# **Test Plan**

# **UI Test Automation Playground**

27/06/2022 Roberto Jaime Garza Hernandez

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# Revision And Sign-off Sheet

### Document History-

Version	Date	Author	Description of Change
1.0	27/06/2022	Roberto Jaime Garza Hernandez	First TestPlan

### Approvers List-

Name	Role	Approver/Reviewer	Approval Date
Oscar Aguilar	Direct boss	Roberto Jaime	04/07/2022

### Reference Documents

Version	Date	Document Name
1.0	27/06/2022	QA_ Final Exercise
		one note

### 1. Introduction

#### 1.1 Purpose

This test plan describes the testing approach and overall framework that will drive the testing of UI Test Automation Playground and the Petstore API.

This document will include:

- Test Strategy: Which describes the rules the test will be based on, including the givens of the project; description of the valid process to set up a valid test.
- Execution Strategy: Which will describe how the test will be performed and process to identify and report defects, and to fix and implement fixes.
- Test Management: Which describes the process to handle the logistics of the test and all the events that come up during the execution

#### 1.2 Project Overview

IU Test Automation Playground is a web page with the purpose of providing a platform for sharpening UI test automation skills. It also helps to practice with any automation tool and helps learning automation techniques.

The API is a sample server Petstore server for automators to practice automation skills and can be used with lots of automation tools without any problem.

#### 1.3 Audience

- Project team members perform tasks specified in this document, and provide input and recommendations about this document.
  - -The person performing this task will be Roberto Jaime
- Project Manager plans for the testing activities in the overall project schedule, reviews the document, tracks the performance of the testing according to the specified task, approved document and its accountable for the results.
  - -The person performing this task will be Roberto Jaime
- Technical Team ensures that the test plan and deliverables are in line with the design, provides the environment for testing and follows the procedures related to the fixes of defects.
  - -The person performing this task will be Roberto Jaime

# Test Strategy 2.1 Test Objectives

The objective of this test is to verify the functionality of UI Test Automation Playground website and Swagger Petstore works according to the following specifications:

#### **Test Object URL:**

- Front end
  - http://uitestingplayground.com/
- Back end

#### API

Check That the Swagger Petstore is working as expected without any error while retrieving information specifically all the user flow of:

- Create User
- Update User
- Get user by username
- Get user login
- Get user logout
- Delete user by username

### 2.2 Test Assumptions

#### Test types and test levels

- The system will be tested with blackbox technique, if the information in the reports are shown correctly, everything will be assumed that the page is working properly.
- Unit testing and API testing will be considered in the estimation.

# 2.3 Test Principles

- The testing will be focused on meeting the Page objectives and quality.
- The test processes will be defined, but flexible in case a change is needed.
- Testing environment and data will emulate a production environment as much as possible.
- The testing will be divided in distinct phases, each with their objectives and goals.
- There will be an entrance and exit criteria.

## 2.4 Data Approach

- During testing the website, the tester will provide the data used for the testing activities
- In integration features testing, the Petstore API will contain pre-loaded data which will be used for the testing activities.

# 2.5 Scope and Levels of Testing

- In the testing for the website and API of Petstore , 2 types of testing should be conducted.
- Unit testing: Small pieces of verifiable software in the application.
- API Testing: Test Api created for the test.

#### 2.5.1 Features to be tested

#### Website

Module Name	Applicable Roles	Description
Dynamic ID	User	Check that there is a Record button click, and then execute test to make sure that ID is not used for button identification
Class Attribute	User	Record primary (blue) button click and press ok in alert popup, then execute your test to make sure that it can identify the button using btn-primary class.
Hidden Layers	User	Record button click and then duplicate the button click step in your test, then Execute the test to make sure that the green button can not be hit twice.
Load Delay	User	Navigate to Home page and record Load Delays link click and button click on this page, Then play the test. It should wait until page is loaded.
AJAX Data	User	Record the following steps. Press the button below and wait for data to appear (15 seconds), click on text of the loaded label, Then execute

		your test to make sure it waits for label text to appear.
Client Side Delay	User	Record the following steps. Press the button below and wait for data to appear (15 seconds), click on text of the loaded label, Then execute your test to make sure it waits for label text to appear.
Click	User	Record button click. The button becomes green after clicking, Then execute your test to make sure that it is able to click the button.
Text Input	User	Record setting text into the input field and pressing the button, Then execute your test to make sure that the button name is changing.
Scrollbars	User	Find a button in the scroll view and record button click, Update your test to automatically scroll the button into a visible area, Then execute your test to make sure it works.
Dynamic Table	User	For Chrome process get value of CPU load, Compare it with value in the yellow label.
Verify Text	User	Create a test that finds an element with Welcome text.
Progress Bar	User	Create a test that clicks the Start button and then

		waits for the progress bar to reach 75%. Then the test should click Stop. The less the difference between the value of the stopped progress bar and 75% the better your result.
Visibility	User	Learn locators of all buttons, In your testing scenario press Hide button, Determine if other buttons visible or not.
Sample App	User	Fill in and submit the form. For successful login use any non-empty username and `pwd` as password.
Mouse Over	User	Record 2 consecutive link clicks, Execute the test and make sure that click count is increasing by 2.
Non-Breaking Space	User	Use the following xpath to find the button in your test:  //button[text()='My Button'], Notice that the XPath does not work. Change the space between 'My' and 'Button' to a non-breaking space. This time the XPath should be valid.
Overlapped Element	User	Record setting text into the Name input field (scroll element before entering the text), Then execute your test to make

		sure that the text was entered correctly.
Shadow Dom	User	Create a test that clicks on and then on buttons. This sequence of steps generates a new guid and copies it to the clipboard, Add an assertion step to your test to compare the value from the clipboard with the value of the input field, Then execute the test to make sure that the assertion step is not failing.

