



American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

Spring 23 24

Section: A

Software Quality Assurance and Testing

RECYCLE BANGLADESH

A Report submitted

By

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Company:

Sign:

Date:

Software Test Plan

for

<RECYCLE BANGLADESH >

Version 1.0 approved.

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<American International University-Bangladesh >

<13 May 2024 >

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Revision History

Revision	Date	Updated by	Update Comments
0.1	05-05-2024	Ahmed Farhan Amin	First Draft
0.2	07-05-2024	Abu Syed Mohammed Safwan	Second Draft
0.3	08-05-2024	Abdullah Al Shahriar	Third Draft
0.4	09-05-2024	Mosammat Joyayriya Rahman	Updated Features
0.5	10-05-2024	Ahmed Farhan Amin	Updated Test Cases
0.6	11-05-2024	Mosammat Joyayriya Rahman	Updated Requirements
0.7	12-05-2024	Abdullah Al Shahriar	Final Revision
0.8	13-05-2024	Abu Syed Mohammed Safwan	Final Revision

1. TEST PLAN IDENTIFIER: [RB-TP01.0](#)

2. REFERENCES

- Recycle Now: <https://www.recyclenow.com>
- Understanding plastic recycling in Bangladesh:
<https://www.dhakatribune.com/opinion/longform/314956/understanding-plastic-recycling-in-bangladesh>

3. INTRODUCTION

Background to the Problem

Bangladesh is growing quickly, with more cities and industries producing lots of waste. But we're struggling to manage it properly. Despite efforts to promote recycling, our waste management systems aren't efficient enough. This leads to dirty water, polluted soil, and health risks.

The main reasons for this problem are our infrastructure isn't good enough, and people don't know how to dispose of waste properly. Plus, there's a big gap in technology – we don't have any web-based apps specifically for recycling in Bangladesh. This makes it harder to manage the increasing amount of waste we produce every day.

Without a recycling app, it's tough to manage waste and get people involved. We're missing out on making recycling easier and more popular. Fixing this gap is crucial for cleaning up our environment and keeping people healthy.

Solution to the Problem

To address the challenges of inefficient waste management in Bangladesh, we propose the development and implementation of a dedicated web-based application called "Recycle Bangladesh." This solution offers a comprehensive approach to streamline waste collection, sorting, and recycling processes while promoting community engagement and environmental stewardship.

Recycle Bangladesh is particularly appropriate for solving the problem due to its multifaceted features and user-friendly interface. By leveraging technology, the application aims to bridge the gap in waste management infrastructure and awareness by providing an accessible platform for citizens, businesses, and recycling facilities to interact seamlessly.

Key features of Recycle Bangladesh include:

- **Waste Collection Management:** Users can request waste pickups through the app, which optimizes collection routes for efficiency and timely disposal.
- **Waste Sorting Guidance:** The application provides guidance on proper waste segregation, ensuring that recyclable materials are correctly identified and separated at the source.
- **Community Engagement:** Recycle Bangladesh incorporates gamification elements and rewards programs to incentivize active participation in recycling activities, fostering a sense of community involvement and responsibility.
- **Education and Awareness:** The app offers educational resources and tips on sustainable living, empowering users to make informed decisions about waste disposal and recycling practices.

The primary objective of Recycle Bangladesh is to promote sustainable waste management practices and reduce the environmental and health impacts of inadequate waste disposal. By facilitating the efficient collection and recycling of waste materials, the application aims to mitigate pollution, conserve resources, and enhance public health.

While there may be existing software solutions for waste management globally, Recycle Bangladesh is tailored to the specific needs and challenges of Bangladesh. By incorporating localized features and addressing the unique socio-economic context of the country, the solution is well-positioned to meet the business objectives of promoting recycling and environmental sustainability effectively. Moreover, the feasibility of the solution is supported by advances in technology and the increasing adoption of digital platforms in Bangladesh's urban centers.

4. REQUIREMENT SPECIFICATION

4.1 System Features

1. User Registration

Functional Requirements:

1.1 The software shall provide a registration form for new users to create an account by entering their name, email, phone number, and address.

1.2 Upon submission, the system shall verify the uniqueness of the email and phone number to prevent duplicate accounts.

1.3 After successful registration, users shall receive a confirmation email or SMS containing a verification link or code.

Priority Level: High

Precondition: User has access to a valid email or phone number.

2. User Login

Functional Requirements:

2.1 The software shall provide a login interface for registered users to access their accounts by entering their username and password.

