Test Plan
Online Book Store
Phase-II

Submitted in partial fulfillment of the requirements of the degree of
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

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

Login

<table>
<thead>
<tr>
<th>ID</th>
<th>TEST CASE</th>
<th>USER INPUT</th>
<th>PASS CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>U_LOG_1</td>
<td>User Login</td>
<td>User enters a wrong username</td>
<td>Display message Login or Password is incorrect.</td>
</tr>
<tr>
<td>U_LOG_2</td>
<td>User Login</td>
<td>User enters a wrong password</td>
<td>Display message Login or Password is incorrect.</td>
</tr>
<tr>
<td>U_LOG_3</td>
<td>User Login</td>
<td>User enters correct username and password</td>
<td>User logs in successfully</td>
</tr>
</tbody>
</table>

Add to Cart

<table>
<thead>
<tr>
<th>ID</th>
<th>TEST CASE</th>
<th>USER INPUT</th>
<th>PASS CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>U_AC_1</td>
<td>Add to Cart</td>
<td>User selects a book and clicks add to cart button</td>
<td>Book is added to the shopping cart</td>
</tr>
<tr>
<td>U_AC_2</td>
<td>Add to Cart</td>
<td>Guest selects a book and clicks add to cart button</td>
<td>User should create an account.</td>
</tr>
</tbody>
</table>
## Edit Cart

<table>
<thead>
<tr>
<th>ID</th>
<th>TEST CASE</th>
<th>USER INPUT</th>
<th>PASS CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>U_EC_1</td>
<td>Edit Cart</td>
<td>User changes the Quantity</td>
<td>Quantity and total cost of Cart should be updated</td>
</tr>
<tr>
<td>U_EC_2</td>
<td>Edit Cart</td>
<td>User deletes a book from shopping Cart</td>
<td>Books and total cost of Cart should be updated</td>
</tr>
<tr>
<td>U_EC_3</td>
<td>Edit Cart</td>
<td>User selects a new book to shopping Cart</td>
<td>Books and total cost of Cart should be updated</td>
</tr>
</tbody>
</table>

### 4.2 ADMIN

#### Create and Delete a Book from Category

<table>
<thead>
<tr>
<th>ID</th>
<th>TEST CASE</th>
<th>ADMIN INPUT</th>
<th>PASS CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD_CDB_1</td>
<td>Create and Delete a Book from Category</td>
<td>Admin adds a new book to category</td>
<td>Book should be updated in Categories list</td>
</tr>
<tr>
<td>AD_CDB_2</td>
<td>Create and Delete a Book from Category</td>
<td>Admin deletes a book from category</td>
<td>Book should be deleted in Categories list</td>
</tr>
</tbody>
</table>

#### Create and Delete a Category

<table>
<thead>
<tr>
<th>ID</th>
<th>TEST CASE</th>
<th>ADMIN INPUT</th>
<th>PASS CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD_CDC_1</td>
<td>Create and Delete a Category</td>
<td>Admin adds a new category</td>
<td>Category should be updated to system</td>
</tr>
<tr>
<td>AD_CDC_1</td>
<td>Create and Delete a Category</td>
<td>Admin deletes a category</td>
<td>Category should be deleted from system</td>
</tr>
</tbody>
</table>
Manage Orders

<table>
<thead>
<tr>
<th>ID</th>
<th>TEST CASE</th>
<th>ADMIN INPUT</th>
<th>PASS CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD_MO_1</td>
<td>Manage Orders</td>
<td>Admin accepts an order</td>
<td>Order is processed</td>
</tr>
<tr>
<td>AD_MO_2</td>
<td>Manage Orders</td>
<td>Admin deletes an order</td>
<td>Order is not processed</td>
</tr>
</tbody>
</table>

Manage Members

<table>
<thead>
<tr>
<th>ID</th>
<th>TEST CASE</th>
<th>ADMIN INPUT</th>
<th>PASS CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD_MM_1</td>
<td>Manage Members</td>
<td>Admin accepts Members</td>
<td>Member is accepted</td>
</tr>
<tr>
<td>AD_MM_2</td>
<td>Manage Members</td>
<td>Admin deletes Members</td>
<td>Member is not accepted</td>
</tr>
</tbody>
</table>

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