System Test Plan

For

Portales Theater Reservations System

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Change Control

The following information is being used to control and track modifications made to this document.

1) *Revision Date: 4/12/2022*
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      Summary of Change(s): Start to basic sections

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3) *Revision Date: 4/17/2022*
      Section(s): All
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      Summary of Change(s): Formatting updated for all text, grammar corrections.

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1.   Introduction

1.1 Purpose

This document is a test plan for Los Portales Theater, specifying the System Testing. It describes the testing strategy and approach to testing that the team will use to verify that the application meets the established requirements of the client prior to release.

1.2 Objectives

- Verify that the application meets the established requirements of the client prior to release
- Support the intended business functions and achieves the required software standards
- Satisfy the Entrance Criteria for User Acceptance Testing
- Perform testing on system elements

1.3 System Description

Our system is an online system used to sell seats for plays at the "Los Portales" Theater. The system is designed to meet customer requirements for purchasing seats to a specific showing of a play, and to meet administrator requirements for making the plays available.

2.   Test Strategy

2.1 Scope

This Test Plan applies to the integration and system tests that will be conducted on our website. Our website tests involve these five main components: Registration, Browse, Reservation, Checkout and Administrator. This test plan will be testing all of our functional requirements, which are specified in section 2.6 Identification of Tests.

2.2 Testing Approach

This team will be executing functional testing starting with Unit testing, moving to integration testing, followed by System testing, and finally acceptance testing. The goal of this approach is to ensure our components operate within success constraints to provide a highly functional product to our client. Team members work together to test our software in multiple environments as dictated by the requirements of our solution. Errors in functionality will be recorded with detail as to aid rapid solution-deployment of new code to the software. These tests will be performed at the component level and integration level.

2.3 Test Schedule

Our testing schedule will be planned as the following:
- ❖ Registration Testing – 3/3 to 3/9
- ❖ Browse Testing – 3/10 to 3/16
- ❖ Reservation Testing – 3/17 to 3/23
- ❖ Checkout Testing – 3/24 to 3/30
- ❖ Administrator Testing – 3/31 to 4/6

2.4 Problem Reporting and Data Recording

Problem reporting will be tracked through individual Test Case forms and results. The logs will be escalated to the development team for review and resolution. When a resolution has been logged by the development team the testing team will rigorously re-run the Test Case for that functionality.

2.5 Test Environment

We are testing the native software in a web-based environment and our testing environment consists of the following:

- A server running Windows 10
- Various web browsers: Firefox, Chrome, Microsoft Edge.

2.6 Identification of Tests

2.6.1 Registration Phase

Page Responsible	Activity Type	Objective	Test Case ID #
Welcome	Login	Customer login with valid username and password.	Wel-001
Registration	Registration	New customer clicks to register, moved to registration page. Successful registration returns to Login activity on Welcome Page.	Reg-001

2.6.2 Browse Phase

Page Responsible	Activity Type	Objective	Test Case ID #
Welcome	Preview Upcoming Shows	Customer can view all upcoming shows. Can select show	Wel-002

2.6.3 Reservation Phase

Page Responsible	Activity Type	Objective	Test Case ID #
Theater	Seat Selection	Customer can select/unselect seats adding and removing from shopping cart. May proceed to "checkout" or return to other shows to add additional seats for other showings.	T-001
Shopping Cart	Cart Adjustments	Customer may remove items from cart, adjusting price and releasing seats. Customer may proceed to checkout page or "continue shopping"	SC-001

2.6.4 Checkout Phase

Page Responsible	Activity Type	Objective	Test Case ID #

Shopping Cart	Checkout	Customer purchases tickets with valid payment credentials. Generates receipt/tickets.	SC-002

