Test Plan

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Introduction

**a) Test Plan Approach/Objective**

This Test Plan is documented to describe the predefined scope, approach, resources (hardware & personnel), schedule of all the testing activities of the Backyard Cinemas Software, and the risks associated with and corresponding mitigation plan.

The test plan follows the waterfall methodology. Software testing will commence once coding has been completed. The testing activities will refer to the documentation that has been approved at the beginning of the project.

Scope

This section defines a list of features/modules, which are included and excluded from the testing activity.

**The following features are to be tested:**

|  |  |
| --- | --- |
| Module | Description |
| Login | The system should allow Supervisors and Administrators to login to the system using an email and password to gain access. |
| Maintain Movies | Supervisors and Administrators should be able to add movies, edit existing ones and delete movies that are no longer needed. |
| Maintain Movie Schedule | Supervisors and Administrators should be able to schedule a movie to be shown at a specific date and time on one of the available screens. The system should not allow conflicts or overlaps when scheduling a movie. |
| Maintain Supervisor Accounts | The Administrator has all the authority of a supervisor and is responsible for creating supervisor accounts. |

**Features NOT to be tested:**

Payment using UPI need not be tested, as the feature is going to be disabled.

Test Strategy (Approach)

This section describes the methodology which will be used for testing. It also details the methodology and lists the different testing levels and testing types that will be carried out.

**Test Objectives:**

The objective of the test is to verify that the functionality of the Backyard Cinemas Software works according to the specifications. The test will execute and verify the test scripts, identify, fix, and retest all defects.

**Test Types:**

* **UX Testing (Usability/User Experience Testing):** Test the user-friendliness of the application.

|  |  |
| --- | --- |
|  | ***UX******Testing******Scope*** |
| 1 | All mandatory fields should be validated. |
| 2 | All error messages should be displayed in the same CSS style (For Example, using red color) |
| 3 | General confirmation messages should be displayed using CSS style other than error message style |
| 4 | Drop-down fields should have the first entry as blank or text like “Select”. |
| 5 | ‘Delete functionality’ for any record on the page should ask for a confirmation. |
| 6 | All numeric values should be formatted properly. |
| 7 | Field labels should be standard e.g., the field accepting the user’s first name should be labeled properly as ‘First Name’. |
| 8 | Check the text on all pages for spelling and grammatical errors. |
| 9 | Check the functionality of buttons available on all pages. |
| 10 | All fields on the page (For Example, text box, radio options, drop-down lists) should be aligned properly. |
| 11 | Enough space should be provided between field labels, columns, rows, error messages, etc. |
| 12 | Disabled fields should be greyed out and users should not be able to set focus on these fields. |
| 13 | Upon clicking on the input text field, the mouse arrow pointer should get changed to the cursor. |
| 14 | The user should not be able to type in the drop-down select list. |
| 15 | Information filled out by users should remain intact when there is an error message on the page submitted. The user should be able to submit the form again by correcting the errors. |

* **GUI Functional Testing:** Test the features for functionality against requirements.
* **Smoke Testing:** Re-test the features of the application after each system change.

**Test Levels:**

• **Unit Testing:** The individual modules are scrutinized for proper operation.

• **System Testing:** Test the entire application to evaluate the system’s

compliance with its specified requirements.

Environmental Needs (Test Environment)

* Web server package:
* web server – Apache
* Database - MySQL
* Server-side scripting language - PHP
* Operating System on Test Machines: Windows 7, Windows 10, or Windows 11
* Desktop/laptop minimum specifications:
  + 1.5 GB Hard Disk space.
  + Memory: 1GB RAM.

• Browser: Chrome, Firefox or Edge – Last available version

• Network – Wi-Fi: So that laptops can be used for testing

Staffing and Training Needs

• Staffing • Manual Testers: Tester1, Tester2

• QA Lead: Test Lead1

• Automation Tester: Auto Tester1, Auto Tester2

Test Schedule and Estimation

This section outlines when each testing activity should start and end.

• Test case design: • Start Date – <Test Case design start date>

• End Date – <Test Case design end date>

• Sign-in/Sign-up: 6 hours

• Shopping cart: 8 hours

Test Deliverables

This section defines the list of all documents/artifacts that need to be delivered/prepared during the testing life cycle along with the schedule and timeline for the preparation and submission of these artifacts.

* **Test Plan:** Prepared and submitted before the start of the testing phase.
* **Test Cases:** Prepared and delivered during the test design phase.
* **Bug Report:** Prepared and shared at the end of each day throughout the execution cycle.
* **Test Summary Report:** Prepared and submitted at the end of the testing phase.

Exit Criteria

This section of the document describes the conditions that must be satisfied before the test is completed.

The following conditions can be considered

* All test cases are executed, exploratory testing is done and there are no functional bugs.
* All unresolved bugs are of low severity.
* No more than 10% of medium-severity bugs are unresolved.

Suspension and Resumption Criteria

This section of the test plan explicitly describes the conditions when the test execution has to stop and when it can be resumed.

The following criteria can be considered

* Suspend testing when • Critical (show-stopper) bugs are open – (e.g. login

issues).

* An open bug blocks many of the test cases in the test suite.
* Testing can be resumed when • Show stopper bug(s) are resolved and test

cases can be executed.

Responsibilities

**Role: Test Manager**

**Name:**

**Responsibilities:**

* Prepare (write and review) the test plan.
* Conduct meetings with development and testing team.
* Handle Escalation and issues

**Role: Test Lead**

**Name:**

**Responsibilities:**

* Prepare (write and review) the test plan.
* Review and approve the test cases.
* Assign modules.
* Handle schedules.

**Role: Test Engineer1**

**Name:**

**Modules Assigned:**

**Responsibilities:**

* Write review and execute the test documents which consist of test cases and test scenarios.
* Read, review, understand and analyze the requirements.
* Write the flow of the application.
* Defect tracking.
* Prepare the test execution report and communicate same to Test Lead.

**Role: Test Engineer2**

**Name:**

**Modules Assigned:**

**Responsibilities:**

* Write review and execute the test documents which consist of test cases and test scenarios.
* Read, review, understand and analyze the requirements.
* Write the flow of the application.
* Defect tracking.

Prepare the test execution report and communicate same to Test Lead.

Risk and Contingencies

This section defines the pre-identified risks and associated mitigation plans.

|  |  |
| --- | --- |
| **Risk** | **Mitigation** |
| QA Environment is down | Keep an alternate environment |
| Unplanned leaves | Monitor this risk |
| Lack of essential skill | Hire skilled resource or plan for an on-the-job training. |

Assumptions

* Application features are deployed and available for testing on time.

Test References

* UI design
* User Stories
* Requirements/Specification document
* System Design document

Review and Approvals

|  |  |
| --- | --- |
| Role | Test Manager: Approve the test plan |
| Name |  |
| Date |  |
| Signature |  |

|  |  |
| --- | --- |
| Role | Project Manager/Test Lead: Signs off the testing phase |
| Name |  |
| Date |  |
| Signature |  |