American International University-Bangladesh (AIUB)
Department of Computer Science
Faculty of Science &Technology (FST)
Summer 22 23

Software Quality Assurance and Testing

Laundry Management System

A Report submitted
By

SN	Student Name	Student ID
1	Sumaiya Malik	20-43688-2

Software Test Plan

for

< **Laundry Management System**>

Version 1.0 approved

Prepared by <Sumaiya, Tamim, Sneha, Sanjida>

<American International University-Bangladesh>

<13 August,2023>

Table of Contents

1. TEST PLAN IDENTIFIER: RS-MTP01.3

2. REFERENCES

o Software Requirement Specification (SRS) Document

- Draw.io(https://app.diagrams.net/)
- Elaundry(https://www.elaundry.com.bd)
- Dhopaghat(https://www.dhopaghat.com)
- Hello Laundry (http://hellolaundry.com.bd)

3. INTRODUCTION

3.1 Background to the Problem

- The background to the problem for online laundry services is related to the increasing demand for a convenient and time-saving solution for people who lead busy lives and do not have the time or energy to do their own laundry. Laundry is an essential part of our daily lives, and many people do not have the time or resources to do it themselves. The traditional laundry services can be inconvenient as customers need to travel to a physical location to drop off and pick up their laundry, which can be time-consuming and inconvenient. They need a reliable and efficient solution to handle their laundry needs, and with the increasing use of technology, they are looking for an online laundry service that can offer them convenience and quality service.

- However, the current laundry service industry is fragmented, and customers have limited options to choose from. They may not know which service providers are trustworthy and which ones can provide quality service. Also, there is a lack of transparency in pricing and service quality, making it challenging for customers to make informed decisions. Therefore, there is a need for an online laundry service platform that can offer customers a wide range of options, transparent pricing, and a seamless user experience.

3.2 Solution to the Problem

- To solve the challenges faced by customers in the laundry service industry, an online laundry service platform can be developed that allows customers to search for their preferred laundry service providers. The platform can offer both web and app-based solutions, making it accessible to a wide range of customers. Customers can search for

their preferred laundry brands or local laundry service providers, filter their searches based on location and service type, and select the one that best meets their needs. The platform can also offer customers a map view of the available laundry service providers and their locations, making it easier for them to choose one near their location.

One of the key features of the online laundry service is the ability for customers to schedule their laundry pickups and deliveries online, eliminating the need to travel to a physical location. Customers can simply specify the date and time they want their laundry picked up, and the service provider will come to their location to collect the laundry. Similarly, customers can specify the date and time they want their laundry delivered, and the service provider will deliver the cleaned laundry to their doorstep.

- To enhance the customer experience, the online laundry service will also provide real-time tracking of laundry pickups and deliveries. Customers will be able to track the status of their laundry from pickup to delivery, ensuring that they are always aware of the progress of their laundry. This will give customers peace of mind and ensure that they can plan their schedules accordingly.

- To ensure quality service, the platform can offer a rating and review system for laundry service providers. This system will enable customers to rate their experience and provide feedback on the service quality, pricing, and overall customer experience. It will also help build trust and transparency in the industry by providing customers with a better understanding of the quality of service offered by different providers.

- The platform can also offer transparent pricing and payment options, allowing customers to see the cost of different laundry services upfront and choose the one that fits their budget. The platform can accept secure online payments, making it convenient for customers to pay for the service without worrying about cash handling.
- The development of an online laundry service platform can offer customers a convenient and reliable solution to their laundry needs. It can provide customers with a wide range of options, transparent pricing, and a seamless user experience. This will help improve the quality of service and increase customer satisfaction, thereby promoting the growth of the laundry service industry.

- The existing software solutions that are available to solve the problem are laundry management system, Elaundry(https://www.elaundry.com.bd), Dhopaghat(https://www.dhopaghat.com), Hello Laundry (http://hellolaundry.com.bd) etc. The current system lacks a real-time map, sophisticated security, and an online database. On the other side, this project includes these qualities.

4. REQUEIREMNT SPECIFICATION

4.1 System Features

Common Feature:

System Feature: Home Page:

Functional Requirements:

1. The home page should provide users with an overview of the laundry service.
2. The home page should allow users to navigate to different sections of the website.
3. The home page should include a search function that allows users to find laundry service providers by location.
4. The home page should display the most popular laundry service providers or promotions.
5. The home page should allow users to register or sign in to their account.
6. The home page should display information about the laundry service, such as pricing, delivery options, and payment methods.

Priority Level: High
Precondition: The website is accessible and functional.

System Feature: Login

Functional Requirements:

1. Allow users (admin, office-employee, deliver, customer) to log in to their account using their email address or user name and password or social media credentials.
2. Allow users to reset their password in case they forget it.
3. Allow users to create an account by providing their basic details and contact information.

Priority Level: High
Precondition: The user has access to the website and has a valid username or password.

Admin:

System Feature: ADD (office employee, delivery personnel, Laundry Company, add branch of different Laundry Company)

Functional Requirements:

1. The system should allow authorized users (Admin) to add new office employees, delivery personnel, and laundry companies to the system.
2. The system should provide a user-friendly interface for entering and saving information about newly added employees and companies.
3. The system should allow the addition of different branches for each laundry company, along with their location details.

Priority Level: High
Precondition: Admin is logged into the system with appropriate permissions.

System Feature: Delete (Office employee, delivery personnel, Laundry Company)

Functional Requirements:

1. The system should allow authorized users (Admin) to delete office employees, delivery personnel, and laundry companies from the system.
2. The system should prompt the user to confirm the deletion action before removing any entity from the system.
3. The system should ensure that deleting an entity will not cause data inconsistencies in the system.

Priority Level: High
Precondition: The admin user is logged into the system with appropriate permissions.

System Feature: View (All information customer, office employee, delivery personnel, all company)

Functional Requirements:

1. The system should allow authorized users (Admin) to view all information about customers, office employees, delivery personnel, and laundry companies stored in the system.
2. The system should provide a user-friendly interface for displaying the requested information to the user.
3. The system should allow the user to filter and sort the displayed information based on various criteria.

Priority Level: High
Precondition: The admin user is logged into the system with appropriate permissions.

System Feature: Update (All information)

Functional Requirements:

1. The system should allow authorized users to update all information about customers, office employees, delivery personnel, and laundry companies stored in the system.
2. The system should provide a user-friendly interface for modifying the existing information and saving the changes to the system.
3. The system should ensure that updating an entity will not cause data inconsistencies in the system.

Priority Level: High

Precondition: The admin is logged into the system with appropriate permissions and has a valid user ID and password.

System Feature: Activities Track

Functional Requirements:

1. The system should be able to track all office-employee's activities.
2. The system should be able to track the location of delivery employees in real-time.
3. The system should be able to track the status of customer orders, from pickup to delivery.
4. The system should be able to generate reports on employee productivity and order fulfillment.

Priority Level: High

Precondition: The admin user is logged into the system with appropriate permissions and has a valid user ID and password.

Office Employee:

System Feature: View Order from Customer and Laundry Service

Functional Requirements:

1. The system should allow the office employee to view all orders placed by customers.
2. The system should display details of each order, such as the customer's name, contact information, delivery address, and order status.
3. The system should allow the office employee to filter and sort orders based on various criteria, such as delivery date, order status, and customer name.
4. The system should allow the office employee to view orders placed by different laundry service providers.
5. The system should display details of each order, such as the laundry service provider name, contact information, and order status.
6. The system should allow the office employee to filter and sort orders based on various criteria, such as delivery date, order status, and laundry service provider name.

Priority Level: High
Precondition: user have valid user id and password

System Feature: Shift Order to Deliver (Customer)

Functional Requirements:

1. The system should allow the office employee to access the list of pending orders.
2. The system should allow the office employee to assign a pending order to a designated delivery person provided by the customer.
3. The system should allow the office employee to view the status of assigned orders and update their status as necessary.
4. The system should allow the office employee to communicate with the assigned delivery person regarding any issues or changes to the order.
5. The system should allow the office employee to generate reports on the order delivery status.

Priority Level: High
Precondition: The office employee is logged into the system with appropriate permissions.

System Feature: Shift Order to Deliver (Laundry Company)

Functional Requirements:

1. The system should allow the office employee to receive delivery requests from laundry companies.
2. The system should provide the necessary information about the delivery, including customer details, delivery location, and laundry items.
3. The system should allow the office employee to assign the delivery to a specific delivery person from the laundry company.
4. The system should provide a notification to the assigned delivery person about the delivery details and location.
5. The system should allow the office employee to track the delivery person's location and estimated time of arrival.
6. The system should allow the office employee to update the delivery status and notify the laundry company and customer about any changes.

Priority Level: High

Precondition: The office employee is logged into the system with appropriate permissions.

System Feature: Track (Office Employee)

Functional Requirements:

1. The system should allow office employees to track the status of laundry orders.
2. The system should display real-time updates on the progress of laundry orders, including pickup, delivery, and any delays.
3. The system should allow office employees to view the location of delivery personnel and the estimated time of delivery.
4. The system should provide office employees with notifications of any issues or delays with orders.
5. The system should allow office employees to update the status of orders as they are processed.

Priority Level: High

Precondition: The office employee is logged into the system with appropriate permissions.

Delivery:

System Feature: View Assigned Deliveries

Functional Requirements:

1. The system should allow the delivery person to view their assigned deliveries.
2. The delivery person should be able to see the details of the delivery, such as the customer's address, contact information, and order details.
3. The system should display the delivery route on a map to help the delivery person navigate to each customer's location efficiently.
4. The delivery person should be able to mark each delivery as completed once it has been delivered to the customer.
5. The system should update the status of the delivery in real-time, so the office employee can track the progress of the deliveries.

Priority Level: Medium

Precondition: The Deliver is logged into the system with appropriate permissions.

System Feature: Update Delivery Status

Functional Requirements:

1. The system should allow the delivery person to update the status of the delivery, such as "en route", "delivered", or "failed to deliver".
2. The system should notify the customer of any updates to their delivery status in real-time.
3. The system should allow the office employee to view the updated delivery status and take appropriate actions if necessary.
4. The system should keep a record of all delivery status updates for future reference and analysis.

Priority Level: High
Precondition: The Deliver is logged into the system with appropriate permissions.

System Feature: Cancel Delivery

Functional Requirements:

1. The system should allow the customer or the office employee to cancel a delivery.

2. The cancellation request should be processed in real-time.
3. The system should notify the relevant parties (e.g., the delivery person, the customer, and the laundry service) of the cancellation.
4. The system should update the delivery status to "Cancelled" in the database.
5. The system should process any refunds or charges associated with the cancellation according to the company's policies.

Priority Level: High
Precondition: The Deliver is logged into the system with appropriate permissions.

System Feature: View Customer Information

Functional Requirements:

1. The system should allow the delivery person to view customer information such as name, address, and contact number.
2. The system should only display customer information for the delivery that is assigned to the delivery person.
3. The system should ensure the privacy and security of customer data and prevent unauthorized access.

Priority Level: Medium
Precondition: The Deliver is logged into the system with appropriate permissions.

System Feature: Contact Customer

Functional Requirements:

1. The system should allow the Deliver person to view the contact information of the customer for a particular delivery order.
2. The system should provide the option for the Deliver person to contact the customer via phone or message directly from the system.
3. The system should track all communication between the Deliver person and the customer for record-keeping purposes.

Priority Level: High
Precondition: The Deliver is logged into the system with appropriate permissions.