2.6.5 Admin Functions Phase

Page Responsible	Activity Type	Objective	Test Case ID#
Welcome page	Login	Admin login with valid username and password	A-001
Admin Play Page	Add plays	Admin is able to add upcoming plays with valid information. Moves to seat pricing for that play.	A-002
Admin Seat Page	Establish seat pricing	Allows admin to adjust seat pricing for added show.	A-003
Admin Seat Page	Adjust seat pricing	Admin is able to adjust the pricing on seats in any upcoming shows (as selected)	A-004
Admin Report Page	Report generation	Admin is able to generate a report of seats sold given input filters.	A-005
Admin Add-Admin Page	Add Admin	Admin is able to add additional admin users.	A-006

2.7 Acceptance Test Report

Each individual Test Case will include expected results for function actions. These will be logged accordingly and have immediate influence in the findings and reporting around Acceptance testing.

2.8 Corrective Action

Fail status problem reporting will be escalated to development for corrective action. These corrective requests will be dates and tracked with expected solution dates. Once a solution has been provided and implemented, a new Test Case ticket will open, prompting rigorous testing with a pass/fail result.

2.9 Nonfunctional requirements

We will be testing our nonfunctional requirements of the System. Some of the nonfunctional requirements cover are:
- ❖ Performance testing
  - ➢ Response time of website
  - ➢ Performance under load of many users
- ❖ Security
  - ➢ Make sure the site can not be easily modified from an external source.
  - ➢ Only a verified user should be able to log in.
  - ➢ Password requirement should be verified i.e., password should be as per how the requirement defines i.e., length, special characters, numbers, etc.
- ❖ Reliable
  - ➢ Make sure to have a backup server so that if main server goes down, site is accessible.

❖ Usability
  ➢ Make sure our website is accessible from many browsers

3.   Test Cases

3.1 Verify Login

Project Name: Los Portales Theatre	
Test Case ID: Wel-001	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): High	Test Designed date: 4/17/2022
Module Name: Login	Test Executed by:
Test Title: Verify Login	Test Execution date:
Description: Test the Customer Login Page	Test Environment:
Pre-conditions: Customer has valid Username and Password	
Dependencies: n/a	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to welcome page		Welcome page displays			
2	Provide Valid Username	Example: johndoe@email.com				
3	Provide Valid Password	Password: 1234				
4	Click login button		Customer inputs are successfully validated			
5			Or – Validation error displayed			

Post-conditions: User is validated and able to proceed to website navigation.

3.2 Customer Registration

Project Name: Los Portales Theatre	
Test Case ID: Reg-001	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): High	Test Designed date: 4/17/2022
Module Name: Registration	Test Executed by:
Test Title: Customer Registration	Test Execution date:
Description: Test customer registration	Test Environment:
Pre-conditions: n/a	
Dependencies: must not duplicate currently registered username	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to registration page		Registration page displays			
2	Provide first name	Alphabetic				
3	Provide last name	Alphabetic				
4	Provide address (street)	Ex. ### Street Name				
5	Provide City	Ex: Portales				
6	Provide State	xx				
7	Provide Zip Code	xxxxx				
8	Provide valid telephone	(xxx)xxx-xxxx				
9	Provide Email	alphanumeric@url				
10	Provide age	Numerical <120				
11	Provide valid password	Ex: 1234				
12	Click Register Button		Customer inputs are accepted, and new customer is created			
			OR – validation error message displayed			

Post-conditions: Customer registration successful, navigate to welcome page for login.

3.3 Browse

Project Name: Los Portales Theatre	
Test Case ID: Wel-002	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): Medium	Test Designed date: 4/17/2022
Module Name: Browse	Test Executed by:
Test Title: Welcome Screen Preview	Test Execution date:
Description: Test that welcome screen accurately displays upcoming shows	Test Environment:
Pre-conditions: Validated User session is active	
Dependencies: one or more shows have been added by admin	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to welcome screen	n/a	One or more upcoming shows with image, title, and date listed			
2	Click to view	n/a	Customer clicks upcoming showing which navigates to theater page			
3						
4						
5						