2.2 Upon submission, the system shall validate the entered username and password against the stored credentials in the database.

2.3 If the username and/or password are incorrect, the system shall display an error message prompting the user to re-enter the credentials.

2.4 After three consecutive failed login attempts, the system shall generate a random verification code to be entered by the user for additional security.

2.5 If the number of login attempts exceeds the limit of five times, the system shall temporarily block the user account login for one hour.

Priority Level: High

Precondition: User has a valid username and password.

3. Waste Collection Request

Functional Requirements:

2.1 The software shall include a feature allowing registered users to request waste collection by specifying the type and quantity of waste to be collected.

2.2 Users shall have the option to choose between two modes of waste collection:

2.2.1 "Drop-off": Users can select a nearby collection point or recycling facility where they can personally deliver the waste.

2.2.2 "Pick-up": Users can request waste collection from their location by providing their address and preferred pickup date and time.

2.3 Upon submission of the request, the system shall:

2.3.1 For "Drop-off" mode:

- Display the address and operating hours of the selected collection point or recycling facility.

- Provide confirmation of the request with details of the selected drop-off location.

2.3.2 For "Pick-up" mode:

- Assign the nearest available collection point or recycling facility for pickup based on user location or postal code.

- Generate a confirmation notification via email or SMS with scheduled pickup details, including date, time, and location.

2.4 Users shall receive confirmation notifications via email or SMS with scheduled pickup details, including date, time, and location, for both "Drop-off" and "Pick-up" modes.

Priority Level: High

Precondition: User is logged into the system.

4. Recycling Facility Locator

Functional Requirements:

4.1 The software shall feature a search function allowing users to find nearby recycling facilities based on their current location.

4.2 The system shall display a list of recycling centers along with contact information, operating hours, and accepted waste types.

4.3 Users shall be able to filter search results based on specific waste categories to find suitable recycling options.

Priority Level: Medium

Precondition: User grants location access.

5. Donation Feature

Functional Requirements:

8.1 The software shall feature a donation functionality enabling users to contribute funds to support recycling initiatives and environmental causes.

8.2 Users shall be presented with an option to make donations directly through the platform using various payment methods, including credit/debit cards or mobile wallets.

8.3 Upon selecting the donation amount and preferred payment method, the system shall securely process the transaction.

8.4 The software shall provide transparency by displaying information on supported projects, organizations, or campaigns, allowing users to choose where their donations will be directed.

8.5 Users shall receive acknowledgment and confirmation of their donation transactions via email or notification within the platform.

Priority Level: High

Precondition: User is logged into the system.

6. Waste Sorting Guidelines

Functional Requirements:

3.1 The software shall provide a section offering guidelines on proper waste segregation, categorizing materials as recyclable or non-recyclable.

3.2 Users shall have access to visual aids and instructions demonstrating effective waste sorting techniques.

3.3 The system shall update sorting guidelines based on user feedback and change recycling regulations.

Priority Level: Medium

Precondition: User access to the waste sorting guidelines section.

7. Feedback Feature

Functional Requirements:

- 7.1 The software shall include a feedback feature allowing logged-in users to provide their opinions and suggestions about the website.
- 7.2 Users shall be presented with a feedback form or interface where they can enter their comments, suggestions, or concerns.
- 7.3 The system shall capture and store user feedback securely for further analysis and improvement.
- 7.4 Users shall have the option to submit feedback anonymously.
- 7.5 The software shall notify administrators or designated personnel about new feedback submissions for timely review and response.

Priority Level: Medium

Precondition: User is logged into the system to access the feedback feature on the website.

8. Selling Recycled Products

Functional Requirements:

- 8.1 The software shall include a feature allowing registered users to browse and purchase recycled products available for sale on the platform.
- 8.2 Users shall be able to view product listings, including images, descriptions, prices, and availability.
- 8.3 The system shall provide search and filter options to help users find specific products based on categories, keywords, or price range.
- 8.4 Registered users shall have the ability to add products to their shopping cart and proceed to checkout for payment.
- 8.5 Upon checkout, users shall be prompted to provide shipping details and select a preferred payment method, including credit/debit cards, mobile wallets, or cash on delivery.
- 8.6 The system shall generate order confirmations and provide users with tracking information for their purchased products.
- 8.7 Users shall have the option to leave reviews and ratings for purchased products, contributing to the platform's community-driven feedback system.

Priority Level: High

Precondition: User is logged into the system.