Laundry Company:

System Feature: View Upcoming Orders

Functional Requirements:

1. The system should allow the laundry company to view a list of upcoming orders that are scheduled to be delivered by a specific delivery person and provide by office employee.
2. The system should display relevant details about each upcoming order, such as the customer's name, order details, and delivery address.
3. The system should allow the laundry company to filter and sort the list of upcoming orders based on various criteria such as date, time, order status, and delivery person.
4. The system should allow the laundry company to update the status of each upcoming order, such as "processing," "ready for delivery," "out for delivery," and "delivered."
5. The system should provide real-time updates to the laundry company and the delivery person regarding any changes in the status of an upcoming order.

Priority Level: Medium
Precondition: The User is logged into the system with appropriate permissions.

System Feature: Take Order from Deliver

Functional Requirements:

1. The system should allow delivery persons to input and submit orders to the laundry company.
2. The system should allow laundry company employees to view and manage the orders received from delivery persons.
3. The system should enable the laundry company to track and update the status of the orders.
4. The system should provide a notification to the delivery person upon the acceptance of their order.
5. The system should allow the delivery person to view the status of their submitted orders.

Priority Level: High
Precondition: The User is logged into the system with appropriate permissions.

System Feature: Update Order Status for Laundry Company

Functional Requirements:

1. The system should allow the company to update the status of an order after taking the product from the delivery person.
2. The system should present the office employee with a list of delivery persons who are available to fulfill the order, from which they can choose. Additionally, the company must ensure that the selected delivery person receives the product for delivery.
3. The system should allow the company to update the status of an order after shifting the product to the delivery person again.
4. The system should provide an option to select the current status of the order from a predefined list of statuses.
5. The system should send notifications to the delivery person and the customer about the status update.

Priority Level: High
Precondition: The User is logged into the system with appropriate permissions.

Customer:

System Feature: User Registration

Functional Requirement:

1. Allow users to create a new account by providing their personal information such as name, email address, and phone number.

Priority Level: High
Precondition: The user has access to the registration interface of the system.

System Feature: Laundry Service Provider Search

Functional Requirement:

1. Allow users to search for laundry service providers based on their location and service type.

Priority Level: Medium

Precondition: The user has access to the search functionality of the system.

System Feature: Laundry Pickup and Delivery Scheduling

Functional Requirement:

1. Allow users to schedule their laundry pickups and deliveries online.

   Priority Level: High

   Precondition: The user is logged into the system and has access to their account.

System Feature: Laundry Tracking

Functional Requirement:

1. Allow users to track the status of their laundry from pickup to delivery.

   Priority Level: High
   Precondition: The user is logged into the system and has access to their account.

System Feature: Rating and Review System

Functional Requirement:

1. Allow users to rate and review laundry service providers based on their experience.

   Priority Level: Medium
   Precondition: The user is logged into the system and has access to their account.

System Feature: Transparent Pricing and Payment Options

Functional Requirement:

1. Display transparent pricing information for laundry services and provide secure online payment options.

   Priority Level: High
   Precondition: The user is logged into the system and has access to their account.

System Feature: Order Management System Feature

Functional Requirements:

1. Allow users to place an order for laundry services by selecting the type of service, laundry items, and quantity.
2. Allow users to specify the pickup and delivery time and location.
3. Allow users to track the status of their order and receive notifications regarding the pickup, delivery, and completion of the order.
4. Provide an option for users to cancel or modify their order before pickup.
5. Ensure that the order details and user information are secure and protected.

Priority Level: High
Precondition: The user is logged into the system and has access to their account.

System Feature: Order Tracking

Functional Requirements:

1. Provide customers with the ability to track the status of their laundry orders in real-time
2. Allow customers to view detailed information about their order, such as the estimated delivery/pickup time, the status of each item in the order, and any special instructions or notes from the laundry service provider
3. Send notifications to customers when their order status changes, such as when the laundry is picked up, when it is being washed, when it is ready for delivery, and when it has been delivered
4. Allow customers to view a history of their previous orders and their corresponding order statuses.

Priority Level: High
Precondition: The user is logged into the system and has access to their account.

4.2 System Quality Attributes

Common Feature:

System Feature: Home Page:

Quality Attributes:

1. Usability: The home page should be easy to navigate and provide users with the information they need quickly and efficiently.
2. Reliability: The home page should be stable and available to users at all times.
3. Performance: The home page should load quickly and respond to user actions promptly.
4. Security: The home page should protect user data and ensure the privacy and security of sensitive information.
5. Accessibility: The home page should be accessible to users with disabilities, including those who use assistive technology.
6. Scalability: The home page should be able to handle a large number of users and display information in real-time.

System Feature: Login

Quality Attributes:

1. Usability: The login system must be user-friendly and easy to navigate for users of all technical backgrounds.
2. Security: The login system must ensure the confidentiality and integrity of user credentials and prevent unauthorized access to user accounts.
3. Performance: The login system must be fast and responsive to provide a seamless user experience.
4. Accessibility: The login system must be accessible to users with disabilities or special needs.

Admin:

System Feature: ADD (office employee, delivery personnel, Laundry Company, add branch of different Laundry Company)

Quality Attributes:

1. Usability: The system should have an intuitive and easy-to-use interface for adding new entities to the system, reducing the chances of user errors.
2. Reliability: The system should ensure that all newly added entities are correctly saved and available for future use.
3. Security: The system should have appropriate access controls to ensure that only authorized users can add new entities to the system.
4. Scalability: The system should be able to handle a large number of concurrent requests for adding new entities to the system without compromising its performance.

System Feature: Delete (Office employee, delivery personnel, Laundry Company)

Quality Attributes:

1. Usability: The system should have a clear and easy-to-use interface for deleting entities from the system, reducing the chances of user errors.
2. Reliability: The system should ensure that all deleted entities are correctly removed from the system and will not cause any data inconsistencies.
3. Security: The system should have appropriate access controls to ensure that only authorized users can delete entities from the system.
4. Scalability: The system should be able to handle a large number of concurrent requests for deleting entities from the system without compromising its performance.

System Feature: View (All information customer, office employee, delivery personnel, all company)

Quality Attributes:

1. Usability: The system should have an intuitive and easy-to-use interface for displaying information to the user, reducing the chances of user errors.

2. Reliability: The system should ensure that all information displayed to the user is accurate and up-to-date.
3. Security: The system should have appropriate access controls to ensure that only authorized users can view the requested information.
4. Scalability: The system should be able to handle a large number of concurrent requests for displaying information to the user without compromising its performance.

System Feature: Update (All information)

Quality Attributes:

1. Usability: The system should have an intuitive and easy-to-use interface for updating information, reducing the chances of user errors.
2. Reliability: The system should ensure that all updated information is correctly saved and available for future use.
3. Security: The system should have appropriate access controls to ensure that only authorized users can update information in the system.
4. Scalability: The system should be able to handle a large number of concurrent requests for updating information without compromising its performance.

System Feature: Activities Track

Quality Attributes:

1. Usability: The tracking function should be easy to use for employees and managers, with clear instructions and an intuitive interface.
2. Reliability: The tracking function should provide accurate and up-to-date information on employee location and order status.
3. Performance: The tracking function should be fast and efficient, with minimal loading times for tracking information and notifications.
4. Security: The tracking function should ensure the privacy and security of customer and employee data.
5. Scalability: The tracking function should be able to handle a large number of tracking requests and provide information in real-time.

Office Employee:

System Feature: View Order from Customer and Laundry Service

Quality Attributes:

1. Usability: The system should provide an easy-to-use interface for viewing and managing orders.
2. Reliability: The system should display accurate and up-to-date information about each order and its status.
3. Performance: The system should be fast and efficient, with minimal loading times for order details and search results.
4. Security: The system should ensure the privacy and security of customer and laundry service provider data.
5. Scalability: The system should be able to handle a large number of orders and display order details in real-time.

System Feature: Shift Order to Deliver (Customer)

Quality Attributes:

1. Usability: The system should be easy to use and navigate for the office employee, with clear instructions on how to assign and track orders.
2. Reliability: The system should be reliable and accurate, with up-to-date information on the status of orders and the availability of delivery personnel.
3. Performance: The system should be fast and efficient, with minimal loading times for order details and status updates.
4. Security: The system should ensure the privacy and security of customer information and order details.
5. Scalability: The system should be able to handle a large number of orders and delivery personnel, with the ability to assign and track orders in real-time.

System Feature: Shift Order to Deliver (Laundry Company)

Quality Attributes:

1. Usability: The shift order function should be easy to use and navigate for the office employee.
2. Reliability: The system should ensure that delivery requests are accurate and complete and that the assigned delivery person is reliable and responsible.

3. Performance: The system should be fast and efficient in processing delivery requests and assigning delivery persons.
4. Security: The system should ensure the privacy and security of customer and delivery person data and information.
5. Scalability: The system should be able to handle a large volume of delivery requests and assign delivery persons in real-time.

System Feature: Track (Office Employee)

Quality Attributes:

1. Reliability: The system should provide accurate and up-to-date information on the status of laundry orders.
2. Usability: The tracking function should be easy to use and provide relevant and timely information to office employees.
3. Performance: The tracking function should be fast and efficient, with minimal loading times for updates and notifications.
4. Security: The system should ensure the privacy and security of order and customer data.
5. Scalability: The system should be able to handle a large number of tracking requests and updates in real-time.

Delivery:

System Feature: View Assigned Deliveries

Quality Attributes:

1. Usability: The interface for viewing assigned deliveries should be intuitive and easy to use for the delivery person.
2. Reliability: The system should provide accurate and up-to-date information on assigned deliveries and their status.
3. Performance: The system should be fast and efficient in displaying the delivery route and updating the delivery status.
4. Security: The system should ensure the privacy and security of customer and delivery person data.
5. Scalability: The system should be able to handle a large number of deliveries and display real-time updates for each delivery.

System Feature: Update Delivery Status

Quality Attributes:

1. Usability: The update delivery status function should be easy to use and require minimal effort from the delivery person.
2. Reliability: The system should ensure that the updated delivery status is accurate and reflected in real-time for the customer and office employee.
3. Performance: The update delivery status function should be fast and efficient, with minimal loading times.
4. Security: The system should ensure the privacy and security of customer data and delivery information.
5. Scalability: The system should be able to handle a large number of delivery status updates in real-time.

System Feature: Cancel Delivery

Quality Attributes:

1. Reliability: The cancellation process should be reliable and not result in errors or system crashes.
2. Usability: The cancellation process should be easy to use and accessible to both customers and office employees.
3. Security: The system should ensure the privacy and security of user data, including payment information and order history.
4. Scalability: The system should be able to handle a large volume of cancellation requests without slowing down or crashing.

System Feature: View Customer Information

Quality Attributes:

1. Security: The system should have strong access controls and prevent unauthorized access to customer data.
2. Privacy: The system should protect customer data and only allow access to authorized delivery persons.
3. Usability: The system should provide an easy-to-use interface for delivery persons to view customer information.
4. Reliability: The system should provide accurate and up-to-date customer information to the delivery person.

System Feature: Contact Customer

Quality Attributes:

1. Usability: The contact feature should be easily accessible and straightforward for the Deliver person to use.
2. Reliability: The system should provide accurate and up-to-date contact information for the customer.
3. Security: The system should ensure the privacy and security of customer data, including their contact information.
4. Scalability: The system should be able to handle a large volume of communication requests between deliver persons and customers.

Laundry Company:

System Feature: View Upcoming Orders

Quality Attributes:

1. Usability: The view function should be easy to use and provide relevant and accurate information to the laundry company.
2. Reliability: The system should provide accurate and up-to-date information on upcoming orders and their delivery status.
3. Performance: The view function should be fast and efficient, with minimal loading times for the list of upcoming orders and the order details.
4. Security: The system should ensure the privacy and security of customer data and order information.
5. Scalability: The system should be able to handle a large number of upcoming orders and display them in real-time.

