall run on Microsoft Windows based system.

3.3 Software Interfaces

The system shall interface with Access database.

3.4 Communications Interfaces

Web browsers are the interfaces to communicate with the application. Supported bowsers:

- Google Chrome
- Firefox
- Internet Explorer

4. System Features

4.1 Login

4.1.1 Description and Priority

This feature is to acquire access to the system so that the other features of the system can also be used depending on the type of use whether an admin or an employee. This feature has high priority as the data stored in the application is important and cannot be lost or manipulated by others. Hence, login is compulsory for using the application.

4.1.2 Stimulus/Response Sequences

The users are provided with a username and a password. Hence, the process begins by the user entering the username and corresponding password. Then the system will perform the authentication process by looking up in the database. If correct then the user will be taken further otherwise he/she will be prompted to enter correct username or password.

4.1.3 Functional Requirements

The login screen allows registered users to login to the site to access all of the features that their account gives them access to. If they type in their username and password and click submit the user's credentials are validated and if correct they are logged in. The database should be properly normalized so that the authentication process will be fast.

4.1.3.1 **Sign in :**

INPUT : Email-id and password.

OUTPUT : If valid – redirect to next page (Welcome).
If not valid – Invalid Customer / Try again.

4.1.3.2 **Sign up :**

INPUT : Details for Registration(New Customer).

OUTPUT : Successfully registered and redirect to next page (Welcome).

4.2 Online booking facility for customer

4.2.1 Description and Priority

This feature is to provide the customer to book for laundry service online so that the problem of standing in long queues is resolved. This feature has high priority as this will attract more customers and also the laundry employees can easily keep track of the customers.

4.2.2 Stimulus/Response Sequences

Once the customer has logged in, he will be directed to the booking page. Here he can select the type of clothes for washing, type of washing etc. and make a booking.

4.2.3 Functional Requirements

REQ-1: The employee is required to enter the details of the type of clothes given for and the type of wash the user wishes.

REQ-2: The customer must be notified about the availability of the washing machine and pressing machines.

4.2.3.1 **Plan/Pricing :**

INPUT : Select your plan/pricing.

OUTPUT : Redirect to schedule pickup page.

4.2.3.2 **Schedule Pickup :**

INPUT : Select date for schedule pickup.

OUTPUT : If available then redirect to place order / if not available please choose for another date .

4.2.3.3 **Payment Option :**

INPUT : Choose your payment option.

OUTPUT : Successfully order placed / Thanks for choosing our services .

4.3 Printing of invoices

4.3.1 Description and Priority

This feature is to print the invoice of respective customers. The priority of this feature is medium.

4.3.2 Stimulus/Response Sequences

The invoices for different orders placed by customers is shown here, on clicking the id of the order the customer is redirected to invoice page showing details of the given invoice. On clicking the invoice id the admin is redirected to Show invoice page where the details of the order just clicked is displayed.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The only requirement is that the user and software can interact in a reasonable amount of time.

5.2 Safety Requirements

There are no safety requirements.

5.3 Security Requirements

The user's information will be password protected and accessible only to them.

5.4 Software Quality Attributes

This software is versatile through its open source capabilities to eliminate bugs and improve performance.

6. Other Requirements

Appendix A: Glossary

Laundry Wala : An application that provides online facilities of storage of laundry information and booking of laundry service.

Employee: The worker of laundry.

Admin: The Person who controls the entire laundry Wala.

Use Case: An action implemented by the user system.

Appendix B: Analysis Models

Different analysis models such as class diagram, sequence diagrams have been included above.