9. User Logout

Functional Requirements:

- 9.1 The software shall include a logout functionality allowing users to securely log out of their accounts.
- 9.2 Upon clicking the logout button, the system shall clear the user's session and invalidate the authentication token.
- 9.3 After successful logout, the system shall redirect the user to the login page or display a confirmation message.
- 9.4 Users shall not be able to access any restricted pages or functionalities after logout until they log in again.

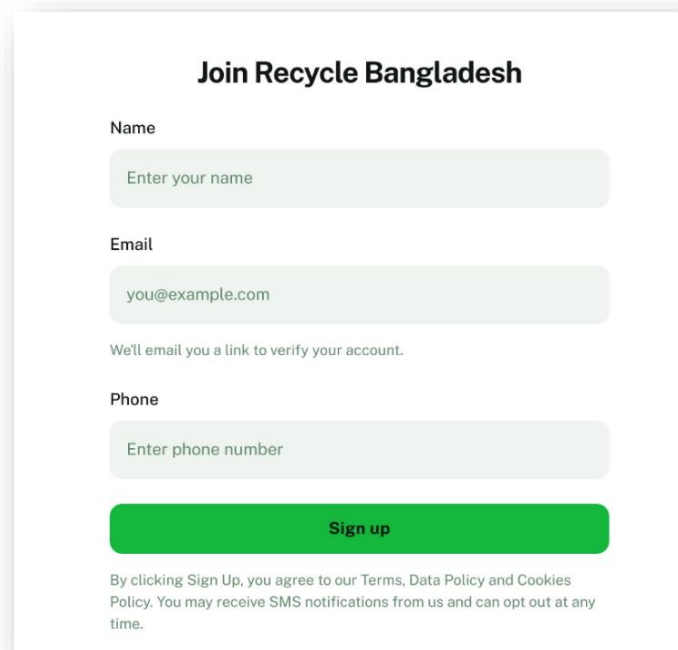
Priority Level: Medium

Precondition: User is logged into the system.

4.2 System Quality Attributes

- Usability: Users should be able to navigate the website easily and access features such as waste sorting guidelines and recycling facility locator without confusion or difficulty.
- Performance: The website should load quickly and respond promptly to user interactions, ensuring a smooth and efficient user experience.
- Reliability: The system should be reliable and available for users to always access without unexpected downtime or interruptions.
- Security: User data and transactions should be protected with robust security measures to prevent unauthorized access or data breaches.
- Scalability: The system should be able to handle increasing user traffic and data volume as the user base grows without compromising performance or reliability.
- Maintainability: The website should be designed with clean and modular code, making it easy for developers to maintain and update in the future.
- Accessibility: The website should be accessible to users with disabilities, complying with accessibility standards to ensure equal access for all users.

4.3 System Interface



Join Recycle Bangladesh

Name

Email

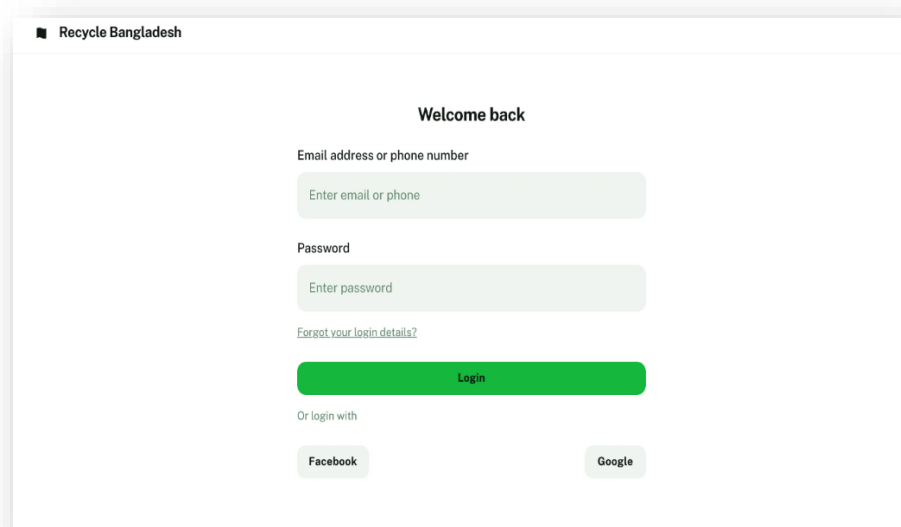
We'll email you a link to verify your account.