System Feature: Take Order from Deliver

Quality Attributes:

1. Usability: The system should be easy to use for both delivery persons and laundry company employees.
2. Reliability: The system should accurately record and manage the orders received from delivery persons.

3. Performance: The system should be fast and efficient, with minimal lag times between order submission and acceptance.
4. Security: The system should ensure the privacy and security of all order information and transaction details.
5. Scalability: The system should be able to handle a large volume of orders from multiple delivery persons simultaneously.

System Feature: Update Order Status for Laundry Company

Quality Attributes:

1. Usability: The status update function should be easy to use and provide relevant and accurate information to the company, the delivery person, and the customer.
2. Reliability: The system should ensure that the status updates are accurate and up-to-date.
3. Performance: The status update function should be fast and efficient, with minimal loading times for the status updates and notifications.
4. Security: The system should ensure the privacy and security of user data, including order information.
5. Scalability: The system should be able to handle a large number of status updates and notifications in real-time.

Customer:

System Feature: User Registration

Quality Attributes:

1. Security: The system must ensure that the user's personal information is protected and not accessible to unauthorized users.
2. Usability: The registration process should be simple and easy to use for the users.
3. Performance: The system should be able to handle a large number of user registrations simultaneously.

System Feature: Laundry Service Provider Search

Quality Attributes:

1. Accuracy: The search results should be accurate and match the user's search criteria.
2. Performance: The system should be able to retrieve the search results quickly and efficiently.

3. Usability: The search interface should be easy to use and navigate.

System Feature: Laundry Pickup and Delivery Scheduling

Quality Attributes:

1. Reliability: The system should ensure that the laundry is picked up and delivered on the specified date and time.
2. Usability: The scheduling process should be simple and easy to use for the users.
3. Performance: The system should be able to handle a large number of laundry pickup and delivery requests simultaneously.

System Feature: Laundry Tracking

Quality Attributes:

2. Accuracy: The tracking information should be accurate and up-to-date.
3. Usability: The tracking interface should be easy to use and navigate.
4. Performance: The system should be able to retrieve the tracking information quickly and efficiently.

System Feature: Rating and Review System

Quality Attributes:

1. Accuracy: The rating and review system should accurately reflect the user's experience with the laundry service provider.
2. Usability: The rating and review interface should be easy to use and navigate.
3. Security: The rating and review system should be protected from fraudulent reviews and ratings.

System Feature: Transparent Pricing and Payment Options

Quality Attributes:

2. Accuracy: The pricing information displayed should accurately reflect the actual cost of the laundry service.

3. Security: The online payment system should be secure and protected from fraudulent activities.
4. Usability: The payment process should be simple and easy to use for the users.

System Feature: Order Management System Feature

Quality Attributes:

1. Reliability: The system must ensure that all orders are accurately processed and fulfilled on time.
2. Performance: The system must be able to handle a large number of orders and users simultaneously without any delay or lag.
3. Availability: The system must be available 24/7 to accept and process orders.
4. Security: The system must ensure the confidentiality, integrity, and availability of user data and transaction information.

System Feature: Order Tracking

Quality Attributes:

1. Reliability: The order tracking system should be reliable and accurate, providing customers with up-to-date and correct information about their orders.
2. Usability: The order tracking system should be easy to use and navigate, with clear and intuitive interfaces that allow customers to quickly find the information they need.
3. Performance: The order tracking system should be fast and responsive, with minimal delay in updating the order status or sending notifications to customers.
4. Security: The order tracking system should be secure and protect customers' personal and order information from unauthorized access or data breaches.

4.3 System Interface

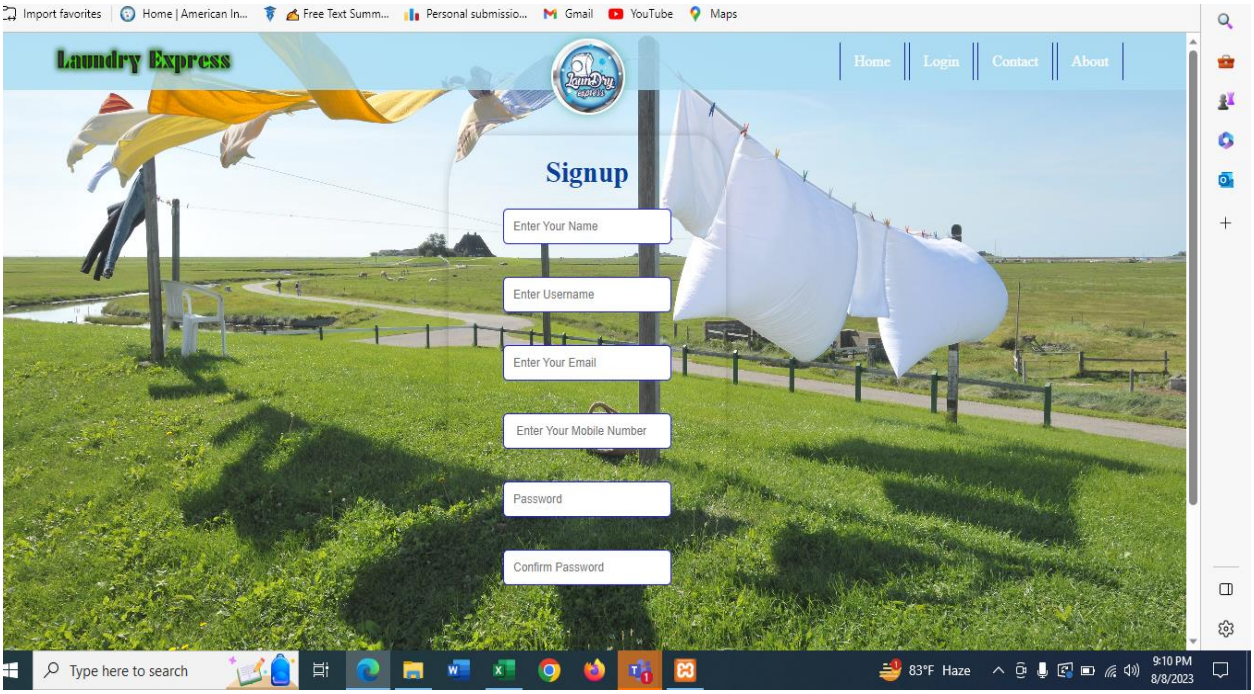

Figure 1: Signup Page of Laundry Management System.

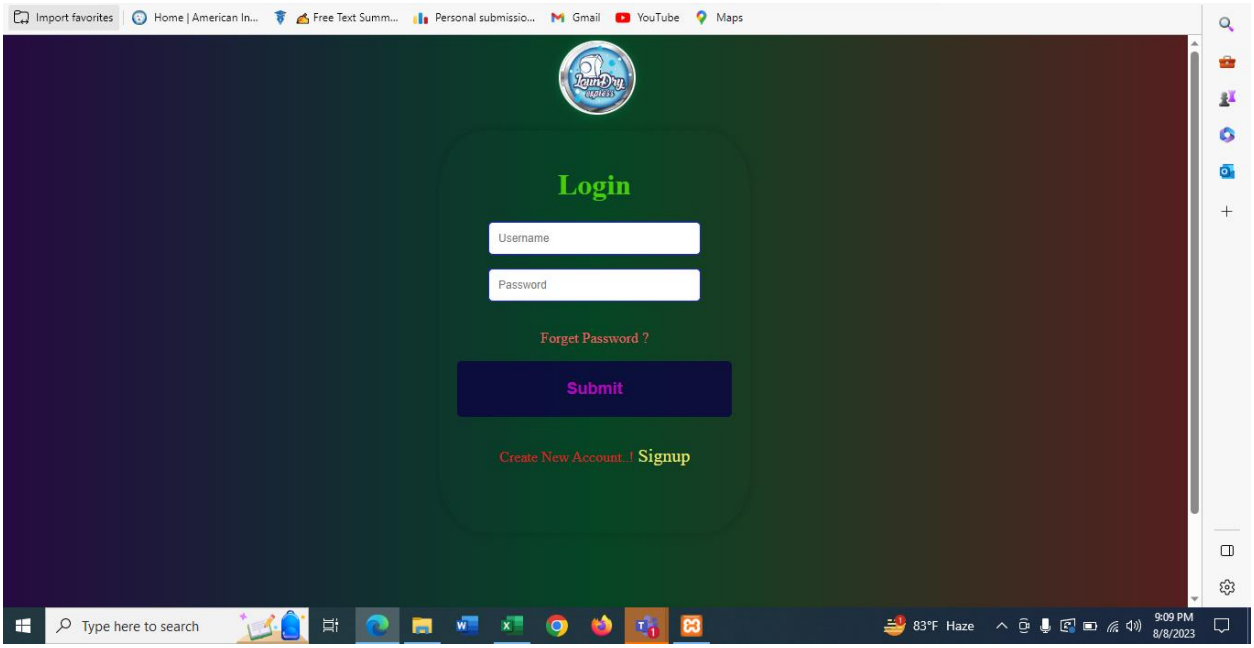

Figure 2: Login Page of Laundry Management System.

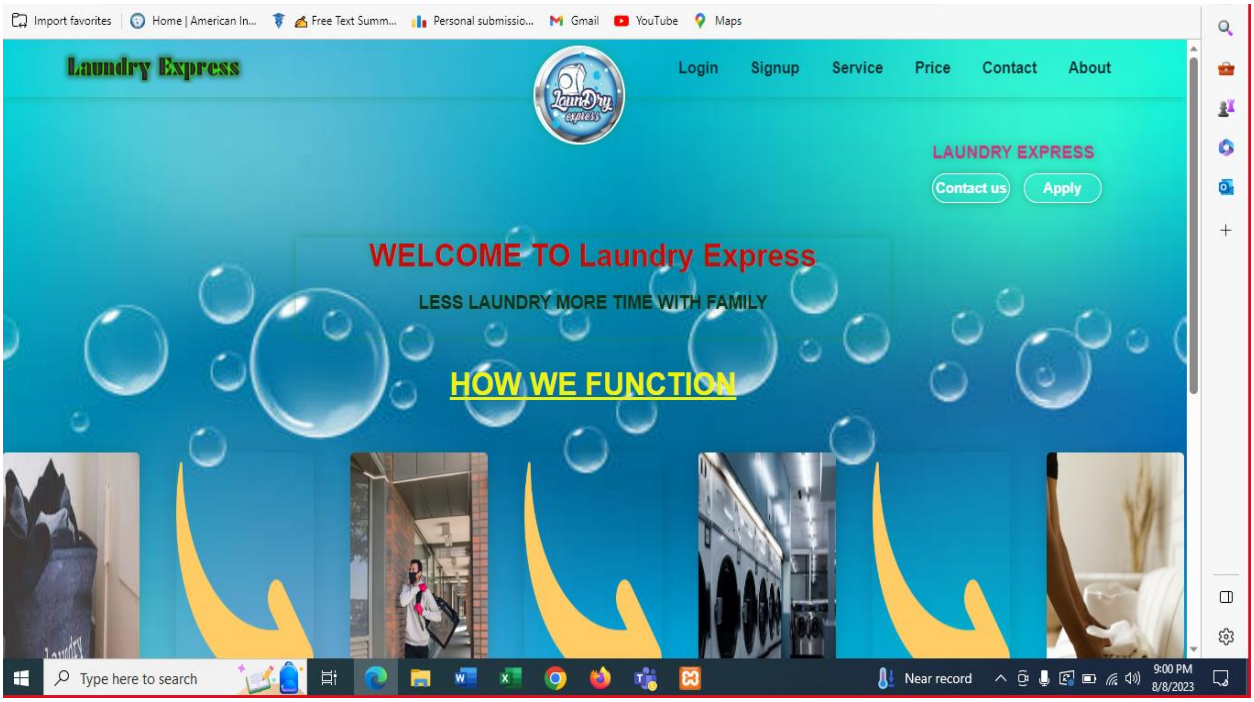

Figure 3: Home Page of Laundry Management System.

