# **System Test Plan**

# For

# Portales Theater Reservations System

Written by: Walker Monaghan, Zachary Dowding, Vern Watkins

Date: April 17, 2022

# **Table of Contents**

#### 1. INTRODUCTION

- 1.1 PURPOSE
- 1.2 Objectives
- 1.3 SYSTEM DESCRIPTION

#### 2. TEST STRATEGY

- 2.1 Scope
- 2.2 TESTING APPROACH
- 2.3 TEST SCHEDULE
- 2.4 PROBLEM REPORTING AND DATA RECORDING
- 2.5 TEST ENVIRONMENT
- 2.6 IDENTIFICATION OF TESTS
- 2.7 ACCEPTANCE TEST REPORT
- 2.8 CORRECTIVE ACTION
- 2.9 Nonfunctional requirements

#### 3. TEST CASES

- 3.1 VERIFY LOGIN
- 3.2 Customer Registration
- 3.3 Browse
- 3.4 SEAT SELECTION
- 3.5 SHOPPING CART MANAGEMENT
- 3.6 CART CHECKOUT
- 3.7 ADMIN LOGIN
- 3.8 ADMIN ADD-PLAY
- 3.9 ADMIN ESTABLISH SEAT PRICING (NEW PLAY CREATION)
- 3.10 ADMIN- ADJUST SEAT PRICING
- 3.11 ADMIN REPORT GENERATION
- 3.12 ADMIN ADD ADMIN

#### 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 the team will use to verify that the application meets the established requirements of the business 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 the five main components of the following: Registration, Browse, Reservation, Checkout and Administrator. This plan will be testing all of our functional requirements, all of which are specified in section 2.7, in a defined testing environment (see 2.5).

# 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:

- $\clubsuit$  Registration Testing 3/3 to 3/9
- $\bullet$  Browse Testing 3/10 to 3/16
- Reservation Testing -3/17 to 3/23
- Checkout Testing 3/24 to 3/30
- $\clubsuit$  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 computer running Windows 10, Linux, or Mac
- A web browser, of the following list: Firefox, Chrome, Microsoft Edge.

# 2.6 Identification of Tests

# 2.6.1 Registration Phase

Page Responsible	<b>Activity Type</b>	<u>Objective</u>	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	<u>Objective</u>	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	<u>Objective</u>	Test Case ID #
Theater	Seat Selection	Customer can	T-001
		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.	
Shopping Cart	Cart Adjustments	Customer may remove	SC-001
		items from cart, adjusting	
		price and releasing seats.	
		Customer may proceed to	
		checkout page or	
		"continue shopping"	

### 2.6.4 Checkout Phase

Page Responsible	Activity Type	<u>Objective</u>	Test Case ID #
Shopping Cart	Checkout	Customer purchases tickets with	SC-002
		valid payment credentials.	
		Generates receipt/tickets.	

#### 2.6.5 Admin Functions Phase

Page Responsible	<b>Activity Type</b>	<u>Objective</u>	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	<del></del>		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 ab		a report of seats sold given	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

4	Test Steps  Navigate to welcome page	Test Data	Expected Result  Welcome page displays	Actual Result	Status (Pass/Fail)	Notes
		Example: iohndoe@email.com				
	Provide Valid Password					
	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: RegistrationTest Executed by:Test Title: Customer RegistrationTest Execution date:Description: Test customer registrationTest 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
					(=)	1,000
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				
			Customer inputs are accepted, and new customer			
12	Click Register Button		is created			
	Daniel Barrer		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** 

**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

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

**Test Execution date:** 

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	<b>Test Steps</b> Navigate to individual	Test Data	Expected Result Webpage displayed for selected play, showing available and reserved	Actual Result	Status (Pass/Fail)	Notes
1	_	n/a	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 1	Test Steps  Navigate to Shopping  Cart page	Test Data	Expected Result Page renders successfully, showing seat selection(s).	Actual Result	Status (Pass/Fail)	Notes
_	Remove quantity from cart		Requested quantity of seat(s) are removed from Customer Cart.			
	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)

	<b>Test Steps</b> Navigate to Checkout Page	Test Data	Expected Result Accurate display of checkout page	Actual Result	Status (Pass/Fail)	Notes
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 Data	Expected Result  Admin page displays	Actual Result	Status (Pass/Fail)	Notes
1	Navigate to admin page		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

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

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

**Test Execution date:** 

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

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	Expected Result Shows accurate Adjust Pricing Page with drop	Actual Result	Status (Pass/Fail)	Notes
	Navigate to edit Adjust	down menu for			
1	Pricing page	upcoming shows			
		Admin is able to select upcoming show, the			
2	Select show	seating for that show is shown			
3	Adjust price	Admin is able to select unreserved seats and adjust pricing of those selected seats			
	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
	Navigate to Reporting		Reporting page shown with filters			
	Page Input Date Range	mm/dd/yy-mm/dd/yy	with filters			
		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 1	<b>Test Steps</b> Navigate to Add Admin page	Test Data	Expected Result Add admin page displayed	Actual Result	Status (Pass/Fail)	Notes
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