Software Testing and Quality Assurance

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Submitted To

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Contents

Software Testing Life Cycle of "পল্লীহাট"

Introduction

This is a Software Testing Life Cycle (STLC) for the "পল্লীহাট". Software Testing Life Cycle refers to a testing process which has specific steps to be executed in a definite sequence to ensure that the quality goals have been met. In the STLC process, each activity is carried out in a planned and systematic way. Each phase has different goals and deliverables.
There are 6 major phases of STLC –

Phases:

➢ Requirement Analysis: When the SRD is ready and shared with the stakeholders, the testing team starts high   level analysis concerning the AUT (Application under Test).

➢ Test Planning: Test Team plans the strategy and approach.

➢ Test Case Development: Develop the test cases based on scope and criteria.

➢ Test Environment Setup: When integrated environment is ready to validate the product.

➢ Test Execution: Real-time validation of product and finding bugs. • Test Closure − Once testing is completed, matrix, reports, results are documented.
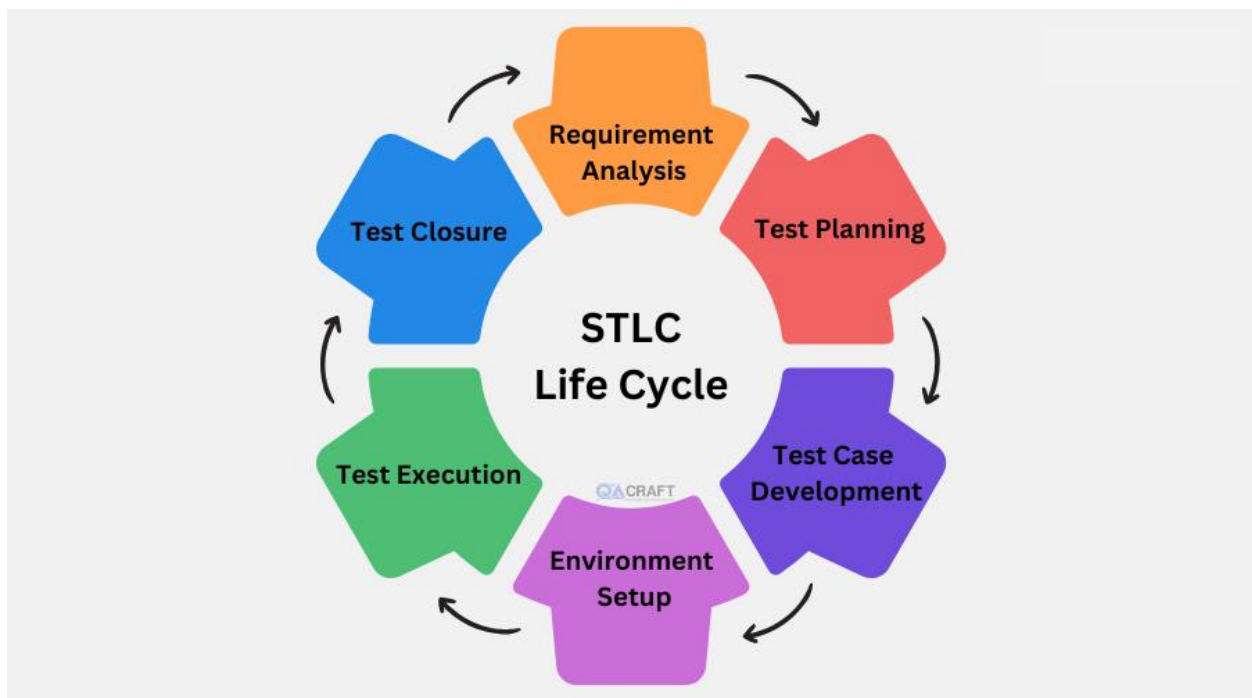

Figure: Software Testing life cycle

We build complete STLC for our project. Our Project is "পল্লীহাট".The project link is:
https://github.com/IIT-NSTU/Pollihaat.git

Phase -1: Requirements Analysis

The purpose is to describe all the requirements for the "পল্লীহাট". The following are some of the stakeholders:

- ➢ **System Owner**
- ➢ **Entrepreneurs**
- ➢ **Customer**
- ➢ **Employee**

The team members of "পল্লীহাট" uses this document as the primary means to communicate confirmed requirements to the development team. The development team expects many face-to-face conversations that will undoubtedly be about requirements and ideas for requirements. However only the requirements that appear in this document or a future revision, will be used to define the scope of the system.

- ❖ **Functional requirements**
- ❖ **Non-functional requirements.**

Non-functional requirements can be used to improve the functioning of the computer system, but not the management of our site as a whole.

Functional requirements, on the other hand, are requirements directly related to our website. The primary areas of concern are performance, security and user interface.

Functional Requirements

FR ID	Description	Priority
FR 1	**User registration and login to registered account**	High
FR 2	**System owner can control members**	High
FR 3	**Unregister members**	Medium
FR 4	**Manage categories and products**	High
FR 5	**System owner can manage order**	Medium
FR 6	**Customer can provide rating and review**	High

FR 7	Customer can manage their shopping cart	High
FR 8	Customer can update own profile	Low
FR 9	Add homemade cottages for sale	High
FR 10	Customer can search for desired product	Medium
FR 11	System owner can manage customer's feedback.	Low

Non-Functional Requirements

NFR - 01	Security
Description	Securing information is much more important for a system to get users dependability. Password: Any user who uses the system must have a password. Modification: Any modification (insert, delete, update) for the Database shall be synchronized and done only by the administrator in the ward. System owners' right: System owner must have the right to view, modify or delete any information.
Priority	High

NFR - 02	Performance
Description	Any search result will show up within 1 second and images of the product will load within 3 seconds if the network speed is good.
Priority	Medium

NFR - 03	Scalability
Description	System must be able to handle unlimited orders at a time and handle all the functionality within short times.
Priority	High

NFR - 04	Maintainability
Description	It is very important to update product category, entrepreneur information as entrepreneur will sell products by using our system.
Priority	Low

NFR - 05	Extensibility
Description	After release this system, It might be extensible for new feature .Our system will allow developer to customize an existing installation of an application at runtime without recompiling or changing the original source code.
Priority	High

NFR - 06	Text color and font
Description	All texts and descriptions will be at a good font size so that users can understand what is important and mandatory input fields will be kept red colored until user put correct information.
Priority	High

NFR - 07	Faster searching products and load images quickly
Description	And any search result will show up within 1 second and images of the product will load within 3 seconds if the network speed is good.
Priority	Medium

NFR - 08	Stakeholders have to provide specific sized picture for the products
Description	Entrepreneurs will upload product details such as product name, product quantity, price, image and product description of the new product. Images of the products need to be within 3 MB.
Priority	High

2.2 Introduction

A test plan is a comprehensive document that lists the test objectives, tactics, timeline, budget, and resources needed to complete the project. The main purpose of the test plan for the "পল্লীহাট" is to discuss the testing details of the use cases of the "পল্লীহাট". The software project test plan also describes the objective, scope and approach of the software testing effort for this project. The test plan for the "পল্লীহাট" also indicates the personnel responsible for each task and also specifies the risks associated with the test plan.