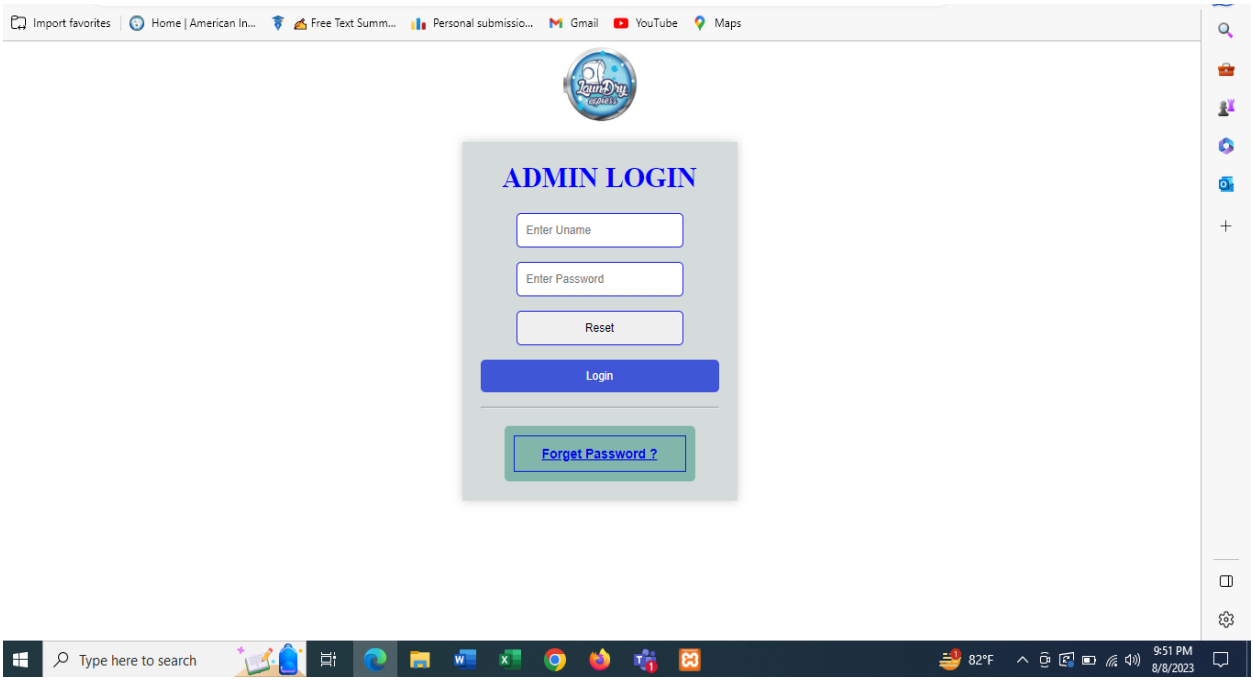

Figure 4: Admin Login Panel of Laundry Management System.

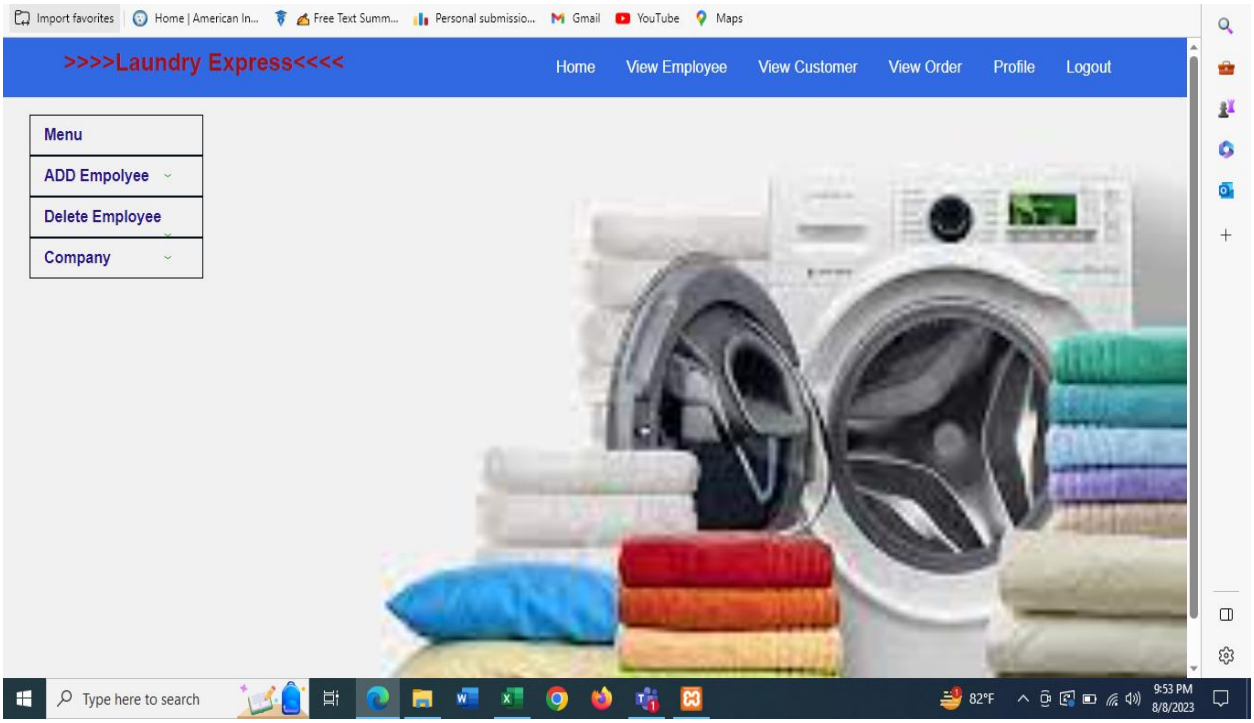

Figure 5: Admin Profile Page of Laundry Management System.

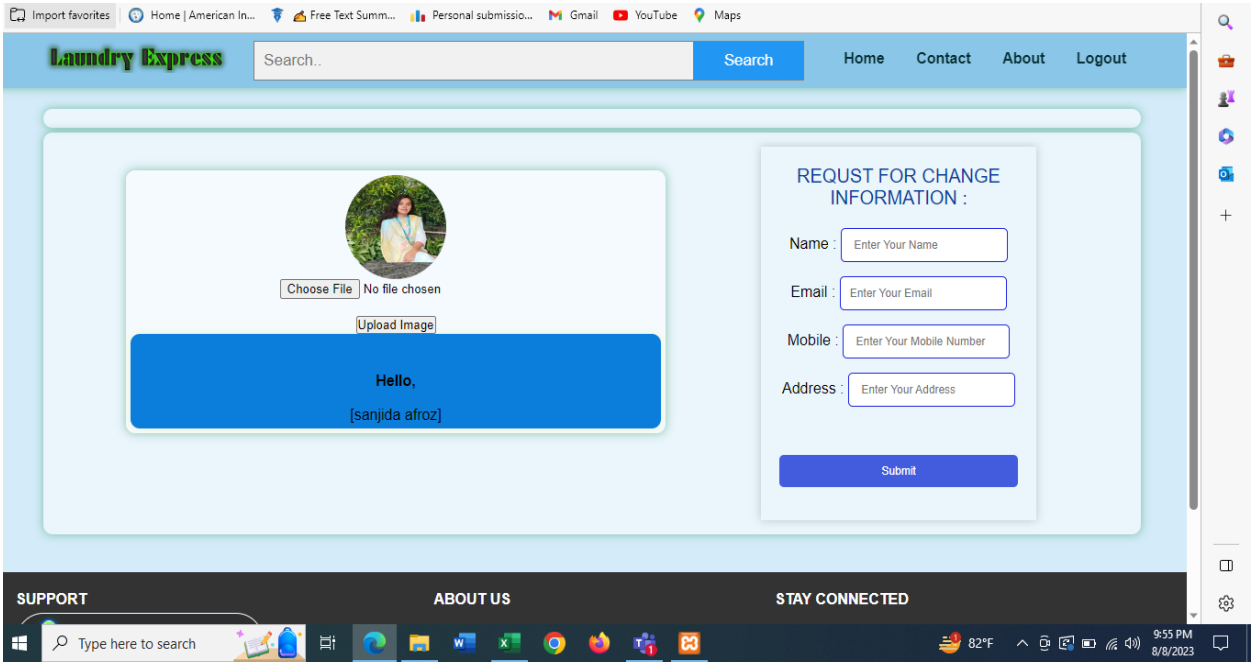

Figure 6: Admin Dashboard Page of Laundry Management System.

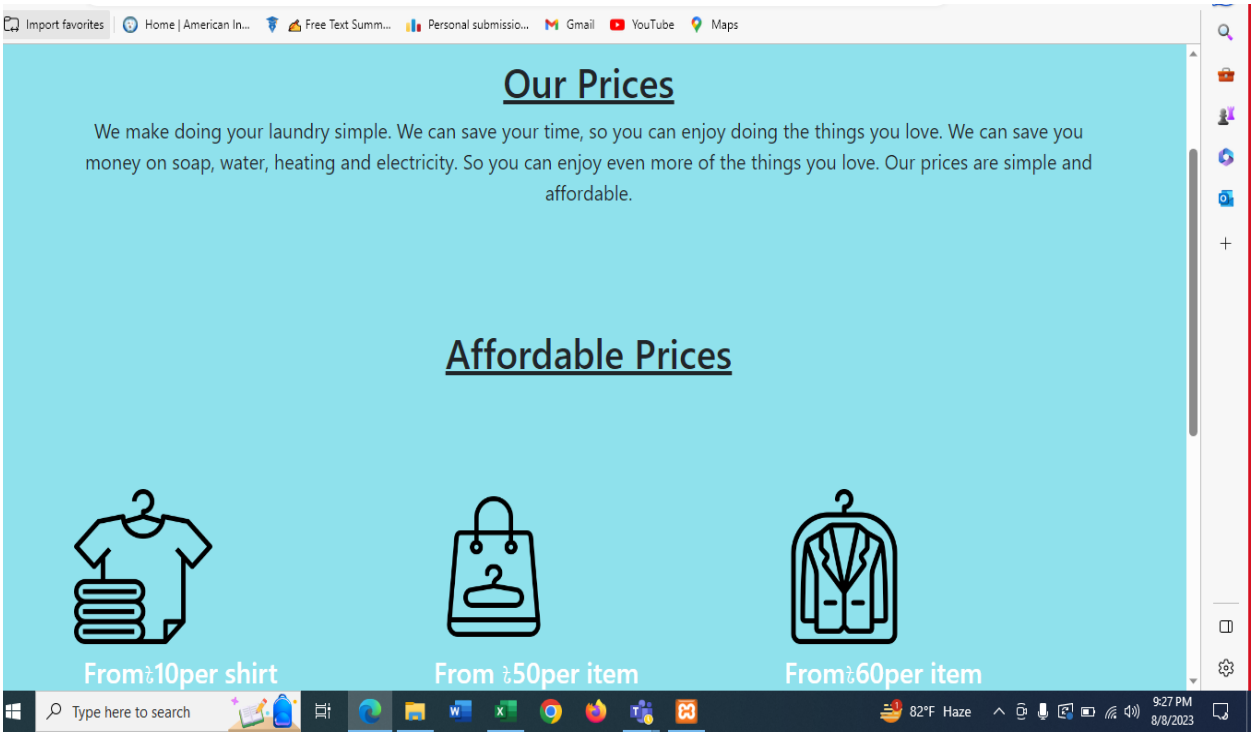

Figure 7: Price List Page of Laundry Management System.