Post-conditions: Customer can select a show to navigate to that theater page

3.4 Seat Selection

Project Name: Los Portales Theatre	
Test Case ID: T-001	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): High	Test Designed date: 4/17/2022
Module Name: Reservation	Test Executed by:
Test Title: Seat Selection	Test Execution date:
Description: Testing functionality of seat management in theatre page	Test Environment:
Pre-conditions: Validated User Session is Active	
Dependencies: n/a	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to individual theatre page	n/a	Webpage displayed for selected play, showing available and reserved seats.			
2	Select seat	n/a	Clicked seat selected and changes color to green. Sys generates an "[seat#] added to cart" message			
3	Unselect seat	n/a	Clicket seat unselected and changes color to grey, Sys generates an "[Seat#] removed from cart" message			
4	Proceed to checkout	n/a	Navigate to shopping cart			
5						

Post-conditions: Navigation proceeds to shopping cart page, selected seats are held

3.5 Shopping Cart Management

Project Name: Los Portales Theatre	
Test Case ID: SC-001	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): Medium	Test Designed date: 4/17/2022
Module Name: Reservation	Test Executed by:
Test Title: Shopping Cart Management	Test Execution date:
Description: Test shopping cart functionality	Test Environment:
Pre-conditions: Valid user session is active	
Dependencies: Seat holds from theatre page(s)	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to Shopping Cart page		Page renders successfully, showing seat selection(s).			
2	Remove quantity from cart		Requested quantity of seat(s) are removed from Customer Cart.			
3	Navigate to Checkout Page		Customer is navigated to Checkout page successfully			
4			Or If cart is empty: sys output message			
5			Or Clicks to continue shopping			

Post-conditions: Navigation to Checkout Page

3.6 Cart Checkout

Project Name: Los Portales Theatre	
Test Case ID: SC-002	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): Medium	Test Designed date: 04/17/2022
Module Name: Checkout	Test Executed by:
Test Title: Cart Checkout	Test Execution date:
Description: Testing for shopping cart -Checkout- functionality	Test Environment:
Pre-conditions: Valid User Session Active	
Dependencies: Seat holds from theatre page(s)	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to Checkout Page		Accurate display of checkout page			
2	Provide first name	Alphabetic				
3	Provide last name	Alphabetic				
4	Provide address (street)	Ex. ### Street Name				
5	Provide City	Ex: Portales				
6	Provide State	xx				
7	Provide Zip Code	xxxxx				
8	Provide valid telephone	(xxx)xxx-xxxx				
9	Provide Email	alphanumeric@url				
10	Provide age	Numerical <120				
11	Provide CC#	Numerical				
12	Provide expiration date	mm/yr ex: 01/31				
13	Provide CCV	XXX				
14	Submit payment		Valid inputs are submitted, and transaction is processed			
			OR Sys err. Message for invalid inputs			

Post-conditions: With successful payment processing system navigates to receipt/Tickets page.

3.7 Admin - Login

Project Name: Los Portales Theatre	
Test Case ID: A-001	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): High	Test Designed date: 4/17/2022
Module Name: Admin Functions	Test Executed by:
Test Title: Admin Login	Test Execution date:
Description: Testing for admin login validation	Test Environment:
Pre-conditions: Admin credentials exist within the system	
Dependencies: n/a	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to admin page		Admin page displays with login inputs			
2	Input Username	Ex: admin@lpt.com				
3	Input Password	Ex: 1234				
4	Click to Login		Credentials validated			
5			OR Sys error output: invalid credentials			

Post-conditions: Navigate to admin page

3.8 Admin - Add-Play

Project Name: Los Portales Theatre	
Test Case ID: A-002	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): High	Test Designed date: 4/17/2022
Module Name: Admin Functions	Test Executed by:
Test Title: Admin add play	Test Execution date:
Description: Test admin function to add a new play	Test Environment:
Pre-conditions: Valid admin session is active	
Dependencies: n/a	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to add play page		Add play page displayed with blank input form			
2	Input Name	Ex: Beowulf				
3	Input Date	mm/dd/yy				
4	Input Description	Alphanumeric				
5	Submit		New play inputs accepted, push to seat management page			

