Test Plan

Online Book Store

Phase-II

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Master of Software Engineering

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1. Test plan identifier

CIS 895-MSE Project Test plan Online Book Store V1.0

2. Introduction

The goal of this document is to develop a test plan for the Online Book Store design system. This document defines all the procedures and activities required to prepare for testing of the functionalities of the system which are specified in Vision document. The objectives of the test plan are to define the activities to perform testing, define the test deliverables documents and to identify the various risks and contingencies involved in testing.

3. Features to be tested

The following list describes the features to be tested:

USER:

- Registration
- Login
- Add To Cart
- Edit Cart

ADMIN:

- Create and Delete book from Category
- Create and Delete a Category
- Manage Orders
- Manage Members

4. Test Cases

4.1 USER

Registration

ID	TEST CASE	USER INPUT	PASS CRITERIA
U_REG_1	User Registration	User selects already existing user name	Display message to choose different user name
U_REG_2	User Registration	User enters different password in password confirm field	Display message that Password and Confirm Password fields don't match
U_REG_3	User Registration	User forgets to enter a particular required fields	Display message The value in field is required
U_REG_4	User Registration	User enters all the details successfully	User account created

Login

ID	TEST CASE	USER INPUT	PASS CRITERIA
U_LOG_1	User Login	User enters a wrong username	Display message Login or Password is incorrect.
U_LOG_2	User Login	User enters a wrong password	Display message Login or Password is incorrect.
U_LOG_3	User Login	User enters correct username and password	User logs in successfully

Add to Cart

ID	TEST CASE	USER INPUT	PASS CRITERIA
U_AC_1	Add to Cart	User selects a book and clicks add to cart button	Book is added to the shopping cart
U_AC_2	Add to Cart	Guest selects a book and clicks add to cart button	User should create an account.

Edit Cart

ID	TEST CASE	USER INPUT	PASS CRITERIA
U_EC_1	Edit Cart	User changes the Quantity	Quantity and total cost of Cart should be updated
U_EC_2	Edit Cart	User deletes a book from shopping Cart	Books and total cost of Cart should be updated
U_EC_3	Edit Cart	User selects a new book to shopping Cart	Books and total cost of Cart should be updated

4.2 ADMIN

Create and Delete a Book from Category

ID	TEST CASE	ADMIN INPUT	PASS CRITERIA
AD_CDB_1	Create and Delete a Book from Category	Admin adds a new book to category	Book should be updated in Categories list
AD_CDB_2	Create and Delete a Book from Category	Admin deletes a book from category	Book should be deleted in Categories list

Create and Delete a Category

ID	TEST CASE	ADMIN INPUT	PASS CRITERIA
AD_CDC_1	Create and Delete a Category	Admin adds a new category	Category should be updated to system
AD_CDC_1	Create and Delete a Category	Admin deletes a category	Category should be deleted from system

Manage Orders

ID	TEST CASE	ADMIN INPUT	PASS CRITERIA
AD_MO_1	Manage Orders	Admin accepts an order	Order is processed
AD_MO_2	Manage Orders	Admin deletes an order	Order is not processed

Manage Members

ID	TEST CASE	ADMIN INPUT	PASS CRITERIA
AD_MM_1	Manage Members	Admin accepts Members	Member is accepted
AD_MM_2	Manage Members	Admin deletes Members	Member is not accepted

5. Approach

This section describes the overall approach of the testing which ensures that the each feature and the combination of the features are adequately tested. The major tasks that are used are

5.1 Unit testing

Unit testing is a method of testing that verifies the individual units of source code are working properly. The goal of unit testing is to isolate each part of the program and show that the individual parts are correct. The NUnit a testing tool for C#, will be used for unit testing.

5.2 Load testing

Load testing is the process of creating demand on a system or device and measuring its response. It generally refers to the practice of modeling the expected usage of a software program by simulating multiple users accessing the program concurrently. As such, this testing is most relevant for multi-user systems; often one built using a client/server model, such as web servers

5.3 System Testing

Once the entire system has been built then it has to be tested against the Software Requirement Specification and System Specification to check if it delivers the features required. System testing can involve a number of specialist types of test to see if all the functional and non-functional requirements have been met.

5.4 Performance Testing

The system should meet the performance requirements as mentioned in the Vision document. The performance will be evaluated based on the response time of the GUI and the database commands. Using JMETER tool performance testing will be done.

5.5 Manual Testing

Manual Testing will be done to ensure the correctness of various parts of the code using test cases generated by the tester.

6. Pass/fail criteria

The system should satisfy all the functional requirements, in the Vision document. Each feature to be tested will be evaluated against its requirement as stated in the Vision Document. The pass or fail of a test depends on whether the system meets with all the particular post conditions.
Test cases executed on the Online Book Store will pass if they meet the specific requirements as mentioned in the Vision Document.

7. Suspension criteria and resumption requirements

7.1 Suspension criteria

If the system contains one or more critical defects like the defects in the GUI editor which provides the editing features for one line diagrams and database locking, unlocking

and sharing features which provides the environment for multiple users to work in parallel, the entire system should be suspended.

The testing may also be suspended if the hardware and software components required are not available on time.

The failed test cases should be recorded along with the description for failure.

7.2 Resumption requirements

When a new version of the system is transmitted to the test group after a suspension of testing has occurred, all previous tests will be rerun to ensure program changes have not inadvertently affected other portions of the program.

8. Test deliverables

The following documents are the available test deliverables:-

- Test plan
- Test case specifications
- Test input and output data
- Test procedure specifications
- Test logs

References

1. http://en.wikipedia.org/wiki/Load_testing
2. http://en.wikipedia.org/wiki/Unit_test