Los Portales Theatre
System Test Plan

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1. Introduction

1.1 Purpose

This document is a test plan for Los Portales Theatre System Testing, produced by the Testing team. It describes the testing strategy and approach to testing the team will use to ensure that the website meets the client's requirements.

2. Functional Scope

The scope of testing will include website functionality (buttons, scaling, messaging system), new user registration, updating user information, seating map functionality, cart, and checkout. Administrator testing will include updating user information, seats, schedule, price, and the ability to generate reports.

3. Overall Strategy and Approach

3.1 Testing Strategy

Testing will include testing of all functionalities that are in scope (Refer Functional Scope Section) identified. System testing activities will include the testing of new functionalities, modified functionalities, functionality access, and testing of databases.

3.2 System Testing Entrance Criteria

To start system testing:
- Complete testable code is available
- Requirements set by client have been met
- Ability to obtain or simulate test data
- Test environment has been set-up

3.3 Testing Types

3.3.1 Software Inspection

A review of the code will be done by the test team in order to help fix any noticeable issues or bugs before the testing process begins. This will help mitigate the need for extra test cycles.

3.3.2 Functional Testing

The test team will ensure that the functional requirements set by the client are met:
- Documentation updates reflect the changes made to the website itself
- New users must register
- All card types are accepted
- No special users
- User information requirements (age, location, name, email, and phone number)
- User payment option retention
- Secure accounts and transactions

3.3.3 Development Testing

The testing done in this stage will be done during and after development by the development team. They will document focused testing in areas the development team is concerned about.

3.3.4 Use-Case Testing

The Use-Case* testing will be done by the testing team and will include the following:
- Register – user
- Update user information - customer
- Update seats – customer
- Update cart - customer
- Send purchase - customer
- Update information - administrator
- Update schedule - administrator
- Update price – administrator
- Generate report – administrator

3.3.5 Scenario Testing

The test team will include five different scenarios for testing and will act as a customer:

Scenario 1: Customer registration – test team will satisfy several test cases**
- All combinations of valid and invalid name, email, password, address, phone
- Capital letter
- Lowercase letter
- Number
- Special character/symbol

Scenario 2: Login

- All combinations of valid and invalid email and password
- Forgot password?
- Remember me: checked and unchecked

Scenario 3: Seats

- Select and deselect seat/seats
- Add seats to cart

Scenario 4: Cart

- Remove seats from cart
- Proceed to checkout

Scenario 5: Payment Functionality

- System accepts several types of payment
- Automated send receipt

3.3.6   User Testing

All user testing will be simulated though the scenarios previously described.

3.4 Suspension Criteria and Resumption Requirements

Suspension Criteria

If testing discovers a critical error in the website that is causing a loss of functionality, we will suspend testing until the issue is resolved.

Resumption Requirements

The error will be retested in the same manor it was discovered. If the issue does not reoccur, the test team will resume with the scheduled testing.

3.5 Test Data

The test data will be derived from the test cases that come from our test scenarios. All the test data will be organized and documented using a browser extension called Selenium IDE.
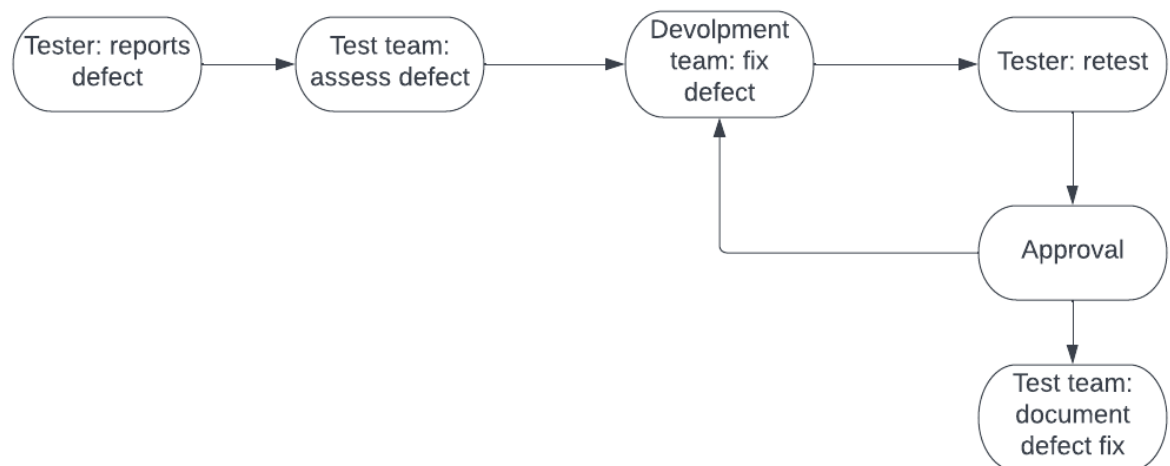
4.   Execution Plan

The test team will conduct each scenario as an actor playing the role of a customer. Each test case will be covered by inputting the test data and recording the result via the Selenium IDE.

5.   Defect Reporting

5.1 Defect Tracking

Selenium IDE will be used for defect tracking.

5.2 Defect Management Process

Each defect discovered through testing will be categorized and sent to the development team to be corrected. When the defect is corrected it will be documented and marked as complete by the test team when it is retested and causes no error.

5.3 Defect Severity Definitions

- Critical – any defect that causes a major loss of functionality and renders the website inoperable.
- Moderate – any defect that causes some loss of functionality without total loss of operation.
- Minimal – primarily cosmetic and design defects

6.   Environment

6.1 Environment

The System Testing Environment will include testing done on several different web browsers such as Google Chrome, Firefox, and Microsoft Edge. The website will also be tested in mobile versions of those browsers as well as safari.

7.   Test Schedule

Testing will begin 4/18/2022 and will last for two weeks until 5/1/2022. Unless a critical defect is discovered, on 5/2/2022 the defect management process will begin and end on 5/6/2022. If there is a need to extend testing and corrections further, we have a grace period of 4 days until our scheduled presentation of the website on 5/11/2022.

8.   Assumptions

We assume that the testing conducted will reveal some bugs or areas that need improvement, which will greatly help us address those issues and produce a clean, functional finished product.

9.   Risks and Contingencies

Testing could reveal minimal or critical defects with the website. In any case, the issues will be resolved as fast as possible in order to meet the final presentation date.

Risk	Probability	Impact	Contingencies
Time constraints	moderate	high	4 days extra grace period
Defects	moderate	high	Plan in place to communicate defects efficiently
Loss of test environment availability	low	high	Back-up environments will be identified
Team member unavailable	moderate	moderate	If a member of the test team is unavailable, other members will step in to assist.

10.   **Appendices**

*updated Use-Case tables and diagrams can be found in the System Requirement Specification document

**specific tests followed and recorded to insure functionality of individual components