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2.3 Objectives

The main objectives of the test plan for the "পল্লীহাট" are as follows:

- Define the scope of what will be tested for "পল্লীহাট" .
- Organize the activities and timescales.
- Estimate the people and other resources required.
- Specify the approach taken to testing for "পল্লীহাট"
- Define the deliverables expected.
- Specify how the testing results will be evaluated.
- Estimate the risks to testing plan and how to mitigate them.
- Use as a basis for agreement by key stakeholders that the plan is acceptable.

2.4 Test Items

This section of the test plan lists all the items of the "পল্লীহাট" project that will be tested.

➢ All Functional Requirements
➢ All Non-Functional Requirements

2.5. Approach

This section of the test plan describes the overall approach for testing the "পল্লীহাট" project. The approach followed for testing this system ensures that the major features of the project are adequately tested testing would be carried out on the "পল্লীহাট" system while logging into the system as a customer or a normal user of the system.

2.5.1 Unit Testing

The Unit Testing is a test that tests each single module of the software to check for errors. This is mainly done to discover errors in the code of the "পল্লীহাট" system. The main goal of the unit testing would be to isolate each part of the program and to check the correctness of the code.

In the case of the "পল্লীহাট", all the web forms and the admin portion will be tested. There are many

benefits for this unit testing:

> The unit testing facilitates change in the code.
> It allows testing to be done in a bottom up fashion.

Unit testing by its very nature focuses on a unit of code. Hence it can't catch integration errors or broad system level errors.

2.5.2 Integration Testing

In Integration Testing, the individual software modules are combined and tested as a whole unit. The integration testing generally follows unit testing where each module is tested as a separate unit. The main purpose of the integration testing is to test the functional and performance requirements on the major items of the project. All the modules of the project developed individually would be combined together and tested as a whole system in the integration testing.

2.5.3 Regression Testing

The Regression Testing is generally done whenever modifications are made to the source code of a project. The Regression Testing can also be defined as the process of testing changes made to the computer program and also makes sure that the older programming still works with the new changes. So, before any new version of a software product is released, the old test cases for the project will be run against the software with the changes made, to make sure that the old functionalities of the project still work.

2.5.4 Acceptance Testing

This testing is generally performed when the project is nearing its end. This test mainly qualifies the project and decides if it will be accepted by the users of the system. The users or the customers of the project are responsible for the test.

2.5.5 System Testing

The system testing is mainly done on the whole integrated system to make sure that the project that has been developed meets all the requirements. The test cases for the system testing will be the combination of unit and integration tests.

2.5.6 Test strategy

Testing strategy is the planning of the whole testing process into a well-planned series of steps. In other words, strategy provides a roadmap that includes very specific activities that must be performed by the test team in order to achieve a specific goal
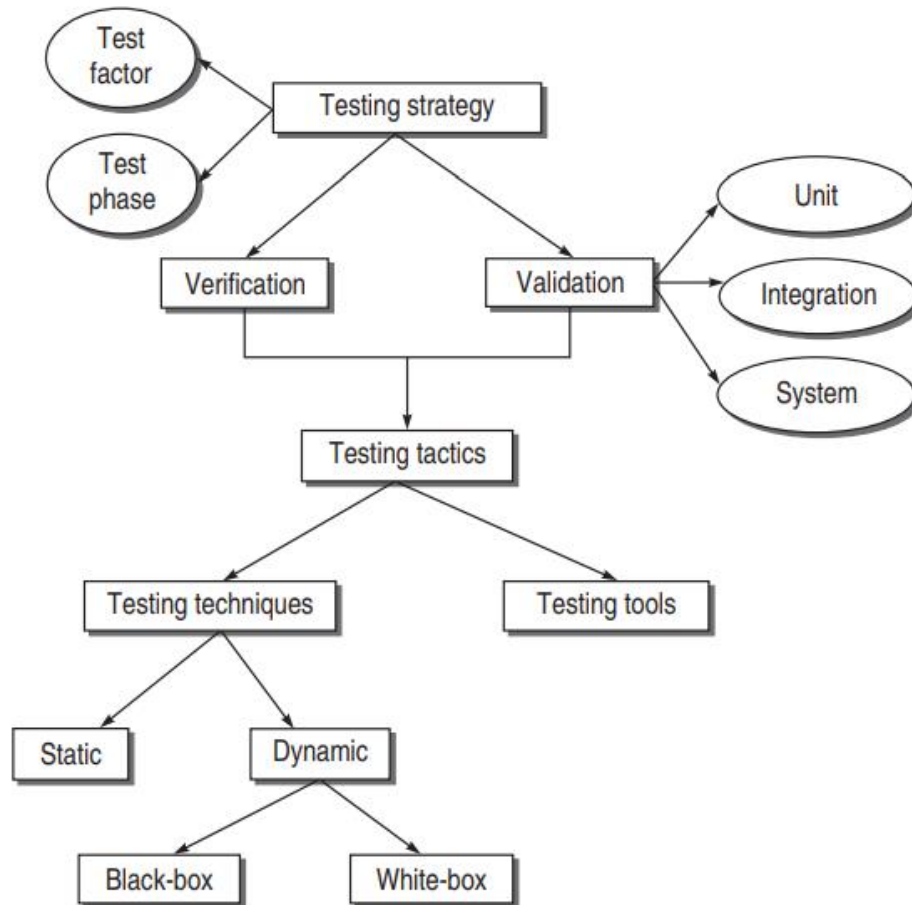
Figure: Testing Strategy

2.6 Roles and responsibilities

Roles	Responsibilities	Tester
Test Manager	Manage the whole project, acquire appropriate resources and control team members.	Sanzida Sultana And Sultana Marjan
Test Analyst	Identify test conditions and features.	
Software Development Engineer in Test	Develop tools for testing.	
Software Test Engineer	Test the overall system using appropriate testing approach and instruments	

Test Architect	Design various suitable testing models	
SQA team	Check to confirm whether the testing process is meeting specified requirements	
Developer in Test	Implement the test cases, test program, test suite etc.	