4.4 Project Requirements

- The source code must be written in HTML, PHP, CSS, JS
- For software databases, we shall use a My SQL database also we can use Oracle database server. (SQL Server Management Studio)
- For software development we have developed the android version but in future we will try to make the IOS version by using the Swift. (Web Application)
- The minimum software size will be 200 MB.

4.4.1 PROJECT ESTIMATION

An algorithmic software cost estimating methodology is the Constructive Cost Model (COCOMO). We will be using an organic software project type. It is a software project that must be worked on in a hardware-dependent environment.

Constructive Cost Model

We are assuming that the SLOC (Source Lines of Code) that we require here after analyzing all the components.

SLOC = 35,000

Now we need to figure out the effort, development time, and required number of people.

Suppose that, our software project type is organic, the values of the Coefficient<Effort Factor> =2.5

P = project complexity = 1.25

SLOC= 35,000

T= SLOC-dependent coefficient = 0.40

Now,

Effort = PM = Coefficient*(SLOC/1000) ^{P}

$PM = 2.5*(35000/1000)^{1.25}$

$= 212.83$

Development Time= DM= $2.5*(PM)^{T}$

$= 2.5*(212.83)^{0.40}$

$= 21.34$

$= 22$ [In months]

Required Number of People = ST

$= PM/DM$

$= 212.83/21.34$

$= 9.97$

$= 10$

Total Development time: 22 months

Total working hours needed: (22*22) *8= 3,872hours; (1 month = 22 working day & per day working time 8 hours)

Requirement analysis & Documentation times needed: 22*22=484 hours

Times needed for Ui/UX designing: (2*22) *22=968 hours

Times needed for developing system: (7*22) *22= 3,388 hours

Times needed for Testing & Debugging: (3*22) *22= 1,452 hours

Revision time: (2*22) *22= 968 hours.

For develop the software:

- Developer team of 5 engineers.
- Software Quality assurance team of 2 engineers.
- One Business Analyst
- Two Ui/UX Designer
- Total budget: **5,500,000 BDT**

4.4.2 Cost and Profit Analysis

Cost Analysis

Project Name: Laundry Management System

SL	Designation	Total Hours	Per day Salary	Resource Unit	Total Cost (BDT)
1	Developer	3388	250	5	4235000
2	SQA Engineer	1452	200	2	580800
3	Ui/UX Designer	968	150	1	145200
4	Business Analyst	484	300	2	290400
	Total Cost				**5251400**

Now, All together

Project Name: Laundry Management System

SL	Cost Item	Total Cost(BDT)
1	Requirement Cost	
2	Design Cost	145200
3	Development Cost	4235000
4	Testing Cost	580800
5	Business Analyst Salary	290400
6	Staff's Salary	100000
7	Maintence Cost	20000
8	Review Cost	10000
9	Market Promotion Cost	100000
10	Launching Website Cost	40000
	Total Cost	**7021400**

Profit:

Those who will use their grave space in the cemetery have to buy a maintenance cost. We set our monthly maintenance rate at 250 BDT. We are assuming at least 2550 people will use our app.

So, 2550 X 250 = 637,500 BDT

So, in 22 months it will be 637500 *22 = 14025000 BDT

Our Total Development cost = 7021400 BDT

So, earnings on this website = 14025000 BDT

So, we are getting (14025000-7021400) = 7003600 BDT profit. After one-year subscription fee will be reduced.

5. FEATURES NOT TO BE TESTED

1. **Third-Party Payment Gateways:**
   Testing of the third-party payment gateways used for online payments will not be directly tested within the scope of this project.
   While integration with these payment gateways will be ensured, the specific testing of their functionalities lies with the payment gateway providers.

2. **Customer Devices and Browsers:**
   Testing on various customer devices (e.g., smartphones, tablets, desktops) and different web browsers (e.g., Chrome, Firefox, Safari) will not be explicitly tested.
   Ensuring compatibility and responsiveness across a range of devices and browsers is important, but detailed testing of each combination is outside the scope of this project.

3. **User-Provided Content Quality:**
   The quality and accuracy of content provided by customers (such as delivery addresses, laundry preferences) will not be directly tested.
   The system may have validation checks, but the responsibility for providing accurate and complete information rests with the customers.

4. **User's Internet Connectivity:**
   Testing the performance of the online laundry service under various internet connectivity conditions of individual users will not be explicitly tested.
   While optimizing for performance is important, testing user experiences under all possible connectivity scenarios is beyond the scope of this project.

5. **External Email Services:**
   The proper delivery of confirmation emails, notifications, and alerts through external email services will not be tested in detail.
   Integration with email services will be ensured, but detailed email delivery testing is the responsibility of the email service providers

6. TESTING APPROACH

6.1 Testing Levels

1. **Unit Testing:** This is the lowest level of testing and involves testing individual components or units of the software in isolation. Developers usually perform unit testing to ensure that each unit of code works as expected. It helps catch bugs and issues at an early stage, before they can propagate to higher levels. Unit tests are typically automated and focus on testing specific functions, methods, or classes.

2. **Integration Testing:** Integration testing focuses on testing how different units or modules of the software work together when integrated. The goal is to ensure that the

interactions between components are seamless and that data flows correctly between them. Integration testing can identify issues related to communication between modules, data transformation, and overall system behavior.

3. **System Testing:** System testing involves testing the entire software application as a complete and integrated system. The purpose is to validate that the software meets the specified requirements and functions correctly as a whole. System testing covers various aspects, including functional testing, performance testing, security testing, and more. It provides a broader view of the software's behavior in a real-world environment.

4. **Acceptance testing:** Acceptance testing is a crucial phase in the software development lifecycle where the software is evaluated to determine whether it meets the specified requirements and is ready for deployment. The primary focus of acceptance testing is to ensure that the software satisfies the needs of the end-users and stakeholders. It's the final step before the software is released into production.

5. **Regression Testing:** Regression testing is carried out throughout the development cycle to ensure that new changes or additions to the software do not negatively impact existing functionality. It involves re-running tests that have already been executed to make sure that the new code changes have not introduced new defects.

6.2 Test Tools

- The **Selenium Web Driver Tool** will be used for automated testing. This tool serves as an automation framework specifically designed for web applications. Its capabilities extend to simulating user interactions with web elements, thereby executing scripts that systematically test and validate application behavior. This automation not only expedites the identification of errors but also ensures that our software systems are of exceptional quality. The tool's functionality encompasses a range of benefits. Firstly, it guarantees the consistency of test executions, reducing the likelihood of human errors and bolstering accuracy. Secondly, by enabling us to run tests across various browsers, it ensures compatibility and consistent behavior across different platforms. Thirdly, it validates the responsiveness of our systems, verifying their performance under diverse conditions. This contributes to an overall enhancement in the quality assurance process and reinforces our commitment to delivering reliable and user-centric software.

- **ClickUp Project Management Tool** will be used to share documents, communicate with team members, to keep track of schedule and planning, the progress of the testing project and soon. ClickUp multifaceted capabilities cater to various aspects of project management. The tool facilitates seamless communication among team members, ensuring that discussions, updates, and insights are readily accessible. Additionally, its features for scheduling and planning enhance our ability to organize tasks, set milestones, and monitor progress in real time. ClickUp customizable dashboards offer visual representations of project advancement, thereby promoting transparency and ensuring that stakeholders remain well-informed about the project's status. In essence, our

integration of the ClickUp tool not only enhances efficiency in project management but also fosters a culture of effective collaboration and transparent communication, ultimately contributing to the successful execution of our testing endeavors.

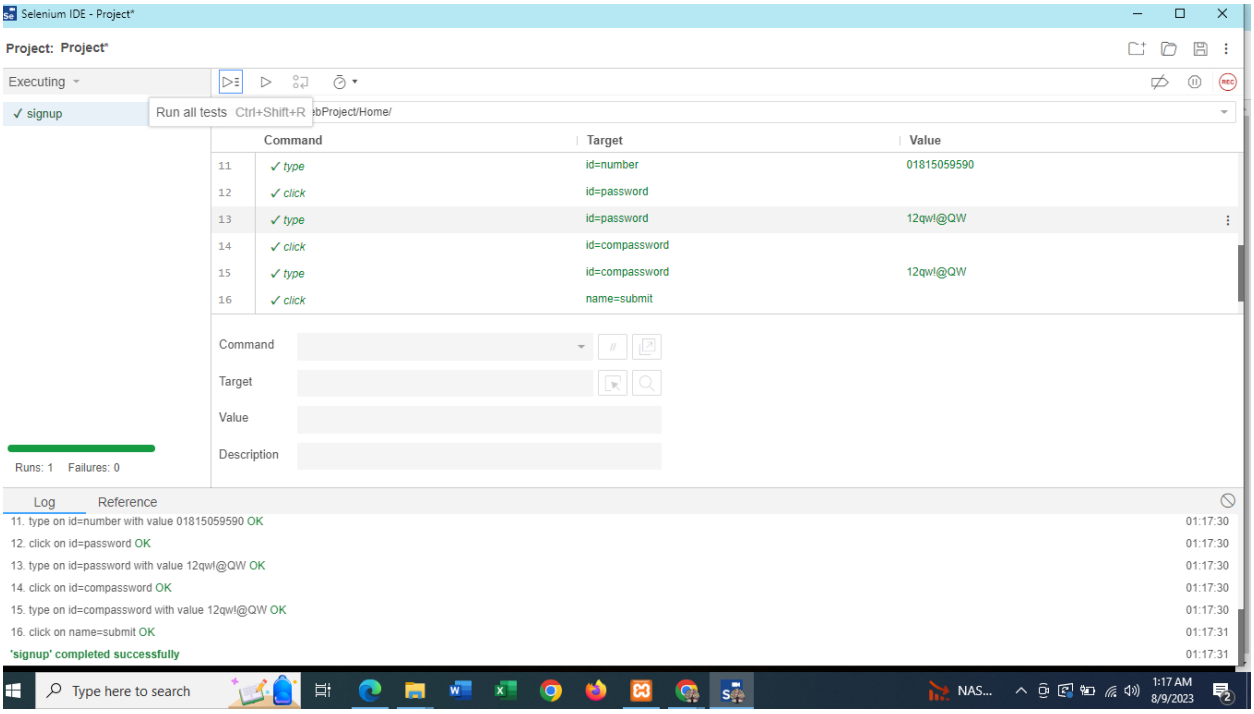

Figure 8: Checking the automation test of Signup page using Selenium Chrome Extension.

