

# Manual Testing Project

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# Introduction

- Name : First Cry
- Module name : E-Shopping
- Test Scenarios :
  - 1.Login
  - 2.Home Page
  - 3.Add to cart
  - 4.Check out
- Manual Testing was carried out on this module.
- Test Scenarios and Test cases were build according to user requirement.
- Actual result and Status were noted down.

# Requirements Phase

- Login functionality should allow the user to login to their accounts with valid credentials.
- The system should allow the user to reset their passwords by clicking on “forgot password”.
- Home page should allow the user to navigate to corresponding page using links.
- Cart should display items, total amount and check out button on cart page and allow the users to access the cart page by clicking on the cart icon.
- Check out should allow the user to place an order successfully, make payment quickly.
- Confirm the order, send a confirmation mail to the user and track shipping status of an order.

# Design Phase

- Login feature is designed along with user name , password and forgot password option. When user click on login button it should navigate to home page.
- We designed home page to catch user attention and navigate to corresponding page by clicking on images and links that are provided.
- Add to cart option allows the user to add or delete the items from the cart.
- Cart is usually an icon that can be found at top right corner of the home page which shows number of items it holds.
- Check out option designed to make payment safely, securely and quickly by selecting payment methods.

# Development Phase

- Agile Methodology was used for the development of online shopping store module.
- Requirements were reviewed.
- Programming language, framework and tools were setup for development of the project.
- Code was developed according to the requirements and design phase following the coding standards.
- Unit test cases were written for the code and increased test coverage,
- Code was executed.
- Built was ready.

# Testing Phase

In this phase testing is done by the tester on the built and all the components are tested according to STLC(Software Testing life cycle).

STLC consists of following stages :

- Requirement Analysis
- Test Planning
- Test Case development
- Test Environment setup
- Test Execution
- Test Closure

# Requirement Analysis

During this stage we decided to focus mainly on the functionalities such as :

- Log In
- Home Page
- Add To Cart
- Check Out
- We gathered all the functional and non-functional requirements for testing.
- We prioritized on functionalities and sub modules based on their severity.

# Test Plan

During this phase roles were assigned to every member of the testing team.

Members	Roles
Test Manager	<ul style="list-style-type: none"><li>• Monitors and contacts team lead.</li><li>• Test strategies</li><li>• Level of testing</li><li>• Approval of test plan.</li></ul>
Test Lead	<ul style="list-style-type: none"><li>• Test plan creation</li><li>• Work distribution</li><li>• Technically leads team</li></ul>
Test Engineer	<ul style="list-style-type: none"><li>• Create test scenarios</li><li>• Design, creation of test cases</li><li>• Defect report</li><li>• Tracking defect till closure</li></ul>
Automotive Architecture	<ul style="list-style-type: none"><li>• Plans for test automation</li></ul>
Automation Engineer	<ul style="list-style-type: none"><li>• Script and creation for automation</li><li>• Maintaining scripts for changes</li></ul>



# Test Case Development

In this phase test cases were developed and test data was created. For each test case expected results were identified. Test cases were reviewed and validated. Requirement Traceability Matrix was updated to map requirements to test cases.

E-Shopping module contains test scenarios as follows:

- Test Scenario on “Login” functionality.
- Test Scenario on “Home” Page.
- Test Scenario on “Add to Cart”.
- Test Scenario on “Checkout”.

# Test Environment setup

The test environment was setup with required hardware, software and network configurations. The Shopping module was tested on web browser and on mobile device as follows :

- Windows – Chrome, Edge and Firefox
- Mac OS – Safari
- Android Mobile OS – Chrome, Google
- iPhone mobile OS – Safari

# Test Execution

Test cases were executed according to test scenario's

## 1. Test Case for Log In :

TestCase ID	TestCase Objective	Pre-Requisite	Step Data	Expected Result	Actual Result	Status
TC_M1_01	To check user login with valid credentials	1)URL should be open 2)User should be registered	1)Enter user name 2)Enter password 3)Click on login button	Home Page will be displayed	Home Page displayed	Pass
TC_M1_02	To check user login with invalid username	1)URL should be open 2)User should be registered	1)Enter user name 2)Enter password 3)Click on login button	Error Page will be displayed	Error Page displayed	Pass
TC_M1_03	To check user login with invalid password	1)URL should be open 2)User should be registered	1)Enter user name 2)Enter password 3)Click on login button	Error Page will be displayed	Error Page displayed	Pass

# Test Cases

## 2. Test Case for Home page :

TestCase Id	TestCase Objective	Pre-Requisite	Step Data	Expected Result	Actual Result	Status
TC_M2_01	To verify tapping on search bar opens the search screen with keyboard and voice input options	URL should be open	1)Tap on search bar 2)Type in any query and press enter key for keyboard option 3)Tap on microphone icon and speak your query for voice option	Search screen will appear with blinking cursor and micro phone icon and relevant results will be appeared	Search screen appeared with blinking cursor and micro-phone icon	Pass
TC_M2_02	To verify tapping on product image navigates to product page with description, reviews and AddToCart button	URL should be open	1)Enter product name 2)Click on product image 3)View the product page	product page will be appered with description,reviews and AddToCart button	product page was appeared with description,reviews and AddToCart button	Pass
TC_M2_03	To verify tapping on logo redi-rects to home page	URL should be open	1) Tap on logo 2) view the page	Home page will be appeared with categories like toys, clothes etc.	Home page appeared with categories like toys, clothes etc.	Pass