2.7 Testing Tool

No	Resources	Description
1	Server	Need a Database server which install MySQL server Web server which install Apache Server
2	Test tool	Develop a Test tool which can auto generate the test result to the predefined form and automated test execution
3	Network	Setup a LAN Gigabit and 1 internet line with the speed at least 5 Mb/s
4	Computer	At least 4 computer run Windows 10, Ram 4GB, CPU 3.4GHZ

2.8 Test Deliverables

Test deliverables are provided as below
- ❖ Test plans document.
- ❖ Test cases documents

2.9 Identifying the testing techniques and testing types

Testing Techniques	Testing Type	Perform on
Dynamic Testing (Black Box)	Boundary Value Analysis	Functional requirements, code
	Equivalence Class Partitioning	
	Cause-effect Graph	
Dynamic Testing (White Box)	Logic Coverage Criteria	Structure, design, code
	Basic Path Testing	
	Control Flow Graph	
	Graph Matrix	

Static Testing	Inspection	Whole system without execute code
Validation Testing	Unit Testing	Code Module
	Integration Testing	Merged code
	Function Testing	Functional design
	System Testing	SRS
	Installing Testing	Adaptability with operating machine
	Acceptance Testing	Conformance to gathered requirements

Phase -3: Test Case Development
Functional Test Cases

Test Case ID	Test case	Test Data	Verification
TC-01	Check customer "সাইন আপ করুন" button with valid information.	Name: Sultana Marjan Email: marjanmitu12@gmail.com Phone Number:01712397955 Password:123ui6gh Confirm password:123ui6gh	Valid
TC-02	Check customer "সাইন আপ করুন" button with invalid email address.	Name: Sanzida Sultana Email: sanzida@gmail.com Phone Number:01712397955 Password:1234567 Confirm password:123ui6gh	Invalid
TC-03	Check customer register with invalid password length.	Name: Sanzida Sultana Email: Sanzida@gmail.com Phone Number:01712397955 Password:12 Confirm password:12	Invalid
TC-04	Check if customer registered already.	Name: Sultana Marjan Email: marjanmitu12@gmail.com Phone Number:01712397955 Password:123ui6gh Confirm password:123ui6gh	Invalid
TC-05	Check customer login with valid email and password.	Email: marjanmitu12@gmail.com Password:123ui6gh	Valid
TC-06	Check customer login with invalid email.	Email: marjanmitu@gmail.com Password:123ui6gh	Invalid
TC-07	Check customer login with invalid password.	Email: marjanmitu@gmail.com Password:123	Invalid
TC-08	Test add to cart with product	N/A	Valid
TC-09	Add to cart which is already exists in the cart.	N/A	Invalid

TC-10	Add to cart before logging into the system.	N/A	Invalid
TC-11	Check the "remove products from the cart" procedure.	N/A	Valid
TC-12	View cart list.	N/A	Valid
TC-13	Update cart with invalid products quantity.	Quantity:0	Invalid
TC-14	Update cart with valid products quantity.	Quantity:5	Valid
TC-15	Cart update with more product quantity than available in system.	Quantity:10000000	Invalid
TC-16	Delete individual item from cart.	N/A	Valid
TC-17	Delete all items from cart.	N/A	Valid
TC-18	Test the procedure of providing rating of customer side	rating: চমৎকার	Valid
TC-19	Test procedure of providing feedback of customer side.	feedback: গলার হারটি অসাধারণ	Valid
TC-20	Test the procedure of proving feedback before ordering.	N/A	Invalid
TC-21	Test the procedure of contact to the system owner.	Name: Sanzida Email: sanzida@gmail.com Mobile: 01882428980 message: "Pallihat products are always reliable for us, thanks Pallihat."	Valid
TC-22	Test procedure for searching products that do not exist in the system.	Product Name: "কুশন"	Valid

TC-23	Test procedure for searching for products that do not exist in the system.	Product Name: "chair"	Valid
TC-24	View all category that exist into the system.	N/A	Valid
TC-25	View all placed orders of a customer.	N/A	Valid
TC-26	View all products that exist into the system.	N/A	Valid
TC-27	View products of a specific category.	N/A	Valid
TC-28	Click on notification icon for seeing the condition of order product.	N/A	Valid
TC-29	Check notifications for customers who have not logged in.	N/A	Invalid
TC-30	Test "forget password" module for registered customer.	Email: sanzida822@gmail.com pin:12jfdjfd	Valid
TC-31	Check admin login with valid data.	Name: Nitu Password:123	Valid
TC-32	Check admin login with invalid username or password.	Name: Nitu Password:er445	Invalid
TC-33	Check the procedure of adding entrepreneurs in our system.	Name: অনুপা Email: anupa@gmail.com Mobile No:01712324980 Password:123	Valid
TC-34	Check entrepreneur add	Name: arman Email: arman@gmail.com	Invalid

		invalid password length.	Mobile No:01712324980 Password:123	
TC-35	Check entrepreneur edit procedure from admin side.	Name: Nokshi Email: noksi@gmail.com Mobile No:01812324980 Password:123	Valid
TC-36	Check entrepreneur add procedure with invalid email address which does not exists.	Name: Nitu Email: Nitu@gmail.com Mobile No:01812324980 Password:1238jn8hh	Invalid
TC-37	Check entrepreneur add procedure with invalid mobile number which does not exists.	Name: Nitu Email: Nitu@gmail.com Mobile No:010012324980 Password:1238jn8hh	Invalid
TC-38	Add entrepreneur with duplicate email address which already exists into the system.	Name: Nitu Email: Nitu@gmail.com Mobile No:010012324980 Password:1238jn8hh	Invalid
TC-39	Add entrepreneur with duplicate mobile number which already exists into the system.	Name: Nitu Email: Nitu@gmail.com Mobile No:01712324980 Password:1238jn8hh	Invalid
TC-40	Add an entrepreneur with duplicate username which already exists into the system.	Name: Nitu Email: Nitu@gmail.com Mobile No:01712324980 Password:1238jn8hh	Invalid
TC-41	Check delete entrepreneur procedure.	N/A	Valid
TC-42	Update entrepreneur with duplicate username which	Name: Nokshi Email: noksi@gmail.com Mobile No:01812324980 Password:123	Invalid

	already exists into the system.		
TC-43	Update entrepreneur with duplicate email which already exists into the system.	Name: Nokshi Email: noksi@gmail.com Mobile No:01812324980 Password:123	Invalid
TC-44	Update entrepreneur account with valid information.	Name: Bithy Email: bithy@gmail.com Mobile No:01612324980 Password:1267	Valid
TC-45	Update entrepreneur with duplicate mobile number which already exists into the system.	Name: Rintu Email: rintu@gmail.com Mobile No:01812324980 Password:123	Invalid
TC-46	Check the procedure of adding categories in our system.	Category name: মৃৎশিল্প Image:mritshilpo.jpg	Valid
TC-47	Check the procedure of adding categories with duplicate category name which already exists in our system.	Category name: মৃৎশিল্প Image: mritshilpo.jpg	Invalid
TC-48	Add category without uploading image in the system.	Category name: মৃৎশিল্প	Invalid
TC-49	Check the procedure of adding categories with duplicate category image which already exists in our system.	Category name: মৃৎশিল্প Image: mritshilpo.jpg	Invalid
TC-50	Check the procedure of	Category name: শাড়ি সমগ্র Image: sharee.jpg	Valid

	updating category from admin side.		
TC-51	Check the procedure of updating category with duplicate category name from admin side.	Category name: শাড়ি সমগ্র Image: sharee.jpg	Invalid
TC-52	Check the procedure of updating category with a duplicate category image from admin side.	Category name: হাতে তৈরি গহনা Image: sharee.jpg	Invalid
TC-53	Check the procedure of deleting a category.	N/A	Valid
TC-54	Test the procedure of updating a product information.	Name: মাটির ব্যাংক Type: কে.জি. Category name: মৃৎশিল্প Quantity:122 Description: মাটির তৈরি পণ্য যেনো প্রকৃতির নিদর্শন	Valid
TC-55	Test the procedure of deleting product data.	N/A	Valid
TC-56	Check the procedure of viewing customer details.	N/A	Valid
TC-57	Check the procedure of viewing the message which was sent by the customer.	N/A	Valid
TC-58	Check the procedure of deleting messages from the admin side.	N/A	Valid