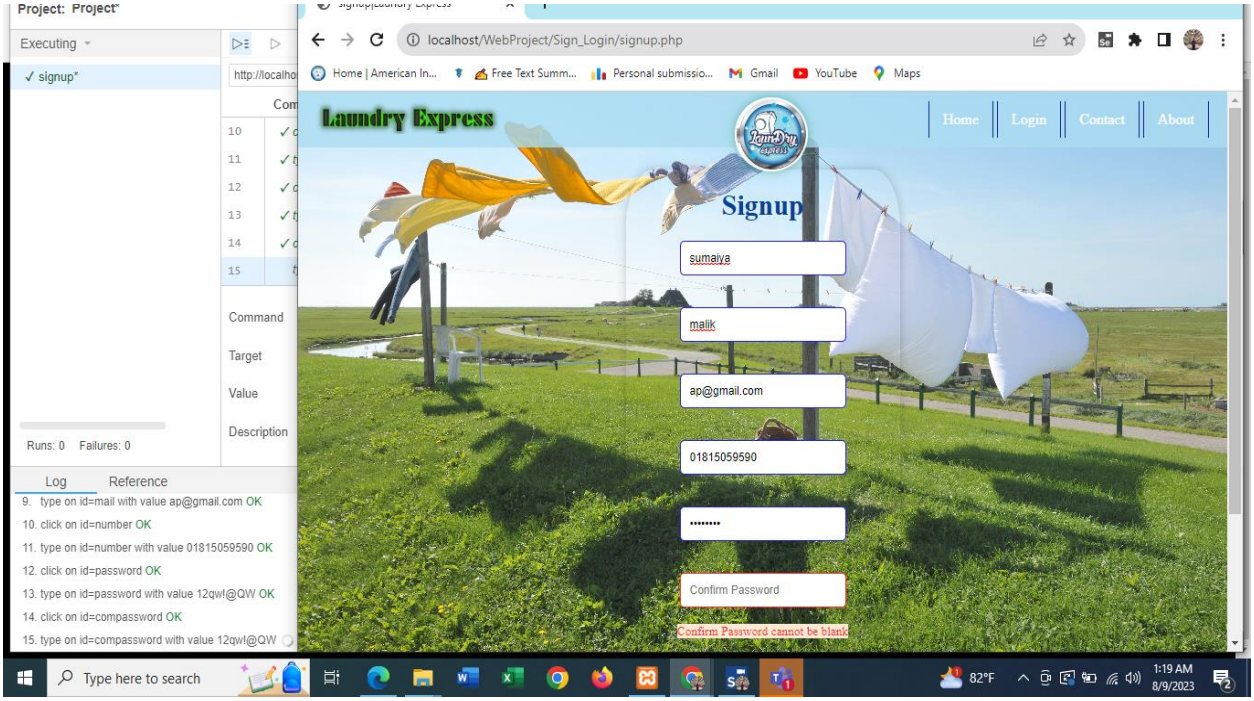

Figure 9: After the automation test of Signup page using Selenium Chrome Extension loading to the website.

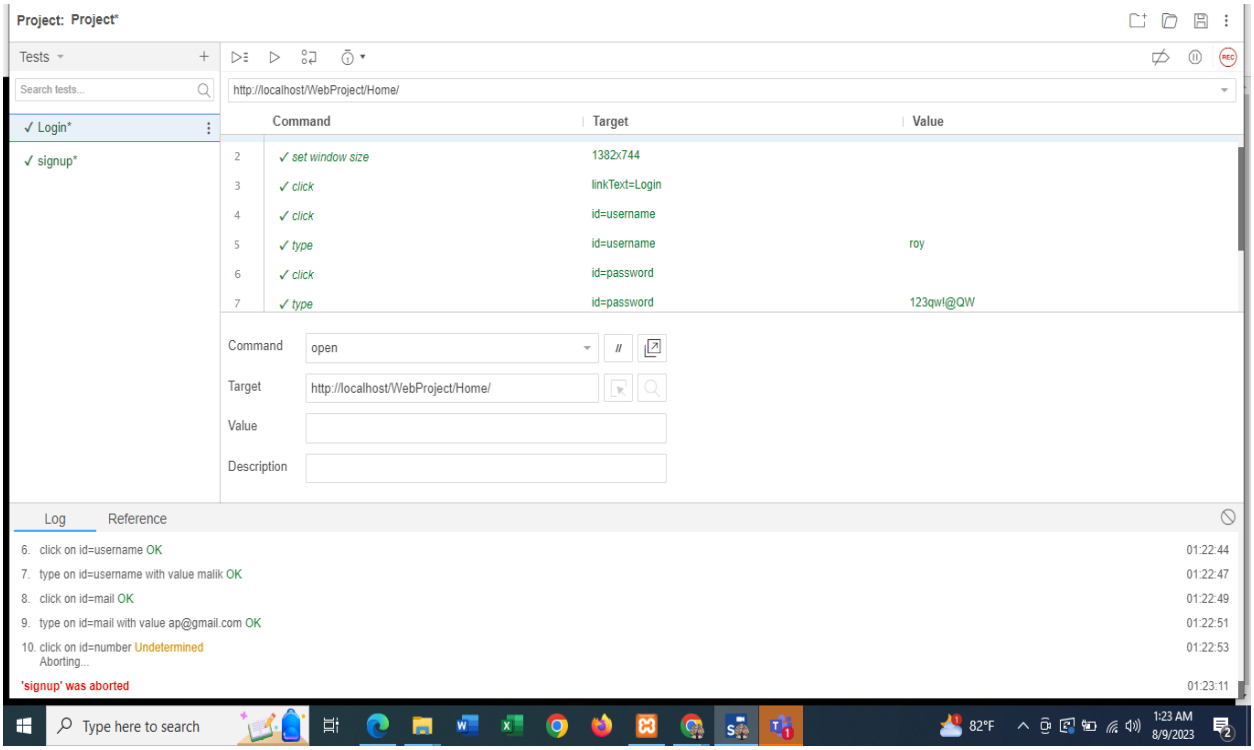

Figure 10: Checking the automation test of Login page using Selenium Chrome Extension.

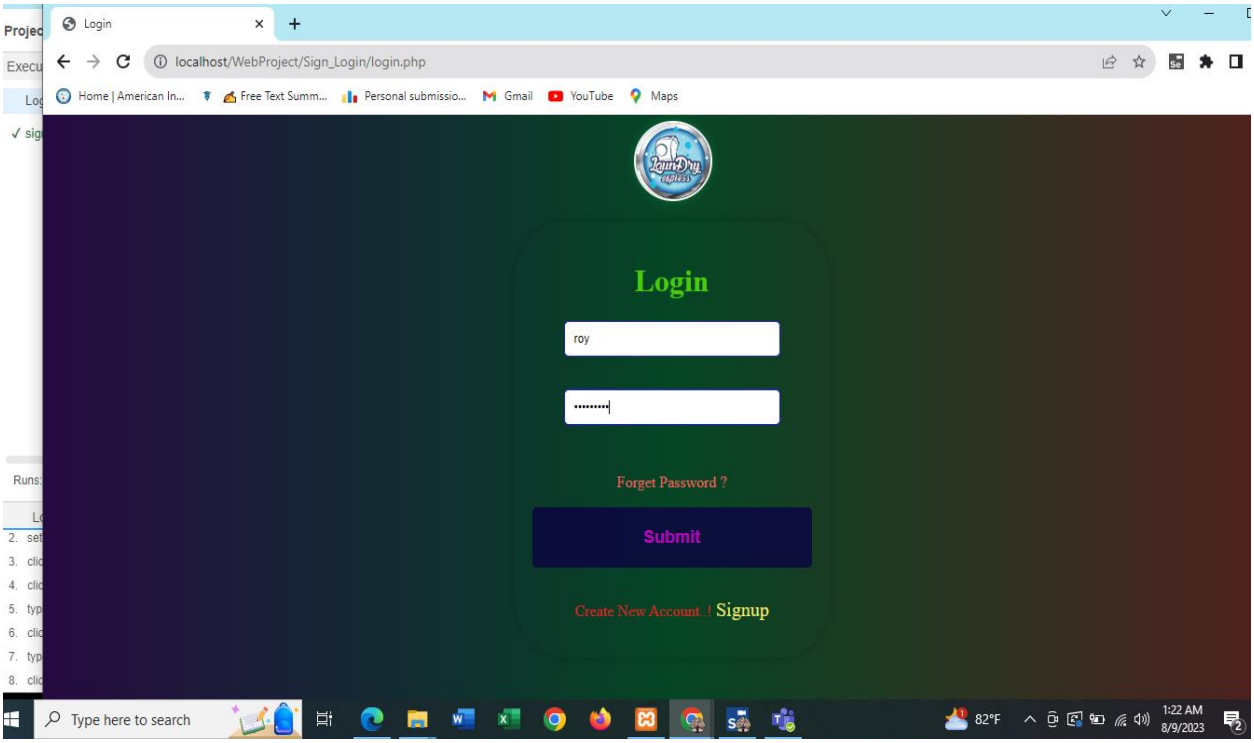

Figure 11: After the automation test of Login page using Selenium Chrome Extension loading to the website.

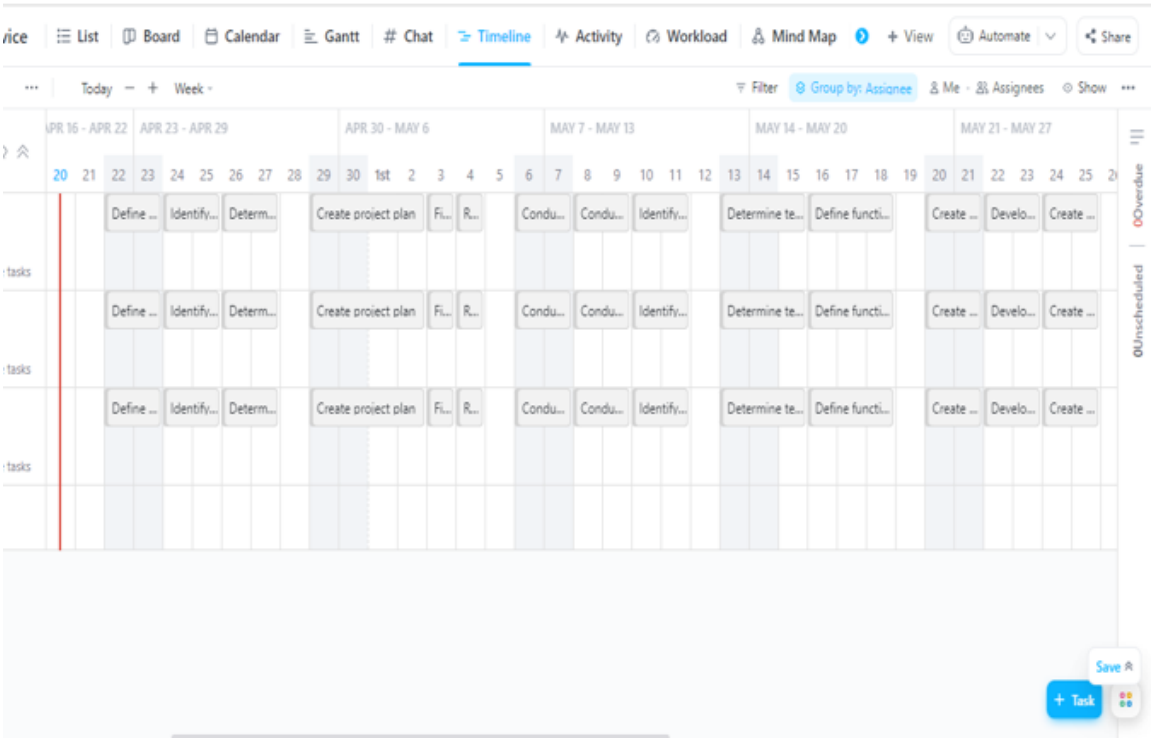

Figure 12: The total Timeline for the Project of Laundry Management System.