## API

Module Name	Applicable Roles	Description
GET: /user/{username}	User	Get user by user name
PUT: /user/{username}	User	Update user
DELETE: /user/{username}	User	Delete user
GET: /user/login	User	Logs user into a system
GET:user/logout	User	Logs out current logged in user session
POST: /user	User	Create user

#### 2.5.2 Features not to be tested

The features not to be tested are not included in the software requirement specs.

- Website security and Performance
- Database Structure
- Hardware Interfaces

# 2.6 Test Type

#### **Functional test**

Purpose: Functional testing will be performed to check the functionality of the applications and API. The testing will be carried out by feeding the input and validating the output from the application.

# 2.7 Test Risks and Mitigation Factors

Risk	Probability	Impact	Mitigation Plan
Schedule The testing schedule is tight. If the start of the testing is delayed, it cannot be extended beyond the deadline	High	High	The testing team has a planned schedule to fulfill all the test cases on time
Defects usually are found at the end are usually more time costly to consume.	Medium	High	Defect management plan is in place to ensure prompt communication and fixing of issues.
Budget	Low	High	Budget is always a risk but this time we have enough budget for the time listed for the test.
Natural disasters	Low	Medium	Natural disasters on the area of the team can affect the testing teams who are in the disaster area and could slow down or totally stop the test.

## 2.8 Role Expectations

The following list defines in general terms the expectations related to the roles directly involved in the management, planning or execution of the test for the project.

	Roles	Name	Contact Information
1	Project Manager	Oscar Aguilar	oscar.aguilar@enroutesystems.com
2	Test Lead	Roberto Jaime	roberto.garza@enroutesystems.com
3	Testing Team	Roberto Jaime	roberto.garza@enroutesystems.com

### 2.8.1 Project Management

Project Manager: Reviews the content of the test plan, test strategy and test estimates.

### 2.8.2 Test Planning

- Develops a test plan and the guidelines to create test conditions, test cases, expected results and execution scripts.
- Provides guidelines on how to manage defects.
- Communicates to the test team any changes that need to be made.

#### 2.8.3 Test Team

- Develops test conditions, test cases, expected results and execution scripts.
- Performs execution and validation.
- Identifies, documents and prioritizes defects according to the guidance provided by the test lead.

## 3 Test Logistics

Webdriver IO to test the webpage and Newman/Postman to test the backend, also the test will be done with a Macbook pro and infinite internet.

### **4 Test Criteria**

#### 4.1 Suspension Criteria

• If the team members report that there are 25% of test cases failed, testing will be suspended until the development team fixes the failed cases.

#### 4.2 Entry Criteria

- The test environment, test tools and test data are available and ready to use.
- Website is available for testing
- API is available for testing
- Test Specification is created
- Test environment is built

#### 4.3 Exit Criteria

- Specifies the criteria that denotes a successful completion of a test phase.
- Run rate is mandatory to be 100% unless a clear reason is given.
- Pass rate is 80%, achieving the pass rate is mandatory.

# 5 Resource Planning

#### 5.1 System Resources

No.	Resources	Description
1	Network	A stable internet with speed of 200mb/s
2	Computer	At least 1 computer running macOs Catalina or higher
3	Test tool	The API will be tested with Newman and the Webpage will be tested with WebDriverIO for the automation for both API and Webpage.

## **6 Test Environment**

- Petstore swagger will be hosted on site.(<a href="https://petstore.swagger.io/#/">https://petstore.swagger.io/#/</a>)
- UI Test Automation Playground will be hosted at site(<a href="https://uitestingplayground.com">https://uitestingplayground.com</a>)

## 7 Schedule and Estimation

### 7.1 Project tasks and estimation

Task	Members	Estimate Effort
Create the tests	Test Designer	10 hours
Perform test Execution	Tester	1.5 hours
Test Report	Tester	1 hour
Test Delivery	Tester	2 hours
Total		14.5 hours

### 7.2 Schedule to complete these tasks

Task Name	Start Date	End Date
Test specification	08/07/2022	08/07/2022
Test Execution	08/07/2022	08/07/2022
Test Report	12/07/2022	12/07/2022
Test Delivery	12/07/2022	12/07/2022

## 8 Test Deliverables

Test deliverables are provided as shown below

### 8.1 Before testing phase

- Test plan document
- Test cases document
- Test specifications

### 8.2 During the testing

- Test tool
- Simulators
- Test specifications

### 8.3 After the testing

- Test result / reports
- Defect report
- Test procedure guidelines

# 9 Approvals

The names and titles of people who must approve this plan.

Signature:	Oscar Aguilar
Name:	Oscar Aguilar
Role:	Direct boss
Date:	04/07/2022