TC-59	Check the procedure of viewing the feedback which was sent by the customer.	N/A	Valid
TC-60	Check the procedure of deleting feedback from the admin side.	N/A	Valid
TC-61	Check the procedure of viewing all orders which were placed by the customer.	N/A	Valid
TC-62	Check the procedure of viewing all orders which were placed by the customer but not delivered to the customer.	N/A	Valid
TC-63	Test the procedure of sending email when a product is received from the entrepreneur.	N/A	Valid
TC-64	Check the procedure of generating a pdf of an order.	N/A	Valid
TC-65	Test the procedure of sending email when a product is delivered to a customer.	N/A	Valid
TC-66	Check the procedure of deleting orders from the admin side.	N/A	Valid

TC-67	Check the "লগ আউট" option from customer side.	N/A	Valid
TC-68	Check the "ক্যাটাগরি" option from customer side.	N/A	Valid
TC-69	Check the "লগ আউট" option from admin side.	N/A	Valid
TC-70	Check entrepreneur login with valid name and password.	Name: মিতু Password:123	Valid
TC-71	Check entrepreneur login with invalid name and password.	Name: Taha Password:122334	Invalid
TC-72	Check the products add procedure by the entrepreneur.	Name: সন্দেশ Type: কেজি Category: বাঙালি ভোজ Unit price:২৫০ Quantity: ২৫কেজি Image: sondesh.jpg	Valid
TC-73	Check the products add procedure by the entrepreneur which already exists into the system.	Name: সন্দেশ Type: কেজি Category: বাঙালি ভোজ Unit price: ২৫ Quantity: ২৫ কেজি Image: sondesh.jpg	Invalid
TC-74	Add product without uploading image in the system from entrepreneur side.	Name: সন্দেশ Type: কেজি Category: বাঙালি ভোজ Unit price:২৫০ Quantity: ২৫কেজি Image:	Invalid

TC-75	Add product without selecting the category in the system from the entrepreneur side.	Name: সন্দেশ Type: কেজি Category: Unit price:২৫০ Quantity:২৫কেজি Image: sondesh.jpg	Invalid
TC-76	Add product without entering the products quantity in the system from entrepreneur side.	Name: সন্দেশ Type: কেজি Category: বাঙালি ভোজ Unit price:২৫০ Quantity: Image: sondesh.jpg	Invalid
TC-77	Check the order by the entrepreneur.	N/A	Valid
TC-78	Check the feedback by the entrepreneur about the delivered products.	N/A	Valid
TC-79	Add a product with duplicate image in the system from the entrepreneur side.	Name: সন্দেশ Type: কেজি Category: Unit price:২৫০ Quantity:২৫কেজি Image: sondesh.jpg	Invalid

Non-Functional Test Cases:

Test Case ID	Test Case	Test Data	Verification
TC-80	Review product with image.	N/A	Invalid
TC-81	Review product without image	N/A	Valid
TC-82	Tracking order location	N/A	Invalid
TC-83	Check if user login into the system within minimum time	Email: nitu@gmail.com Password:1232	Valid
TC-84	Check a user should be able to log in from different devices simultaneously	N/A	Valid
TC-85	Check the application should not cause device heating or battery draining	N/A	Valid

Phase -4: Test Environment Setup

Test Environment consists of elements that support test execution with software, hardware and network configured. Test environment configuration must mimic the production environment in order to uncover any environment/configuration related issues.

4.1. Hardware Requirement -
- ❖ Min 500 GB Hard Disk
- ❖ Min 3 RAM
- ❖ Dual-Core Processor
- ❖ Monitor

4.2. Software Requirement -:
- ❖ Microsoft windows 10 installed

4.3. Network Requirement -:
- ❖ Setup a LAN Gigabit and 1 internet line with the speed at least 5 Mb/s

Phase -5: Test Execution

5.1 Functional requirement

ID	Test Scenario	Test Steps	Test Data	Expected Results	Actual Results	Pass / Fail
TC01	Check customer "সাইন আপ করুন"button with valid information.	1. Go to site http://localhost/pollihaat/register.php 2. Click "সাইন আপ করুন" button. 3.Entervalid name, email, phone and password 4. Click "রেজিস্টার" button	Name: Sultana Marjan Email: marjanmitu12@gmail.com Phone Number: 01712397955 Password:123ui6gh Confirm password: 123ui6gh	Successfuly signed up	As Expected	Pass
TC02	Check customer "সাইন আপ করুন"button with invalid email address.	1. Go to site http://localhost/pollihaat/egister.php 2. Click "সাইন আপ করুন" button 3. Enter invalid name, email, phone and password 4. Click "রেজিস্টার" button	Name: Sanzida Sultana Email: sanzida@gmail.com Phone Number: 01712397955 Password:1234567 Confirm password: 123ui6gh	Customer can not Register successfully.	As Expected	Pass
TC03	Check customer register with invalid password length.	1. Go to site http://localhost/pollihaat/register.php 2. Click "সাইন আপ করুন" button 3. Enter invalid name, email, phone and password 4. Click "রেজিস্টার" button	Name: Sanzida Sultana Email: Sanzida@gmail.com Phone Number: 01712397955 Password:12 Confirm password:12	Customer should not able to register into the system	As not expected	Fail
TC04	Check if customer registered already	1. Go to site http://localhost/pollihaat/register.php 2. Click "সাইন আপ করুন" button 3. Enter invalid name, email, phone and password 4. Click "রেজিস্টার" button	Name: Sultana Marjan Email: marjanmitu12@gmail.com Phone Number: 01712397955 Password: 123ui6gh Confirm password:123ui6gh	Can not register successfully	As Expected	Pass

TC05	Check customer login with valid email and password.	1. Go to site http://localhost/pollihaat/login.php 2. Click "লগ ইন " icon 3.Enter valid email and password 4.Click "লগ ইন" button	Email: marjanmitu12@gmail.com Password:123ui6gh	Customer can login into system.	As Expected	Pass
TC06	Check customer login with invalid email	1. Go to site http://localhost/pollihaat/login.php 2. Click "লগ ইন " icon 3.Enter valid email and password 4.Click "লগ ইন" button	Email: marjanmitu@gmail.com Password:123ui6gh	Customer cannot login into system.	As Expected	Pass
TC07	Check customer login with invalid password	1. Go to site http://localhost/pollihaat/login.php 2. Click "লগ ইন " icon 3.Enter valid email and password 4.Click "লগ ইন" button	Email: marjanmitu@gmail.com Password:123	Customer can not login into system.	As Expected	Pass
TC08	Test add to cart with product.	1. Go to site http://localhost/pollihaat/cart.php 2. Click "লগ ইন" icon. 3.Click "কার্টে যোগ করুন" option. 4.Click the cart icon.	N/A	Products added to the customer cart.	As Expected	Pass
TC09	Add to cart which is already exists in the cart.	1. Go to site http://localhost/pollihaat/cart.php 2. Click "লগ ইন" icon. 3.Click "কার্টে যোগ করুন" option 4.Click the cart icon.	N/A	Products doesnot added to the customer cart.	As Expected	Pass
TC10	Add to cart before logging Into the system.	1. Go to site http://localhost/pollihaat/cart.php 3.Click "কার্টে যোগ করুন" option 4.Click the cart icon.	N/A	Products does not added to the customer cart.	As not expected	Fail