Phone

Sign up

By clicking Sign Up, you agree to our Terms, Data Policy and Cookies Policy. You may receive SMS notifications from us and can opt out at any time.

Fig: Registration



■ Recycle Bangladesh

Welcome back

Email address or phone number

Password

[Forgot your login details?](#)

Login

Or login with

Facebook **Google**

Fig: Login

Recycle Bangladesh

[Home](#)[Services](#)[Blog](#)[About Us](#)[Contact](#)[Sign Up](#)[Log In](#)

Book a Collection

Step 1: Choose your waste type

Plastic

Glass

Paper

Metal

E-waste

Others

Step 2: Select the quantity of waste

Less than 5 kg

5 - 10 kg

10 - 20 kg

20 - 50 kg

50 - 100 kg

100 - 200 kg

200 - 500 kg

More than 500 kg

Step 3: Choose your collection mode

Drop-off

Pick-up

Step 4: Choose drop-off address

Please enter your address

Back

Next

Fig: Request Waste Collection

Recycle Bangladesh

Search

[Home](#)[Recycling Guide](#)[News](#)[Events](#)

Find a Recycling Facility

Enter your location

Filter by waste type

Plastic

Paper

Metal

Glass

E-waste

Organic

Other

Nearby recycling centers

Dhaka City Corporation (North)
Open now

Dhaka South City Corporation
Closes at 6:00 PM

Dhaka City Corporation (West)
Open now

Dhaka North City Corporation
Closes at 5:00 PM

Dhaka City Corporation (East)
Open now

Fig: Find recycle facility nearby

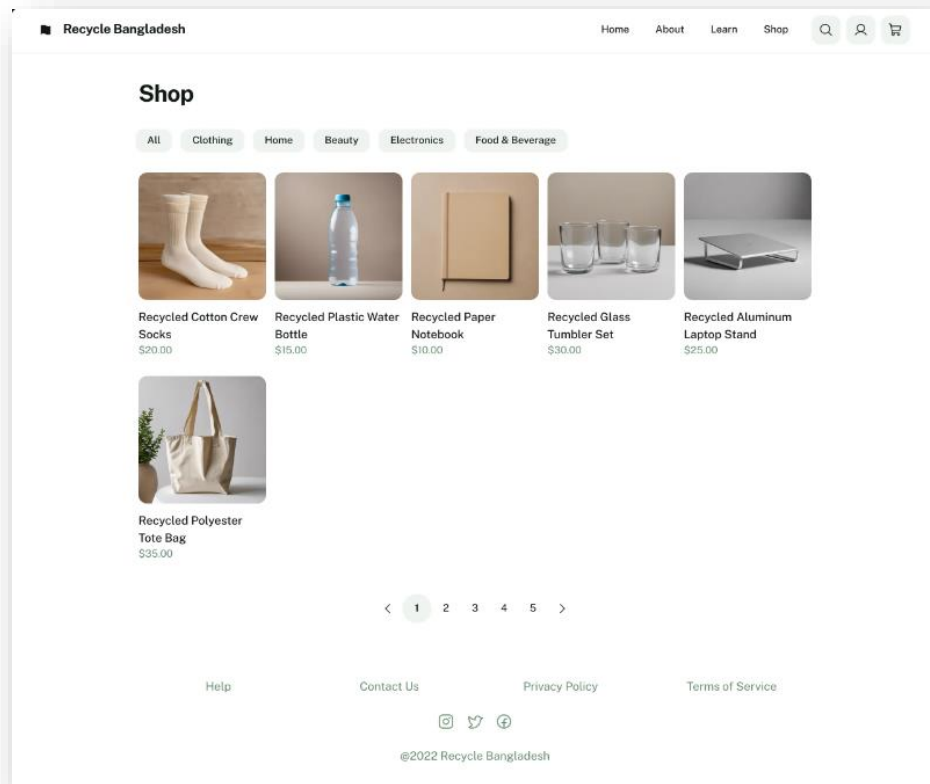


Fig: Shop of recycled product

The screenshot shows the 'Feedback' page of the Recycle Bangladesh website. The header includes the logo 'Recycle Bangladesh' and a user profile icon. The main content area is titled 'Feedback' and contains the following text:

We're always looking for ways to improve. Tell us what you think about Recycle Bangladesh. Your feedback will be sent to the Recycle Bangladesh team and may be used to help improve the website.