# Test Cases

## 3. Test Case for Add to Cart :

TestCase ID	TestCase Objective	Pre-Requisite	Step Data	Expected Result	Actual Result	Status
TC_M3_01	To verify AddToCart button is functioning properly	URL should be open	1)Click on search option 2)Enter product name 3)Click on image of the product 4)Click on AddToCart button	Shopping Cart Page will be displayed	Shopping Cart Page was displayed	Pass
TC_M3_02	To verify if the user increase or decrease the number of items then the changes should be reflected as per quantities	1)URL should be open 2)User should be registered 3)User should have logged in	1)Click on Cart Icon 2)Click on quantity 3)Select the number from drop down list	Quantity of item is updated will be displayed	has been displayed	Pass
TC_M3_03	To verify when the user add items to the cart, then the cart should display total price of all items on shopping cart page.	1)URL should be open 2)User should be registered 3)User should have logged in	1)Click on search option 2)Enter product name 3)Click on image of the product 4)Click on AddToCart button 5)Click on GoToCart	Total price of all the items will be displayed on the shopping cart page	Total price of all the items has been displayed on the shopping cart page	pass

# Test Cases

## 4. Test Case for Check Out :

TestCase ID	TestCase Objective	Pre-Requisite	Step Data	Expected Result	Actual Result	Status
TC_M4_01	To check if the user can choose a payment method and complete transaction successfully	1)URL should be open 2)User should be registered 3)User should be logged in	1) select the product and click on AddtoCart 2)select payment method 3)click on pay now 4)Confirm the payment	order placed and transanction twas successful	order placed and transa- nction was successful	Pass
TC_M4_02	To check if the user can apply any discount or offers coupon on check out page	1)URL should be open 2)User should be registered 3)User should logged in	1)Add products to cart 2)Click on place order 3)Select payment method 4)Click ok pay now option 5)Enter coupon code 6)Click on Apply	Total amount will be displayed after deducting discount amount	Total amount will be dis- played after deducting discount amount	Pass
TC_M4_03	To check if user can view total bill, delivery date and shipping options on checkout page	1)URL should be open 2)User should be registered 3)User should be logged in	1)Click on Cart Icon 2)Click on PlaceOrder and select payment method 3)Click on PayNow option 4)View the CheckOut page	Total bill, delivery date and shipping options will be appe- ared on CheckOut page	Total bill, delivery date and shipping options will be appeared on CheckOut page	Pass

# Test Closure

S.NO	Test Scenario	Total test cases	Test cases executed	Test case pending
1	Test Scenario for Log In	4	4	0
2	Test Scenario for Home Page	4	4	0
3	Test Scenario for Add to Cart	4	4	0
4	Test Scenario for Check Out	4	4	0

# Test Summary Report

## Test summary report

- Test summary report is documented with a detail account of over all test results and defects and reported to the relevant stake holders.
- We have executed all types of testing on Shopping module and also we have conducted
- **Exploratory testing** : Testers explored the software with different scenarios, inputs and identified bugs and issues with out using pre-written test cases.
- **End to End Testing** : We performed end to end testing on shopping module and validated the entire functionality is working according to users requirement.



# Levels of Testing

Basic levels of testing performed on shopping module as follows:

## **Unit Testing :**

- Each and every component of a Shopping module is to ensure that they work as expected.
- Test cases has been covered for each functionality of the module such as adding items to cart, check out and applying discounts.

## **Integration testing :**

In this testing we have combined individual units and tested to verify if they are working as intended when they are integrated.

- We tested it through different types of approaches:
- Top-down
- Bottom-up
- Big bang

# System Testing

## **System Testing :**

- System testing is performed on Shopping module by using following kinds of testing:

## **Functionality Testing :**

- We performed functionality testing to check whether the shopping module meets the specified requirements and works as expected.
- It covers various scenarios such as adding, removing, and updating items in the cart, applying coupons and discounts, choosing payment and delivery options, placing and canceling orders.

## **Usability testing:**

- We performed usability testing to evaluate how easy and user-friendly the shopping module is for the customers.
- It involves testing the design, navigation, content, feedback, and error messages of the shopping module.
- We have checked whether the shopping module is accessible and compatible with different browsers, devices and screen sizes.

# System Testing

## **Security Testing:**

- We performed security testing to ensure that the shopping module is safe and secure from unauthorized access and data breaches.
- It involves testing the encryption, authentication, authorization, and validation of the Shopping module.

## **Performance Testing:**

- We performed security testing to check how well the shopping module performs under different load and stress conditions.
- It involves testing the speed, scalability, reliability, and resource consumption of the shopping module.
- We have also checked whether the shopping module can handle peak traffic, concurrent users, and large data volumes.

# UAT Testing

**User Acceptance Testing(UAT)** : UAT was done in presence of client. We performed Alpha testing followed by Beta testing.

**Alpha Testing :**

In Alpha testing the developer checked the application and identified the bugs and issues and fixed them immediately.

**Beta Testing :**

The client has performed the Beta testing in real environment and did not find any issue. This testing was the last phase of testing usually performed before releasing the product officially.

# Deployment

- Deployment is the final phase of SDLC where the application is put into production.
- After the product is tested by the project team and the product passes each testing phase then the product is ready to go live.
- Thus, the product is ready for use in the real environment by all the product's end-users.

# Maintenance

- Maintenance phase of SDLC occurs after the software has been placed into operation.
- Maintenance of software application includes bug fixing, enhancements, adaptation to changing environment, performance optimization, documentation and user support.
- Whenever changes or updates are made during the maintenance phase, regression testing is performed to ensure that existing functionality is not adversely affected by the modifications.