TC11	Check the "remove products from the cart" procedure	1. Go to site http://localhost/pollihaat/register.php 2. Login as a customer 3.Click cart icon 4.Click the "মুছুন" option	N/A	Product successfully remove from the cart	As expected	Pass
TC12	View cart list	1. Go to site http://localhost/pollihaat/cart.php 2.Login into the system 3.Click the cart icon	N/A	Customer can able to see all products that were added into the cart.	As Expected	Pass
TC13	Update cart with invalid products quantity	1. Go to site http://localhost/pollihaat/cart.php 2.Login into the system 3.Click the cart icon 4.Click update button	Quantity:0	Cart update does not work and shows "value must be greater than 0"	As Expected	Pass
TC14	Update cart with valid products quantity	1. Go to site http://localhost/pollihaat/cart.php 2.Login into the system 3.Click the cart icon 4.Click update button	Quantity:5	Cart updated successfully.	As Expected	Pass
TC15	Cart update with more product quantity than available in system.	1. Go to site http://localhost/pollihaat/cart.php 2.Login into the system 3.Click the cart icon 4.Click update button	Quantity:100000	Cart update does not work and shows "value must be less than maximum product quantity"	As Expected	Pass
TC16	Delete individual item from cart.	1. Login as customer 2. click cart icon 3.Select product and press "মুছুন"	N/A	Customer can successfully delete product from the cart.	As expected	Pass
TC17	Delete all items from cart.	1. Login as customer. 2.Click cart icon. 3.Press "কার্টের সকল পণ্য মুছুন" button	N/A	Customer can successfully remove all products from the cart.	As expected	Pass

TC18	Test the procedure of providing rating of customer side	1.Login as a customer 2. Click on the product that has already been ordered and received from the delivery man 3.click "রেটিং দিন" option. 4.click "জানান" button.	rating: চমৎকার	Customer can able to provide their valuable rating about their received products	As expected	Pass
TC19	Test procedure of providing feedback of customer side.	1.Login as a customer 2. Click on the product that has already been ordered and received from the delivery man 3.click "রেটিং দিন" option. 4.write feedback into textbox	feedback: গলার হারটি অসাধারণ	Customer can able to provide their valuable feedback about their received products	As expected	Pass
TC20	Test procedure of proving before ordering.	1.Login as a customer 2. Click on the product that has not been ordered.	N/A	Customer can not able to provide their valuable feedback .	As expected	Pass
TC21	Test the procedure of contact to the system owner	1. Go to site: //localhost/pollihaat/register.php 2.Click the "যোগাযোগ করুন" option 3.Enter customer's name, email, phone number, message 4. Click the "সেন্ড করুন" option	Name:Sanzida Email:sanzida@gmail.com Mobile: 01882428980 message: "Pallihaat products are always reliable for us, thanks Pallihat."	Customer can able to send their message to the system owner	As expected	Pass
TC22	Test procedure for searching products that do not exist in the system	1. Go to site: //localhost/pollihaat/register.php 2.Click the search icon 3.Input any products name 4.click "অনুসন্ধান করুন" button	Product Name:"কুশন"	The product has been displayed successfully	As expected	Pass
TC23	Test procedure for searching for products that do not exist in the system.	1. Go to site: localhost/pollihaat/search.php 3.Click the search icon 4.Input any products name 5.click "অনুসন্ধান করুন" button	Product Name: "chair"	The product has not been displayed.	As expected	Pass

TC24	Test procedure for searching for products that do not exist in the system.	1. Go to site http://localhost/pollihaat/search.php 3.Click the search icon 4.Input any products name 5.click "অনুসন্ধান করুন" button	Product Name: "chair"	The product has not been displayed	As expected	Pass
TC24	View all category that exist into the system	1. Go to site localhost/pollihaat/category.php 3.Click the "ক্যাটাগরি" option	N/A	Customer should able to see all the products category of our system	As Expected	Pass
TC25	View all placed orders of a customer.	1. Go to site http://localhost/pollihaat//order.php 2.Login into the system as a customer 3.Click the "অর্ডারসমূহ" option	N/A	Customer can able to see details about their ordered products	As Expected	Pass
TC26	View all products that exist into the system	1. Go to site http://localhost/pollihaat/register.php 2.Click the "পণ্যসমূহ" option	N/A	Customer should able to see all the products of our site	As Expected	Pass
TC27	View products of a specific category	1.Go to site http://localhost/pollihaat/ 3.Click the "ক্যাটাগরি" option from the menu 4.Selects a specific category	N/A	Customer can able to show all products of our system of their desire category.	As expeced	Pass
TC28	Click on notification icon for seeing the condition of order product	1. Go to site http://localhost/pollihaat/ 2.Login as a customer into the system 3.Click the notification icon	N/A	Customer can able to see the condition of their ordered product, product details etc	As Expected	Pass
TC29	Check notifications for customers who have not logged in	1. Go to site http://localhost/pollihaat/ 3.Click the notification icon	N/A	Customer should able to see about their ordered product condition.	As not expected	Fail

TC30	Test "forget password" module for registered customer.	1. Go to site http://localhost/pollihaat/ 2.Click "পাসওয়ার্ড ভুলে গেছেন " option. 3.Enter registered email address 4.Click "নিশ্চিত করুন" button 5.Enter pin which is send to email address. 6.Click "সাবমিট" button.	Email:sanzida822@gmail.com pin:12jfdjfd	Email must be sent customer email account.	As not expected	Fail
TC31	Check admin login with valid data	1. Go to site http://localhost/pollihaat/register.php 2. Click "লগ ইন " icon 3.Enter valid username and password 4.Click "লগ ইন" button	Name: Nitu Password: 123	Successful to login into the system	As Expected	Pass
TC32	Check admin login with invalid username or password.	1. Go to site http://localhost/pollihaat/admin/login.php 2. Click "লগ ইন " icon 3.Enter invalid username and password 4.Click "লগ ইন" button	Name: Nitu Password: er445	Admin can not login into the	As Expected	Pass
TC33	Check the procedure of adding entrepreneurs in our system.	1.Login as an admin 2.Click "উদ্যোক্তা" from menu bar 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তা যোগ করুন" button.	Name: অনুপা Email:anupa@gmail.com Mobile No:01712324980 Password:123	Successful to adding a new entrepreneur in our system	As expected	Pass
TC34	Check entrepreneur add invalid password length.	1.Login as an admin 2.Click "উদ্যোক্তা" from menu bar 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তা যোগ করুন" button.	Name: arman Email: arman@gmail.com Mobile No:01712324980 Password:123	Entrepreneur should not be added into the system.	As not expected	Fail
TC35	Check entrepreneur edit procedure from admin side.	1.Login as an admin 2.Click "উদ্যোক্তা" from menu bar 3.Click "পরিবর্তন" option/ 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তার তথ্য পরিবর্তন করুন " button.	Name:Nokshi Email: noksi@gmail.com Mobile No:01812324980 Password:123	Successful to updated entrepreneur account in our system	As expected	Pass