Below the text, there is a large text input field with the placeholder text 'Write your feedback here...'. Below this field is a smaller text input field with the placeholder text 'Your email (optional)'. Below the email field is a checkbox labeled 'Send feedback anonymously', which is checked. At the bottom right of the form is a green 'Submit' button.

Fig: Feedback from user

4.4 Project Requirements

Some of those constraints in our context of project are-

Time: Completion of the project within the stipulated timeline to meet stakeholder expectations and market demands.

Budget: Adhering to the allocated budget for development, testing, marketing, and operational expenses. Managing costs efficiently to avoid overspending.

Resources: Availability of human resources, including developers, testers, designers, and project managers. Ensuring adequate staffing and skill sets for each project phase.

Budget Estimation:

Budget Category	Estimated Cost (TAKA)
Developer Salaries (1*50,000)	150,000 for 3 months
Software Tools and Licenses	10,000
Server and hosting	20,000 and ongoing
Tester (1*40000)	120,000 for 3 months
Testing Tools and Software	10,000
Advertising Cost	20,000
Administrative Expense	50,000
Contingency Budget	20,000
Miscellaneous Expense	10,000
	410,000 Taka

Time Estimation:

Time phase	Estimated Time (Days)
Gathering information	5
Feasibility study	2
Design	10
Development	30
Testing	20
Other Assessment	7
	74 days

5. FEATURES NOT TO BE TESTED

The following is a list of the areas that will not be specifically addressed. All testing in these areas will be indirect because of other testing efforts. For example:

- Third-party applications or tools unrelated to the core functionalities of the web platform, such as PC-based spreadsheet analysis applications. Testing of these applications is the responsibility of their respective maintainers or developers. However, necessary data format information will be provided to enable data extraction for integration purposes. Testing will indirectly occur through the validation of data integration and compatibility with the Recycle Bangladesh platform.

6. TESTING APPROACH

6.1 Testing Levels

For the "Recycle Bangladesh" project, the testing will involve the following levels:

1. Unit Testing:

- Unit testing will be conducted by individual developers and approved by the development team leader.
- Developers must provide proof of unit testing, including a test case list, sample output, data printouts, and defect information to the team leader.
- All unit test information will be provided to the test manager for reference.

2. System/Integration Testing:

- System and integration testing will be carried out by the test manager and development team leader, with assistance from individual developers as needed.
- No specific test tools are allocated for this project.
- Programs will enter system/integration testing after critical defects have been rectified. A program may have up to two major defects, provided they do not obstruct testing and have workarounds available.

3. Acceptance Testing:

- Acceptance testing will involve actual end users, supported by the test manager and development team leader.
- The acceptance test will run concurrently with the existing manual process for a month following the completion of the system/integration testing phase.
- Due to budget constraints and project timelines, most testing tasks will be managed by the test manager, with active participation from the development teams. This approach ensures comprehensive testing coverage while optimizing available resources.

6.2 Test Tools

For the "Recycle Bangladesh" project, the test tools will primarily revolve around Selenium WebDriver due to its suitability for web application testing:

1. Version Control Management:

- While Selenium WebDriver is primarily used for web application testing, version control management will be handled separately. The team will utilize a dedicated version control system such as Git or SVN to manage source code versions, track changes, and facilitate collaboration among team members.

2. Screen Prototyping:

- The initial prototypes for new screens will still be developed using appropriate tools like AS/400 Screen Design Aid (SDA) or other UI design tools. However, Selenium WebDriver will play a crucial role in testing the functionality and behavior of these screens within the web application environment. It will ensure that the screens function correctly according to specifications and user requirements.

6.3 Meetings

The testing team for the "Recycle Bangladesh" project will convene weekly to assess ongoing progress, pinpoint emerging error patterns, and address any identified issues promptly. Additionally, every two weeks, the test team leader will hold discussions with the development team and project manager. These meetings will be scheduled for alternate weeks to ensure comprehensive coverage. As necessary, ad-hoc meetings may be arranged to address urgent matters or unforeseen challenges.