Post-conditions: Successful input navigates to seat management for this play

3.9 Admin – Establish Seat Pricing (New Play Creation)

Project Name: Los Portales Theatre	
Test Case ID: A-003	**Test Designed by: Walker Monaghan**
Test Priority (Low/Medium/High): High	**Test Designed date: 4/17/2022**
Module Name: Admin Functions	**Test Executed by:**
Test Title: Establish Seat Pricing for New play	**Test Execution date:**
Description: Test functionality of establishing seat pricing for a newly created play.	**Test Environment:**
Pre-conditions: Valid Admin session is active	
Dependencies: inputs from previous add-form page.	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to establish seat pricing		Displays seat pricing page for newly created play			
2	Adjust price		Admin is able to select a seat or seats and set pricing for those selected seats.			
3	Publish new Show		Admin clicks to publish the new shows and details to customer view.			
4						
5						

Post-conditions: Navigate back to Admin Controls Page

3.10   Admin- Adjust Seat Pricing

Project Name: Los Portales Theatre	
Test Case ID: A-004	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): Medium	Test Designed date: 4/17/2022
Module Name: Admin Functions	Test Executed by:
Test Title: Adjust Seat Pricing	Test Execution date:
Description: Test admin function to adjust pricing of already published shows	Test Environment:
Pre-conditions: Valid admin session is active	
Dependencies:	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to edit Adjust Pricing page		Shows accurate Adjust Pricing Page with drop down menu for upcoming shows			
2	Select show		Admin is able to select upcoming show, the seating for that show is shown			
3	Adjust price		Admin is able to select unreserved seats and adjust pricing of those selected seats			
4	Click to publish changes		Changes to seat pricing are pushed to live.			
5						

Post-conditions: Admin is able to repeat this step with other shows or click to return to Admin Controls Page

3.11   Admin – Report Generation

Project Name: Los Portales Theatre	
Test Case ID: A-005	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): Medium	Test Designed date: 4/17/2022
Module Name: Admin Functions	Test Executed by:
Test Title: Report Generation	Test Execution date:
Description: Test admin reporting functions	Test Environment:
Pre-conditions: Valid Admin session is active	
Dependencies:	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to Reporting Page		Reporting page shown with filters			
2	Input Date Range	mm/dd/yy-mm/dd/yy				
3	Optional Select Show	Title				
4	Run Report		Sys. Generates and displays an output of the requested data in table format.			
5						

Post-conditions: Admin can continue to run and review reports or choose to navigate back to Admin Controls Page.

3.12   Admin – Add Admin

Project Name: Los Portales Theatre	
Test Case ID: A-006	Test Designed by: Walker Monaghan
Test Priority (Low/Medium/High): Low	Test Designed date: 4/17/2022
Module Name: Admin Functions	Test Executed by:
Test Title: Add Admin	Test Execution date:
Description: Test Admin functionality to add additional admins to user table.	Test Environment:
Pre-conditions: Valid Admin session is active	
Dependencies: n/a	

Step	Test Steps	Test Data	Expected Result	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to Add Admin page		Add admin page displayed			
2	Provide first name	Alphabetic				
3	Provide last name	Alphabetic				
4	Provide address (street)	Ex. ### Street Name				
5	Provide City	Ex: Portales				
6	Provide State	xx				
7	Provide Zip Code	xxxxx				
8	Provide valid telephone	(xxx)xxx-xxxx				
9	Provide Email	alphanumeric@url				
10	Provide Password	Ex: 1234				
11	Submit Add Admin		Valid inputs are submitted and new admin is created			

Post-conditions: Admin can add additional admins or navigate back to Admin Controls Page