TC36	Check entrepreneur add procedure with invalid email address which does not exists.	1.Login as an admin 2.Click "উদ্যোক্তা" from menu bar 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তা যোগ করুন" button.	Name: Nitu Email: Nitu@gmail.com Mobile No:01812324980 Password:1238jn8hh	Entrepreneur should not be added into the system.	As not expected	Fail
TC37	Check entrepreneur add procedure with invalid mobile number which does not exists.	1.Login as an admin 2.Click "উদ্যোক্তা" from menu bar 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তা যোগ করুন" button.	Name:Nitu Email: Nitu@gmail.com Mobile No:010012324980 Password:1238jn8hh	Entrepreneur should not be added into the system.	As not expected	Fail
TC38	Add entrepreneur with duplicate email address which already exists into the system.	1.Login as an admin 2.Click "উদ্যোক্তা" from menu bar 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তা যোগ করুন" button.	Name: Nitu Email: Nitu@gmail.com Mobile No:010012324980 Password:1238jn8hh	Entrepreneur does not add the system	As expected	Pass
TC39	Add entrepreneur with duplicate mobile number which already exists into the system	1.Login as an admin 2.Click "উদ্যোক্তা" from menu bar 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তা যোগ করুন" button.	Name: Nitu Email: Nitu@gmail.com Mobile No:01712324980 Password:1238jn8hh	Entrepreneur does not add the system	As expected	Pass
TC40	Add an entrepreneur with duplicate username which already exists into the system.	1.Login as an admin 2.Click "উদ্যোক্তা" from menu bar 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তা যোগ করুন" button.	Name: Nitu Email: Nitu@gmail.com Mobile No:01712324980 Password:1238jn8hh	Entrepreneur does not add the system	As expected	Pass
TC41	Check delete entrepreneur procedure.	1.Login as a admin 2.Click "উদ্যোক্তা" from menu bar 3.Click "মুছুন" button. 4.System asks for confirmation 5.Click ok option.	N/A	Entrepreneur successfully remove from the system.	As expected	Pass

TC42	Update entrepreneur with duplicate username which already exists into the system.	1.Login as a admin 2.Click "উদ্যোক্তা" from menu bar 3.Click "পরিবর্তন" option/ 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তার তথ্য পরিবর্তন করুন " button.	Name: Nokshi Email: noksi@gmail.com Mobile No:01812324980 Password:123	Entrepreneur does not updated the system	As expected	Pass
TC43	Update entrepreneur with duplicate email which already exists into the system.	1.Login as a admin 2.Click "উদ্যোক্তা" from menu bar 3.Click "পরিবর্তন" option/ 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তার তথ্য পরিবর্তন করুন " button.	Name: Nokshi Email: noksi@gmail.com Mobile No:01812324980 Password:123	Entrepreneur information does not updated .	As expected	Pass
TC44	Update entrepreneur account with valid information.	1.Login as a admin 2.Click "উদ্যোক্তা" from menu bar 3.Click "পরিবর্তন" option/ 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তার তথ্য পরিবর্তন করুন" button.	Name: Bithy Email: bithy@gmail.com Mobile No:01612324980 Password:1267	Entrepreneur account updated successfully	As expected	Pass
TC45	Update entrepreneur with duplicate mobile number which already exists into the system.	1.Login as a admin 2.Click "উদ্যোক্তা" from menu bar 3.Click "পরিবর্তন" option. 3.Input entrepreneur name, email, mobile number and password. 4.Click "উদ্যোক্তার তথ্য পরিবর্তন করুন" button.	Name: Rintu Email: rintu@gmail.com Mobile No:01812324980 Password:123	Entrepreneur information does not updated.	As expected	Pass
TC46	Check the procedure of adding categories in our system.	1.Login as an admin 2.Click "ক্যাটাগরি" from menu bar 3.Input category name. 4.Input image. 5.Click "ক্যাটাগরি যোগ করুন" button.	Category name: মৃৎশিল্প Image: mritshilpo.jpg	Successfully added category into the system	As expected	Pass

TC47	Check the procedure of adding categories with duplicate category name which already exists in our system.	1.Login as an admin 2.Click "ক্যাটাগরি" from menu bar 3.Input category name. 4.Input image. 5.Click "ক্যাটাগরি যোগ করুন" button.	Category name: মৃৎশিল্প Image: mritshilpo.jpg	Category does not added in the system.	As expected	Pass
TC48	Add category without uploading image in the system.	1.Login as an admin 2.Click "ক্যাটাগরি" from menu bar 3.Input category name. 5.Click "ক্যাটাগরি যোগ করুন" button.	Category name: মৃৎশিল্প	Category does not add in the system.	As expected	Pass
TC49	Check the procedure of adding categories with duplicate category image which already exists in our system.	1.Login as an admin 2.Click "ক্যাটাগরি" from menu bar 3.Input category name. 4.Input image. 5.Click "ক্যাটাগরি যোগ করুন" button.	Category name: মৃৎশিল্প Image: mritshilpo.jpg	Category should not be added into the system.	As not expected	Fail
TC50	Check the procedure of updating category from admin side.	1.Login as an admin 2.Click "ক্যাটাগরি" from menu bar 3.Click "পরিবর্তন" button of a specific category 4.Input category name. 4.Input image. 5.Click "ক্যাটাগরি পরিবর্তন করুন" button.	Category name: শাড়ি সমগ্র Image: sharee.jpg	Successfully updated category information into the system	As expected	Pass
TC51	Check the procedure of updating category with duplicate category name from admin side.	1.Login as an admin 2.Click "ক্যাটাগরি" from menu bar 3.Click "পরিবর্তন" button of a specific category 4.Input category name. 4.Input image. 5.Click "ক্যাটাগরি পরিবর্তন করুন" button.	Category name: শাড়ি সমগ্র Image: sharee.jpg	Category information does not add into the system.	As expected	Pass
TC52	Check the procedure of updating category with a duplicate category	1.Login as an admin 2.Click "ক্যাটাগরি" from menu bar 3.Click "পরিবর্তন" button of a specific category 4.Input category name.	Category name: হাতে তৈরি গহনা Image: sharee.jpg	Successfully added category into the system.	As expected	Pass