6.3 Meetings

For a project to achieve success within its designated timeframe, effective task distribution among team members is crucial. This practice ensures that work progresses smoothly and adheres to the established schedule. It falls upon the testing team to meticulously uncover and rectify any bugs or errors, guaranteeing a flawless system that meets the standards of quality expected by customers. To drive the project's triumph, the testing team has implemented a weekly meeting regimen. During these gatherings, each module is carefully scrutinized to gauge its advancement and identify potential issues. This ongoing evaluation ensures that modules are developed in accordance with specifications and that any anomalies are detected early on. Collaboration is key, as the testing team collaborates closely with the development team and project manager. These interactions maintain a clear understanding of goals, enable obstacle resolution, and accommodate any modifications. Furthermore, the team remains equipped to manage emergencies through prompt meetings dedicated to pressing issues. This proactive approach to handling unforeseen challenges ensures minimal disruptions to the project timeline and a smoother development process overall.

7. TEST CASES/TEST ITEMS

Table 1: Verify Admin Login Page with valid username and password

Project Name: Laundry Management System			Test Designed by: Sanjida	
Test Case ID: FR_1			Test Designed date: 04/08/2023	
Test Priority (Low, Medium, High): Medium			Test Executed by: Sumaiya	
Module Name: Admin Login Session			Test Execution date: 04/08/2023	
Test Title: verify login with valid username and password				
Description: Test website Admin login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Click Admin 3. Enter username. 4. Enter password 5. Click submit	username: admin Password: Admin1@#	Admin should login into the application	As expected,	Pass
Post Condition: Admin is validated with database and successfully login to account. The account session details are logged in the database.				

Table 2: Verify Login Page with valid username and password

Project Name: Laundry Management System			Test Designed by: Sneha	
Test Case ID: FR_2			Test Designed date: 04/08/2023	
Test Priority (Low, Medium, High): Medium			Test Executed by: Sumaiya	
Module Name: User Login Session			Test Execution date: 04/08/2023	
Test Title: verify login with valid username and password				
Description: Test website User login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Click User 3. Enter username. 4. Enter password 5. Click submit	username: malik Password: 123qw!@QW	User should login into the application	As expected,	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

Table 3: Verify user registration process

Project Name: Laundry Management System			Test Designed by: Sumaiya	
Test Case ID: FR_3			Test Designed date: 05/08/2023	
Test Priority (Low, Medium, High): Medium			Test Executed by: Tamim	
Module Name: User Registration Session			Test Execution date: 05/08/2023	
Test Title: Verify user registration process				
Description: Test the user registration functionality on the website				
Precondition (If any): User does not have an existing account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Click on the "Register" button. 3. Enter desired name 4. Enter desired username. 5. Enter valid email address. 6. Enter Mobile Number 7. Enter password 8. Confirm password 9. Click on the "Register" button	username: Tamim Email: tamim@gmail.com Password: 123 Phone: 01710121222	User should be registered successfully	As expected,	Pass
Post Condition: New user account is created and saved in the database.				

Table 4: Verify user profile update process

Project Name: Laundry Management System			Test Designed by: Tamim	
Test Case ID: FR_4			Test Designed date: 06/08/2023	
Test Priority (Low, Medium, High): Medium			Test Executed by: Sneha	
Module Name: Profile Update			Test Execution date: 06/08/2023	
Test Title: Verify user profile update process				
Description: User is logged in with a valid account				
Precondition (If any): User is logged in with a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Log in with valid credentials. 3. Click on the "Profile" or "Settings" section. 4. Navigate to the "Edit Profile" or "Update Profile" option. 5. Update desired fields (e.g., name, email, password) 6. Click on the "Save" or "Update" button. 7. Verify the updated information	Name: John Doe Email: john@example.com New Password: NewPass123! Confirm Password: NewPass123!	User should update his information	As expected,	Pass
Post Condition: User's profile information is updated and saved in the database.				

Table 5: Verify order creation process

Project Name: Laundry Management System	Test Designed by: Sneha
Test Case ID: FR_5	Test Designed date: 06/08/2023
Test Priority (Low, Medium, High): Medium	Test Executed by: Sanjida
Module Name: Order Management	Test Execution date: 06/08/2023
Test Title: Verify order creation process	
Description: Test the order creation functionality on the website	
Precondition (If any): User is logged in with a valid account	

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Log in with valid credentials. 3. Click on the "Orders" or "New Order" section. 4. Click on the "Create New Order" button. 5. Select customer from dropdown list 6. Choose services and quantities. 7. Set delivery date and time 8. Click on the "Create Order" or "Submit" button 9. Verify order details	Customer: John Smith Service: Wash & Fold Quantity: 3 kg Date: 2023-08-15 Time: 14:00 - 16:00	New order details should be displayed	As expected,	Pass

Post Condition: Order is created and saved in the database.

Table 6: Verify password change process

Project Name: Laundry Management System	Test Designed by: Tamim
Test Case ID: FR_6	Test Designed date: 07/08/2023
Test Priority (Low, Medium, High): Medium	Test Executed by: Sumaiya
Module Name: Account Management	Test Execution date: 07/08/2023
Test Title: Verify password change process	
Description: Test the password change functionality on the website	

Precondition (If any): User is logged in with a valid account

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Log in with valid credentials. 3. Click on the "Profile" or "Settings" section. 4. Navigate to the "Change Password" option. 5. Enter current password 6. Enter new password. 7. Confirm new password 8. Click on the "Change Password" or "Update" button 9. Verify success message or confirmation 10. Log out and log in with new password 11. Attempt to log in with old password 12. Attempt to log in with new password	Current Password: OldPass123! New Password: NewPass456! Confirm Password: NewPass456!	Password successfully changed	As expected,	Pass

Post Condition: User's password is updated in the database and can log in with the new password.

Table 7: Verify forgot password reset process

Project Name: Laundry Management System	Test Designed by: Sneha
Test Case ID: FR_7	Test Designed date: 08/08/2023
Test Priority (Low, Medium, High): Medium	Test Executed by: Sumaiya
Module Name: Account Management	Test Execution date: 08/08/2023
Test Title: Verify forgot password reset process	
Description: Test the forgot password reset functionality on the website	
Precondition (If any): User has an existing account	

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Click on the "Forgot Password?" link. 3. Enter the registered email address. 4. Check the email for the reset link. 5. Click on the reset link in the email 6. Enter the new password. 7. Confirm the new password 8. Click on the "Reset Password" or "Change Password" button 9. Verify password reset success message 10. Log in with the new password 11. Log out and log in with new password 12. Attempt to log in with old password 13. Attempt to log in with new password	Email: john@example.com A password reset email should be sent to the provided email address Email received with reset link	Password successfully reset	As expected,	Pass

Post Condition: User's password is successfully reset and updated in the database.

Table 8: Verify forgot password reset process

Project Name: Laundry Management System	Test Designed by: Tamim
Test Case ID: FR_8	Test Designed date: 09/08/2023
Test Priority (Low, Medium, High): Medium	Test Executed by: Sanjida
Module Name: Account Management	Test Execution date: 09/08/2023
Test Title: Verify forgot password reset process	
Description: Test the forgot password reset functionality on the website	
Precondition (If any): User has an existing account	

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Click on the "Forgot Password?" link. 3. Enter the registered email address. 4. Check the email for the reset link. 5. Click on the reset link in the email 6. Enter the new password. 7. Confirm the new password 8. Click on the "Reset Password" or "Change Password" button 9. Verify password reset success message 10. Log in with the new password 11. Log out and log in with new password 12. Attempt to log in with old password 13. Attempt to log in with new password	Email: john@example.com A password reset email should be sent to the provided email address Email received with reset link	Password successfully reset	As expected,	Pass

Post Condition: User's password is successfully reset and updated in the database.

Table 9: Verify employee creation process

Project Name: Laundry Management System	Test Designed by: Sneha
Test Case ID: FR_9	Test Designed date: 09/08/2023
Test Priority (Low, Medium, High): Medium	Test Executed by: Sumaiya
Module Name: Employee Management	Test Execution date: 09/08/2023
Test Title: Verify employee creation process	
Description: Test the employee creation functionality on the website	
Precondition (If any): User is logged in as an admin	

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Log in as an admin. 3. Click on the "Employee" or "Manage Employees" section. 4. Click on the "Create New Employee" or "Add Employee" button. 5. Enter employee details 6. Set employee's role and permissions. 7. Click on the "Create" or "Add" button 8. Verify success message or confirmation 9. Search for the newly created employee 10. Log in with the new password 11. Log out and log in with new password 12. Attempt to log in with old password 13. Attempt to log in with new password	Name: John Doe Position: Receptionist Email: john@example.com Phone: 123-456-7890 Role: Employee Permissions: Access to customer records and orders	Newly created employee is displayed in search results	As expected,	Pass

Post Condition: New employee is added and saved in the database.

Table 10: Verify user logout process

Project Name: Laundry Management System			Test Designed by: Sumaiya	
Test Case ID: FR_10			Test Designed date: 10/08/2023	
Test Priority (Low, Medium, High): Medium			Test Executed by: Sanjida	
Module Name: Logout session			Test Execution date: 10/08/2023	
Test Title: Verify user logout process				
Description: Test the user logout functionality on the website				
Precondition (If any): User is logged in with a valid account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Log in with valid credentials 3. Click on the "Logout" or "Sign Out" option. 4. Verify successful logout 5. Attempt to access protected pages or functionalities	Logout Button	should logout	As expected,	Pass
Post Condition: User is successfully logged out and session is terminated.				

8. ITEM PASS/FAIL CRITERIA

We have implemented total 10 test cases. All the test cases were passed successfully.

Pass Criteria:

1. **Functionality Success:** The system successfully performs the expected actions and produces the expected outcomes according to the defined scenarios.
2. **Feature Testing:** All features must be tested at least once, and they should pass their respective test cases without any critical issues.
3. **Repeatable Tests:** If a feature or item is tested over 10 times, it must pass in at least 9 out of 10 test iterations.
4. **System Stability:** The system remains stable without crashing during testing or normal usage.
5. **Query Results:** After submitting a query, the system consistently displays the expected results within an acceptable response time.
6. **Data Consistency:** Data must remain consistent between different data sources (e.g., EDI and ZIP/FAX data) during the reconciliation process.
7. **Parallel Processes:** All parallel processes related to ZIP/FAX data should be successfully stopped for the reassigned distributor accounts.

Fail Criteria:

1. **Functionality Failure:** The system fails to perform the expected actions or produces incorrect outcomes for the defined scenarios.
2. **Feature Testing:** Any critical failure occurs during the testing of a feature, indicating a significant defect.
3. **Repeatable Test Failures:** A feature or item fails 9 or more times out of 10 test iterations.
4. **System Instability:** The system crashes or encounters serious stability issues during testing or normal usage.
5. **Query Result Failure:** After submitting a query, the system consistently fails to display the expected results or exhibits extremely slow response times.
6. **Data Discrepancies:** Significant discrepancies are identified between the new EDI data and the old ZIP/FAX data received in parallel.
7. **Parallel Process Issues:** Any issues arise while stopping parallel processes, causing disruptions or data inaccuracies for reassigned distributor accounts.

9. TEST DELIVERABLES

In the Software Quality Testing (SQT), test deliverables encompass a range of artifacts and documentation that are generated throughout the testing process to ensure thorough evaluation and verification of the software product. These deliverables play a pivotal role in maintaining quality standards and facilitating effective communication among team members and stakeholders. Key test deliverables include:

- **Test Plan:** Outlines testing strategy, objectives, scope, resources, and schedule.
- **Test Cases:** Detailed instructions for testing specific functionalities.
- **Test Scripts:** Automated code-based instructions for executing test cases.
- **Test Data:** Input values and conditions used for testing.
- **Test Environment Setup:** Documentation for preparing the testing environment.
- **Test Execution Logs:** Records details of executed test cases and outcomes.
- **Defect Reports:** Documents identified issues, including descriptions and severity levels.
- **Test Summary Report:** Summarizes testing process, results, metrics, and challenges.
- **Regression Test Suite:** Collection of test cases for regression testing.
- **Performance Test Results:** Reports on performance metrics like response times and resource usage.
- **UAT Results:** Outcomes of user acceptance testing, aligning with user requirements.
- **Traceability Matrix:** Links requirements to corresponding test cases.
- **Test Closure Report:** Summarizes testing effort, lessons learned, and recommendations.
- **Training Materials:** Resources for gaining proficiency in testing tools and techniques.