7. TEST CASES/TEST ITEMS

1. Login

Project Name: Recycle Bangladesh		Test Designed by: Ahmed Farhan Amin		
Test Case ID: FR_1		Test Designed date: 10 May 2024		
Test Priority (Low, Medium, High): High		Test Executed by: A S M Safwan		
Module Name: Login Session		Test Execution date: 10 May 2024		
Test Title: verify login with valid username and password				
Description: Test website 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. Enter username 3. Enter password 4. Click submit	Username: Safwan Password: 12345#	User should login into the application	Request successfully sent	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

2. Waste collection request

Project Name: Recycle Bangladesh		Test Designed by: A S M Safwan		
Test Case ID: FR_2		Test Designed date: 10 May 2024		
Test Priority (Low, Medium, High): High		Test Executed by: Mosammat Joyayriya Rahman		
Module Name: waste collection request		Test Execution date: 10 May 2024		
Test Title: verifying the waste collection request				
Description: Testing the waste collection request functionality				
Precondition (If any): User must have been logged in				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Click waste collection request 3. Select mode 4. Enter required field 5. Click Request	Waste type: plastic Quantity: 5	User should be able to request for waste collection	As expected,	Pass
Post Condition: Upon submission, a confirmation email is sent to the requester, ensuring acknowledgment of the waste collection request.				

3. Donation

Project Name: Recycle Bangladesh		Test Designed by: Abdullah Al Shahriar		
Test Case ID: FR_3		Test Designed date: 10 May 2024		
Test Priority (Low, Medium, High): High		Test Executed by: Ahmed Farhan Amin		
Module Name: Donation		Test Execution date: 10 May 2024		
Test Title: Verifying the donation functionality				
Description: Verify that users can securely donate funds				
Precondition (If any): User must have been logged in				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Navigate to the “donation” section 2. Enter donation amount 3. Select payment gateway 4. Click Donate button	Donation amount: 1000 TK Payment Methods: Bkash	User should be able to donate the amount using payment gateway	As expected,	Pass
Post Condition: Receive a receipt by email				

4. Recycling Facility location

Project Name: Recycle Bangladesh			Test Designed by: A S M Safwan	
Test Case ID: FR_4			Test Designed date: 10 May 2024	
Test Priority (Low, Medium, High): Medium			Test Executed by: Abdullah Al Shahriar	
Module Name: Recycling Facility Locator			Test Execution date: 10 May 2024	
Test Title: Verifying the recycling facility locator				
Description: Test to verify that the recycling facility locator function correctly retrieves and displays nearby recycling facilities based on the user's current location.				
Precondition (If any): User grants location access.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Enter the location 2. Click on Submit	Location: Dhaka	User should be able to get the nearby recycling facility location	As expected,	Pass
Post Condition:				

5. Feedback

Project Name: Recycle Bangladesh		Test Designed by: A S M Safwan		
Test Case ID: FR_5		Test Designed date: 10 May 2024		
Test Priority (Low, Medium, High): Medium		Test Executed by: Abdullah Al Shahriar		
Module Name: Feedback module		Test Execution date: 10 May 2024		
Test Title: Verifying the recycling facility locator				
Description: Test to verify that logged in user can submit feedback				
Precondition (If any): User is logged into the system to access the feedback feature				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Login to system 2. Navigate to feedback 3. Enter the name field of the user 4. Enter feedback message in the field 5. Click on Submit	Name: Dhaka Message: This is a feedback	After submission, the user will be able to submit their feedback message	As expected,	Pass
Post Condition: Administrators or designated personnel should receive emails for new feedback submissions				

6. Waste sorting guidelines

Project Name: Recycle Bangladesh		Test Designed by: Mosammat Joyayriya Rahman		
Test Case ID: FR_6		Test Designed date: 10 May 2024		
Test Priority (Low, Medium, High): Medium		Test Executed by: A S M Safwan		
Module Name: Guideline module		Test Execution date: 10 May 2024		
Test Title: Verifying the access of waste sorting guideline				
Description: Test to verify that logged in user can submit feedback				
Precondition (If any): User is logged into the system to access the feedback feature				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Navigate to the Waster sorting guideline section		User should be able to view the waste sorting guideline	As expected,	Pass
Post Condition:				

7. User registration

Project Name: Recycle Bangladesh		Test Designed by: Ahmed Farhan Amin		
Test Case ID: FR_7		Test Designed date: 10 May 2024		
Test Priority (Low, Medium, High): High		Test Executed by: Mosammat Joyayriya Rahman		
Module Name: Registration module		Test Execution date: 10 May 2024		
Test Title: Verifying the user registration process				
Description: Test website’s registration process and initiate new account				
Precondition (If any):				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to website 2. Navigate to registration 3. Fill out the necessary fields message in the field 4. Click on Submit	Name: test Email: test@mail.com Phone:012345678 Address: Dhaka Password:1234	After submission, with valid data the user should be able to create a new account	As expected,	Pass
Post Condition: Head to signup.				