		image from admin side.	4.Input image. 5.Click "ক্যাটাগরি পরিবর্তন করুন" button.				
TC53	Check the procedure of deleting a category.		1.Login as a admin 2.Click "ক্যাটাগরি" from menu bar 3.Click "মুছুন" option of a specific category 4.System asks for confirmation 5.Click ok button.	N/A	Successfully remove category information from the system	As expected	Pass
TC54	Test the procedure of updating a product information		1.Login as a admin 2.Click "পণ্য" from menu bar 3.Click "পরিবর্তন" option of a specific category 4.Input product, product type name, image, quantity, price, category name description image of any product. 5.Click "পরিবর্তন করুন" button.	Name:মাটির ব্যাংক Type:কে. জি. Category name:মৃৎশিল্প Quantity:122 Description: মাটির তৈরি পণ্য যেনো প্রকৃতির নিদর্শন।	Successfully updated product information into the system	As expected	Pass
TC55	Test the procedure of deleting product data.		1.Login as an admin 2.Click "পণ্য" from menu bar 3.Click "মুছুন" option of a specific category 4.System asks for confirmation 5.Click ok button.	N/A	Successfully remove category from the system.	As expected	Pass
TC56	Check the procedure of viewing customer details.		1.Login as an admin 2.Click "ক্রেতা" from menu bar. 3.Admin can view all customer list which were registered into the system.	N/A	Successfully view registered customer list.	As expected	Pass
TC57	Check the procedure of viewing the message which was sent by the customer.		1.Login as an admin 2.Click "যোগাযোগ" from menu bar. 3.Admin can view all messages sent by customers.	N/A	Successfully view all messages sent by customers.	As expected	Pass

TC58	Check the procedure of deleting messages from the admin side.	1.Login as an admin 2.Click "যোগাযোগ" from menu bar. 3.Admin click delete icon of a specific message sent by customer. 4.System asks for confirmation 5.Admin clicks ok button	N/A	Successfully remove message from the system.	As expected	Pass
TC59	Check the procedure of viewing the feedback which was sent by the customer.	1.Login as a nadmin 2.Click "প্রতিক্রিয়া" from menu bar. 3.Admin can view all feedback sent by customers.	N/A	Successfully view all feedback sent by customers.	As expected	Pass
TC60	Check the procedure of deleting feedback from the admin side.	1.Login as an admin 2.Click "প্রতিক্রিয়া" from menu bar. 3.Admin click delete icon of a specific feedback sent by customer. 4.System asks for confirmation. 5.Admin clicks ok button	N/A	Successfully remove specific feedback from the system.	As expected	Pass
TC61	Check the procedure of viewing all orders which were placed by the customer.	1.Login as an admin 2.Click "অর্ডার" from menu bar. 3.Admin click delete icon of a specific order. 4.System asks for confirmation. 5.Admin clicks ok button	N/A	Successfully delete specific orders which were placed by the customer.	As expected	Pass
TC62	Check the procedure of viewing all orders which were placed by the customer but not delivered to the customer.	1.Login as a admin 2.Click "অর্ডার" from menu bar. 3.Admin click delete icon of an undelivered order. 4.System asks for confirmation. 5.Admin clicks ok button.	N/A	Successfully delete specific undelivered order.	As not expected	Fail
TC63	Test the procedure of sending email when a product is received from the entrepreneur.	1.Login as a admin 2.Click "অর্ডার" from menu bar. 3.Admin selects "হয়েছে " from পণ্য গ্রহণ। 4.Admin clicks update icon	N/A	Email must be sent to the customer email account.	As not expected	Fail

TC64	Check the procedure of generating a pdf of an order.	1.Login as a admin 2.Click "অর্ডার" from menu bar. 3.Admin pdf icon of a specific order. 4.System displays orders details to the admin. 5.Admin clicks "ইনভয়েস তৈরি করুন" option.	N/A	System successfully generates an invoice of a specific order.	As expected	Pass
TC65	Test the procedure of sending email when a product is delivered to a customer.	1.Login as a admin 2.Click "অর্ডার" from menu bar. 3.Admin selects "হয়েছে " from পণ্য ডেলিভেরি । 4.Admin clicks update icon	N/A	Email must be sent to the customer email account.	As not expected	Fail
TC66	Check the procedure of deleting orders from the admin side.	1.Login as a admin 2.Click "অর্ডার" from menu bar. 3.Admin delete icon of a specific order. 4.System asks for confirmation. 5. Admin selects the ok option.	N/A	Admin can successfully delete any specific order from the system.	As expected	Pass
TC67	Check the "লগ আউট" option from customer side.	1. Go to site localhost/pollihaat/login.php 2.Login into the system 3.Click the "লগ আউট" option	N/A	Customer can successfully logout from the system.	As Expected	Pass
TC68	Check the "ক্যাটাগরি" option from admin side	1.Login as admin. 2.Admin clicks "ক্যাটাগরি" option from menu bar.	N/A	Successfully see all the categories of our system.	As Expected	Pass
TC69	Check the "লগ আউট" option from admin side	1. Go to site http://localhost/pollihaat/logout.php 2.Click "লগ আউট " button	N/A	Admin should able to successfully logout from the system	As Expected	Pass

TC70	Check entrepreneur login with valid name and password.	1. Go to site http://localhost/pollihaat/login.php 2.Enter name 3.Enter password 4.Click the login option	Name: মিতু Password:123	Entrepreneur can successfully login into the system.	As expected	Pass
TC71	Check entrepreneur login with invalid name and password	1. Go to site http://localhost/pollihaat/login.php 2.Enter name 3.Enter password 4.Click the login option	Name: Taha Password:122334	Entrepreneur cannot login into the system.	As expected	Pass
TC72	Check the products add procedure by the entrepreneur	1.Login as an entrepreneur 2.Click "পণ্য" option from menu bar 3.Enter products name 4.Choose product type 5.Choose the category of the product 5.Enter the unit price of that product 6.Enter the quantity of that product 7.Add a image for that product 8.Click the "পণ্য যোগ করুন" button	Name: সন্দেশ Type: কেজি Category: বাঙালি ভোজ Unit price: ২৫০ Quantity: ২৫ কেজি Image: sondesh.jpg	Entrepreneur can successfully add product in the system	As expected	Pass
TC73	Check the products add procedure by the entrepreneur which already exists into the system.	1.Login as an entrepreneur 2.Click "পণ্য" option from menu bar 3.Enter products name 4.Choose product type 5.Choose the category of the product 5.Enter the unit price of that product 6.Enter the quantity of that product 7.Add a image for that product 8.Click the "পণ্য যোগ করুন" button	Name: সন্দেশ Type: কেজি Category: বাঙালি ভোজ Unit price: ২৫ Quantity: ২৫ কেজি Image: sondesh.jpg	Products should no added into the system.	As not expected	Pass
TC74	Add product without uploading image in the system from	1.Login as an entrepreneur 2.Click "পণ্য" option from menu bar 3.Enter products name 4.Choose product type	Name: সন্দেশ Type: কেজি Category: বাঙালি ভোজ Unit price: ২৫০ Quantity:২৫ কেজি	Entrepreneur should not able to add product in the system	As expected	Pass