10. STAFFING AND TRAINING NEEDS

In the context of Software Quality Testing (SQT), addressing staffing and training needs is essential to ensure a proficient testing process. For an effective staffing approach, it's crucial to recruit skilled testers with a solid grasp of testing methodologies and tools relevant to the project. Additionally, having experienced test leads to supervise and coordinate the testing efforts enhances overall efficiency. If feasible, considering candidates with domain knowledge or previous experience related to the project's domain can provide valuable insights during testing.

On the training front, providing a comprehensive understanding of the software being tested is vital. This includes offering insights into the system's functionalities, architecture, and user scenarios. Equipping the testing team with diverse testing techniques such as functional, usability, and performance testing enhances their ability to comprehensively evaluate the software's quality.

Training initiatives encompass the intricacies of testing tools, automation frameworks, and systems for tracking defects. This ensures that testers are adept at executing their tasks with efficacy and precision. Additionally, the cultivation of cross-functional skills is actively encouraged, allowing testers to explore diverse testing dimensions and thereby fostering a holistic approach to quality assessment. A continuous learning mindset, coupled with staying attuned to industry trends, emerging technologies, and evolving testing practices, remains integral for sustaining the dynamism of an SQT team. By adeptly balancing the recruitment of skilled personnel and providing targeted training, the SQT team is optimally poised to conduct comprehensive testing, identify potential vulnerabilities, and significantly contribute to the seamless delivery of a trustworthy and high-quality software product.

11. RESPONSIBILITIES

	Sumaiya	Tamim	Sneha	Sanjida
Project Proposal	✓	✓		
Requirement Analysis			✓	✓
Planning		✓	✓	✓
System Design	✓			
Implementation	✓		✓	
Test case design	✓	✓	✓	✓
Test case implementation	✓	✓	✓	
Integration Testing	✓	✓	✓	
Report Bugs & make summary		✓		✓
Documentation	✓			✓

12. TESTING SCHEDULE

A testing schedule within Software Quality Testing (SQT) is a meticulously crafted plan that outlines the systematic execution of testing activities throughout the software development process. It maps out the specific testing phases, their designated timelines, and essential tasks. By setting milestones and allocating resources, this schedule ensures a synchronized alignment with the overarching project timeline. It also factors in potential risks and dependencies, allowing for timely mitigation strategies. With a keen eye on quality, the schedule delineates the scope of testing for each phase, from unit testing to acceptance testing, while also addressing regression testing needs. Effective communication channels and documentation requirements are established to ensure transparent progress reporting and maintain a comprehensive record of testing outcomes. Ultimately, the testing schedule in SQT orchestrates a well-coordinated testing effort, bolstering software reliability and contributing to the successful delivery of a polished and dependable software product.

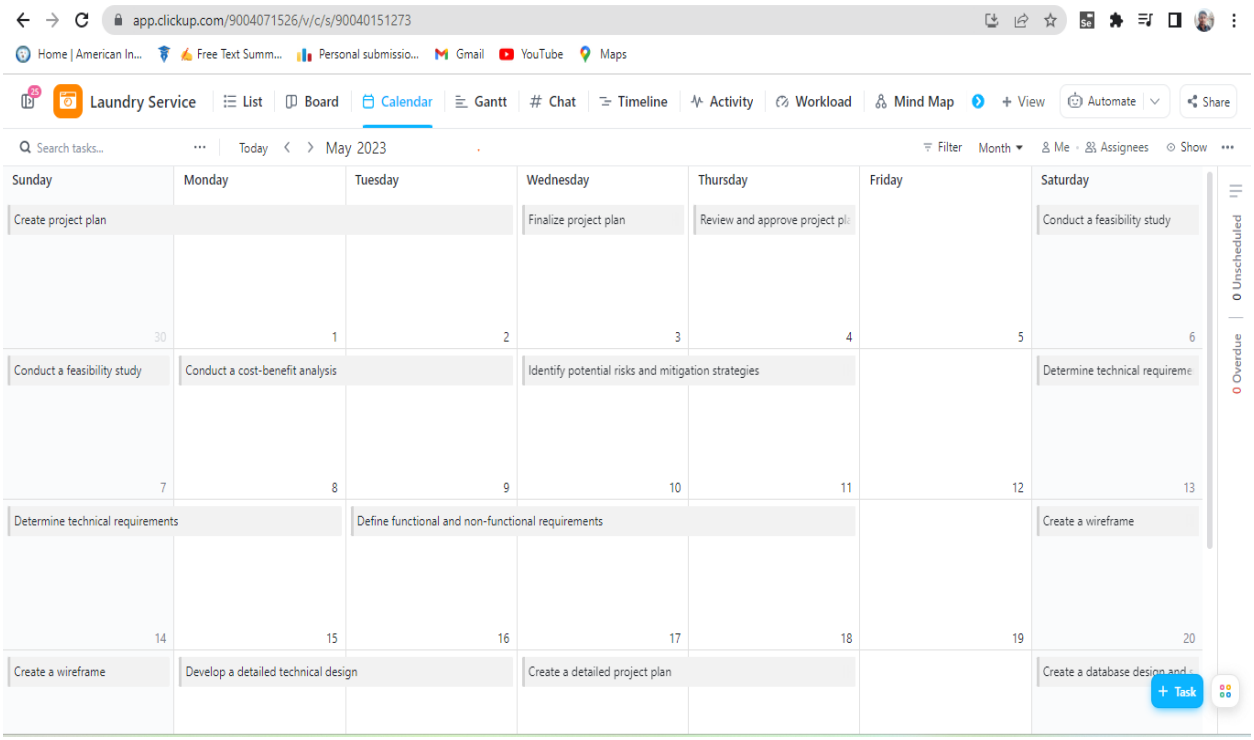

Figure 13: The total Calendar for the Project of Laundry Management System.

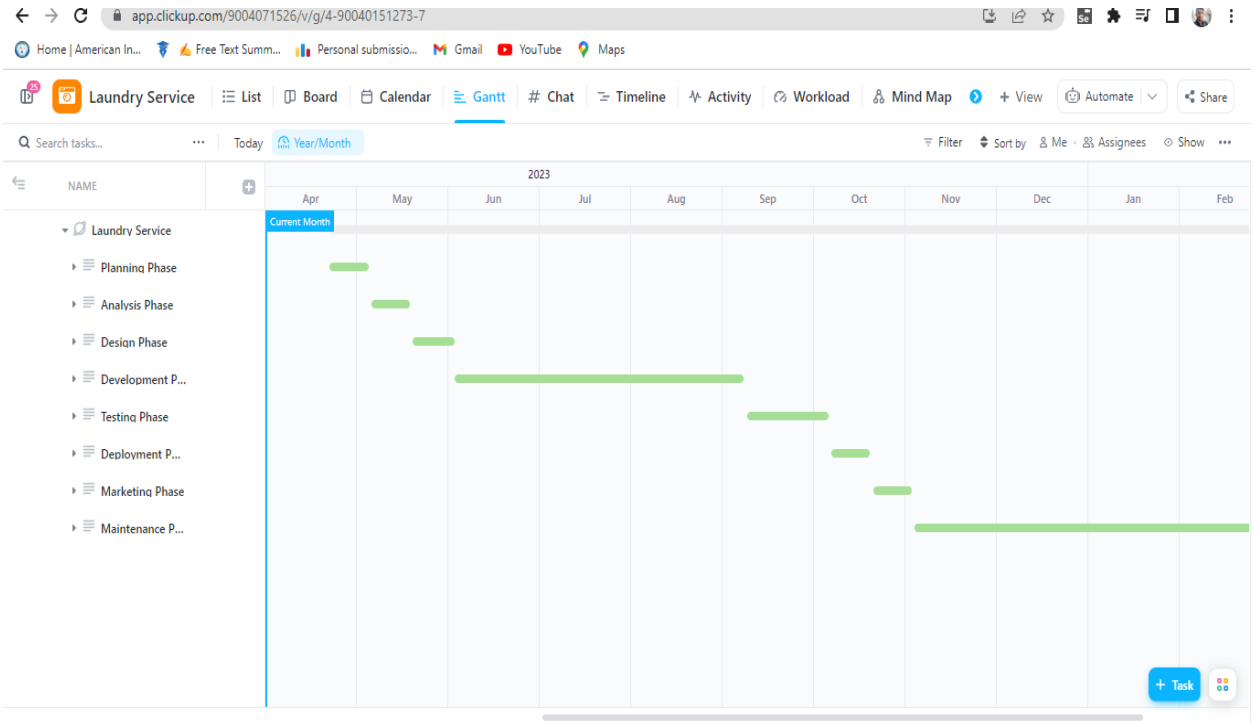

Figure 14: The total Gantt for the Project of Laundry Management System.

13. PLANNING RISKS AND CONTINGENCIES

The "Laundry Management System" project has several planning risks that need to be identified and addressed. Planning risks and contingencies in Software Quality Testing (SQT) involves the strategic anticipation and management of potential obstacles that could arise during the testing process. This process is crucial for ensuring the smooth execution of testing activities and maintaining project timelines. The steps involved in planning risks and contingencies include:

- **Risk Identification:** Identify potential risks that could impact the testing process. These risks could be related to resource availability, scope changes, technology limitations, communication breakdowns, and more.

- **Risk Assessment:** Evaluate the impact and probability of each identified risk. Determine which risks are high-impact and high-probability and prioritize them for further attention.

- **Risk Mitigation Strategy:** Develop strategies to mitigate or minimize the impact of high-priority risks. These strategies could involve proactive measures such as resource allocation adjustments, enhanced communication protocols, or technical solutions.

- **Contingency Planning:** Plan for contingencies by outlining alternative courses of action in case high-priority risks materialize. Contingency plans ensure that the testing process can continue without significant disruptions.

- **Risk Monitoring:** Continuously monitor the identified risks throughout the testing process. This involves tracking their status, evaluating any changes in impact or probability, and assessing whether the mitigation strategies are effective.

- **Communication:** Maintain open communication channels with stakeholders, including the development team, project manager, and clients. Keep them informed about potential risks, mitigation efforts, and contingency plans.

- **Documentation:** Document the identified risks, their assessment, and the corresponding mitigation and contingency plans. This documentation serves as a reference point for the testing team and other stakeholders.

By meticulously planning for risks and contingencies, the SQT team is better prepared to handle unexpected challenges that could potentially disrupt the testing process. This proactive approach safeguards project timelines, enhances communication, and ultimately contributes to the successful completion of testing activities and the delivery of a high-quality software product.

Risk	Probability	Impact	Plan
Insufficient member (if any member takes leave or becomes sick)	20%	marginal	We have made some backup plans for this like hiring new member
Module testing could demonstrate errors.	30%	critical	Development team were always ready to fix this bug.
Module coding can take longer time than expected	30%	critical	More member will handle the module

14. APROVALS

Project Sponsor – Sanjida	Approved
Development Management- Sumaiya	Approved
EDI Project Manager- Tamim	Approved
RS Test Manager- Sneha	Approved
RS Development Team Manager- Sumaiya	Approved
Reassigned Sales- Sneha	Approved
Order Entry EDI Team Manager- Tamim	Approved