8. Purchasing recycled product

Project Name: Recycle Bangladesh		Test Designed by: Mosammat Joyayriya Rahman		
Test Case ID: FR_8		Test Designed date: 10 May 2024		
Test Priority (Low, Medium, High): Medium		Test Executed by: Abdullah Al Shahriar		
Module Name: Selling Recycled Product		Test Execution date: 10 May 2024		
Test Title: Verifying the process of purchasing recycled products				
Description: Test the process of browsing, selecting and purchasing process of recycled products available in the website.				
Precondition (If any): User is logged into the system				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<div>1. Navigate to the "Shop" section of the application.</div> <div>2. Add the selected product to the shopping cart.</div> <div>3. Proceed to checkout.</div> <div>4. Enter shipping details and select a payment method.</div>	<ul style="list-style-type: none">Product: [Select a recycled product from the list]Shipping Details: [Enter valid shipping details]Payment Method: [Select a valid payment method]Review/Rating: [Optional]	User should be able to successfully browse, select, purchase, and review recycled products without encountering any errors.	As expected,	Pass
Post Condition: Receive a confirmation.				

9. Logout

Project Name: Recycle Bangladesh		Test Designed by: Mosammat Joyayriya Rahman		
Test Case ID: FR_9		Test Designed date: 10 May 2024		
Test Priority (Low, Medium, High): Medium		Test Executed by: Abdullah Al Shahriar		
Module Name: Logout		Test Execution date: 10 May 2024		
Test Title: Verifying the logout process				
Description: Test website’s logout process				
Precondition (If any): User is logged into the system				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
5. Click on Logout		User should be logged out from the account	As expected,	Pass
Post Condition: Head to sign in page				

8. ITEM PASS/FAIL CRITERIA

All core functionalities outlined in the individual test cases must operate smoothly without critical defects. An end user should be able to navigate through features such as login, waste collection request, donation, feedback submission, and access to waste sorting guidelines seamlessly, with the ability to complete tasks without encountering errors. The success criteria involve ensuring that 95% of all test cases pass, and any failed cases should not hinder the end user's ability to use the application effectively. Additionally, users should be able to initiate actions such as waste collection requests and donations without encountering any issues, and processes like refund initiation should be error-free. Fail criteria include encountering critical defects in core functionalities, any impediment to the end user's ability to complete tasks or encountering errors during essential processes like fund initiation.

9. TEST DELIVERABLES

Test deliverables are the tangible outputs generated during the testing process, such as test plans, reports, documentation which provide a comprehensive overview of testing activities, results, and findings to stakeholders.

- **Test Cases:** Detailed descriptions of individual test scenarios, including test titles, descriptions, steps, expected results, and test data.
- **Test Data:** Data sets used for testing various functionalities, including valid and invalid inputs, boundary cases, and edge scenarios.
- **Test Reports:** Documentation of test execution results, including pass/fail status, issues encountered, and overall assessment of system quality.
- **Defect Reports:** Reports detailing any defects or issues identified during testing, including steps to reproduce, severity, and priority.
- **Acceptance Test Plan:** A document outlining the approach, scope, and criteria for acceptance testing, including test scenarios and acceptance criteria agreed upon by stakeholders.
- **System/Integration Test Plan:** A comprehensive plan detailing the testing approach, objectives, scope, resources, and schedule for system and integration testing activities.
- **Unit Test Plans/Turnover Documentation:** Documentation detailing unit test plans for individual components/modules, along with turnover documentation for handing over tested units to the integration testing team.

10. STAFFING AND TRAINING NEEDS

For the "Recycle Bangladesh" project, staffing and training needs are as follows:

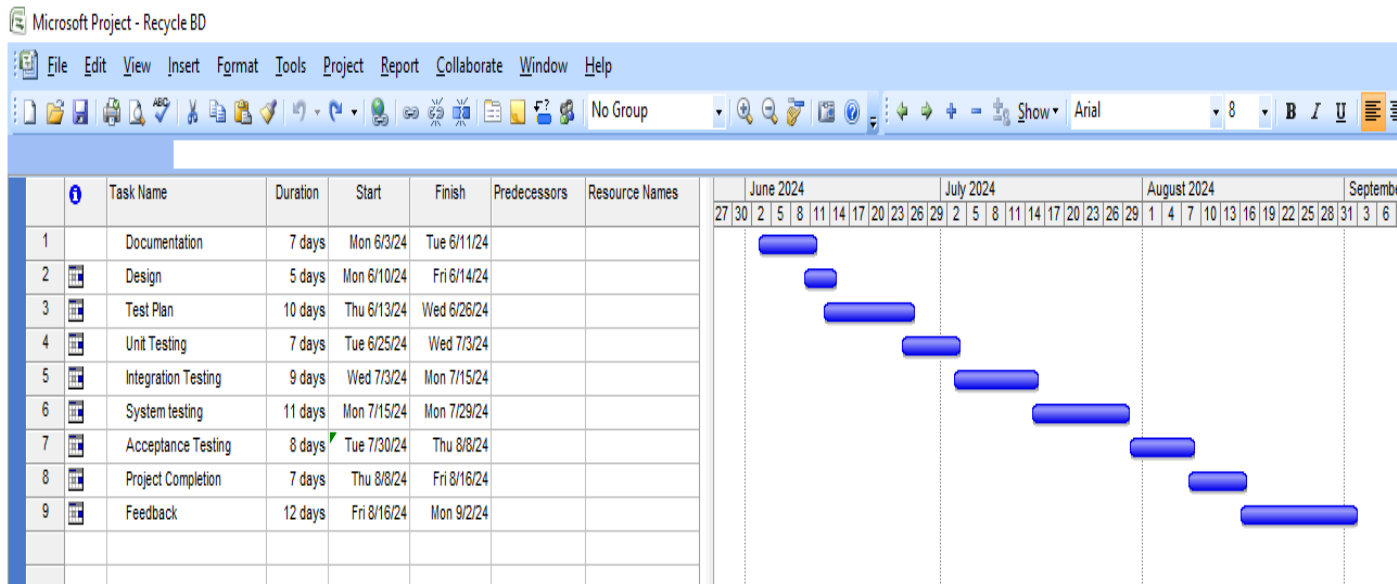
- **Testing Personnel:** It is essential to assign at least one full-time tester for system/integration and acceptance testing phases. Initially, a part-time tester will be assigned to participate in reviews, with a transition to full-time approximately four months into the project if necessary. If a dedicated tester is unavailable, the project manager/test manager will fulfill this role.
- **Training on EDI Interface:** Both developers and testers must undergo training on the basic operations of the Electronic Data Interchange (EDI) interface. This training will ensure proficiency in handling EDI-related tasks and processes. Additionally, operations staff will receive comprehensive training on the EDI communications process to facilitate smooth operations and effective communication.
- **Training for Sales Administration Staff:** Sales administration staff will require training on the new screens and reports introduced by the project. This training will familiarize them with the functionality and usage of the new features, enabling them to effectively utilize the system for sales-related tasks and reporting.

By addressing these staffing and training needs, the "Recycle Bangladesh" project can ensure that team members are equipped with the necessary skills and knowledge to contribute effectively to project success.

11. RESPONSIBILITIES

	TM	PM	Dev Team	Test Team	Client
Test cases documentation	X	X	X	X	
Test Procedures and rules	X		X	X	
Unit test documentation & execution			X	X	
Integration test Documentation & Execution	X		X	X	
System test Documentation & Execution		X		X	
System Design Reviews	X	X	X	X	X
Details Design Reviews	X	X	X	X	
Screen & Report prototype reviews	X	X		X	X
Change Control and regression testing	X	X	X	X	X
Acceptance test Documentation & Execution	X	X		X	X

12. TESTING SCHEDULE



13. PLANNING RISKS AND CONTINGENCIES

Risk	Contingency Plan
Limited Staff Availability	If there are staffing shortages, project timelines for reviews and testing will be adjusted accordingly.
Technical Challenges	In case of technical difficulties, the development team will allocate additional resources and time.
Insufficient User Adoption	To address low user adoption, targeted marketing campaigns and user training sessions will be conducted.
Data Security Breach	In the event of a data breach, immediate action will be taken to mitigate the breach and enhance security measures.
Supplier Delays	If suppliers experience delays, alternate suppliers will be sourced, and project timelines will be adjusted accordingly.

14. APPROVALS

Name	Role	Signature
AIUB	Project Sponsor	
Hasibur Rahman	QA Lead	
Ahmed Farhan Amin	EDI Project Manager	
Mosammat Joyayriya Rahman	Reassigned Sales	
Aby Syed Mohammed Safwan	RS Test Manager	
Abdullah Al Shahriar	Development Management	