		5.Choose the category of the product 5.Enter the unit price of that product 6.Enter the quantity of that product 7.Click the "পণ্য যোগ করুন" button	Image:			
TC75	Add product without selecting the category in the system from the entrepreneur side.	1.Login as an entrepreneur 2.Click "পণ্য" option from menu bar 3.Enter products name 4.Choose product type 5.Enter the unit price of that product 6.Enter the quantity of that product 7.Add an image for that product 8.Click the "পণ্য যোগ করুন" button	Name: সন্দেশ Type: কেজি Category: Unit price:২৫০ Quantity:২৫ কেজি Image:sondesh.jpg	Entrepreneur should not able to add product in the system	As expected	Pass
TC76	Add product without entering the products quantity in the system from entrepreneur side	1.Login as an entrepreneur 2.Click "পণ্য" option from menu bar 3.Enter products name 4.Choose product type 5.Enter the unit price of that product 6.Add a image for that product 8.Click the "পণ্য যোগ করুন" button	Name: সন্দেশ Type: কেজি Category: বাঙালি ভোজ Unit price: ২৫০ Quantity: Image: sondesh.jpg	Entrepreneur should not able to add product in the system	As expected	Pass
TC77	Check the order by the entrepreneur	1.Login as an entrepreneur 2.Click "অর্ডার" option from the menu bar	N/A	Entrepreneur should be able to see the order details like product name, price, unit price etc.	As expected	Pass
TC78	Check the feedback by the entrepreneur about the delivered products	1.Login as an entrepreneur 2.Click প্রতিক্রিয়া" option from menu bar	N/A	Entrepreneur should able to see the feedback about products	As expected	Pass

TC79	Add a product with duplicate image in the system from the entrepreneur side.	1.Login as an entrepreneur 2.Click "পণ্য" option from menu bar 3.Enter products name 4.Choose product type 5.Enter the unit price of that product 6.Enter the quantity of that product 7.Add a image for that product 8.Click the "পণ্য যোগ করুন" button	Name: সন্দেশ Type: কেজি Category: Unit price: ২৫০ Quantity: ২৫ কেজি Image: sondesh.jpg	Entrepreneur should not able to add product into the system.	As not expected	Fail

5.2 Non-Functional Requirement:

Test Case ID	Test Scenario	Test Steps	Test Data	Expected Result	Actual Result	Pass/Fail
TC80	Review product with image.	1.Login as a customer. 2.Click product image 3.Write feedback	N/A	Customer should be able to successfully send feedback.	As not expected	Fail
TC81	Review product without image	1Log in as customer 2.enter review 3.write something and press "সেন্ড" button	N/A		As expected	Pass
TC82	Tracking order location	1.login as customer 2.Click "অর্ডারসমূহ" from menu bar.	N/A	Customer should able to see order location which he/she placed before.	As not expected	Fail
TC83	Check if user login into the system within minimum time	1.Go to site: http://localhost/pollihaat /login.php 2. Enter email 3. Enter Password	Email: nitu@gmail.com Password:1232	User should able to access profile within short time	As expected	Pass
TC84	Check a user should be able to log in from different devices simultaneously.	1.Go to site: http://localhost/pollih aat/	N/A	Customer, entrepreneur must be able to access profile from any devices	As expected	Pass

TC85	Check the application should not cause device heating or battery draining.	1.Go to site: http://localhost/pollihaat/	N/A	User should be able to use the system friendly without any battery problem.	As expected	Pass

5.3 Test Summary

Test Summary	
The number of test cases executed	85
The numbers of test cases pass	71
The numbers of test cases fail	14
Pass percentage	83.52%
Fail percentage	16.48%

Pass   Fail
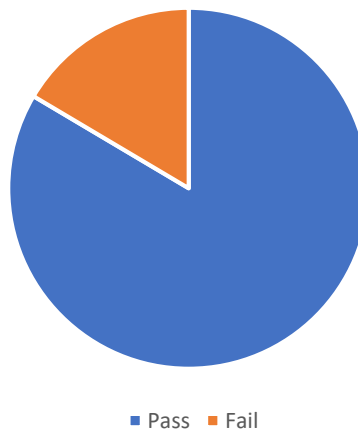
5.4 Bugs Reporting

No	Bug Description	Status
Bug1	System owner can add entrepreneur invalid password length.	Open
Bug2	System failed to send email to the customer email account.	Open
Bug3	System accepts duplicate category image.	Open
Bug4	Entrepreneur add duplicate product image when add or update a product.	Open
Bug5	System accepts invalid email address of entrepreneurs which does not exist.	Open
Bug6	System accepts invalid mobile number of entrepreneurs which does not exist.	Open

Phase -6: Test Cycle Closure

A check against the test exit criteria is very essential to claim that the testing is now complete. Before putting an end to the test process, the product quality is measured against the test completion criteria.

Exit Criteria	Criteria Met? (Yes/No)	If No, Describe Plan of Action
All test scripts have been successfully executed.	YES	
All expected and actual results are captured and documented with the test script(s).	YES	
All identified critical or high severity defects have been corrected and retested.	NO	Those identified critical defects will be assign to the developers to resolve those
Any unresolved defects are documented and signed-off by the project manager.	NO	Those unsolved defects will be assigned to the developers to resolve those

Traceability Matrix for Functional Requirement

	FR-01	FR-02	FR-03	FR-04	FR-05	FR-06	FR-07	FR-08	FR-09	FR-10	FR-11
TC01	✔										
TC02	✔										
TC03	✔										
TC04	✔										
TC05	✔										
TC06	✔										
TC07	✔										
TC08							✔				
TC09							✔				
TC10							✔				
TC11							✔				
TC12							✔				
TC13							✔				
TC14							✔				
TC15							✔				
TC16							✔				
TC17							✔				
TC18						✔					
TC19						✔					
TC20					✔						
TC21		✔									
TC22										✔	
TC23										✔	
TC24										✔	
TC25							✔				
TC26										✔	
TC27										✔	
TC28					✔						
TC29		✔									
TC30								✔			
TC31	✔										
TC32	✔										
TC33									✔		
TC34		✔									
TC35		✔									
TC36		✔									
TC37		✔									
TC38		✔									

TC39		✔									
TC40		✔									
TC41		✔									
TC42		✔									
TC43		✔									
TC44		✔									
TC45		✔									
TC46				✔							
TC47				✔							
TC48				✔							
TC49				✔							
TC50				✔							
TC51				✔							
TC52				✔							
TC53				✔							
TC54				✔							
TC55				✔							
TC56		✔									
TC57											✔
TC58											✔
TC59											✔
TC60											✔
TC61					✔						
TC62					✔						
TC63											✔
TC64					✔						
TC65											✔
TC66					✔						
TC67	✔										
TC68				✔							
TC69	✔										
TC70									✔		
TC71			✔								
TC72									✔		
TC73									✔		
TC74									✔		
TC75									✔		
TC76									✔		
TC77									✔		
TC78									✔		
TC79									✔		

Traceability Matrix for Non-Functional Requirement

	NFR-01	NFR-02	NFR-03	NFR-04	NFR-05	NFR-06
TC80			✔			
TC81				✔		
TC82					✔	
TC83			✔			
TC84						✔
TC85		✔				