Test Plan – Simple Web App

## Introduction

The purpose of this test plan is to ensure that the simple web application meets its functional requirements and provides a smooth user experience.

## Scope

This test plan covers the following components:

\* **Login Page**

+ Username field

+ Password field

+ Clear button

+ Submit button

**\* Home Page**

+ Date field with Calendar Widget

+ Favorite Team field (dependent on date selection)

+ Player's Name field

+ Submit Button

## Test Objectives

The objectives of this test plan are to:

1. Verify that the login functionality works as expected.
2. Validate the form submission on the home page.
3. Ensure that the application handles errors correctly.
4. Validate that the calendar widget and favorite team field work as expected.

## Test Strategy

This test plan will employ a combination of black box and white box testing techniques, including:

* Functional testing: Verifying that each component functions as expected.
* Error guessing: Identifying potential error scenarios and testing for them.
* Boundary value analysis: Testing for invalid inputs at the boundaries of valid input ranges.
* Usability testing: Ensuring that the application is user-friendly and intuitive.

## Test Environment

The tests will be conducted on a web-based platform using the following tools:

* Google Chrome (latest release build, x86\_64 platform)
* Mozilla Firefox (latest release build, x86\_64 platform)
* Apple Safari (latest release build, x86\_64 platform)
* Microsoft Edge (latest release build, x86\_64 platform)
* Test automation framework (Java/TestNG, Selenium)

## Test Cases

### Login Page

**Test setup:** Verify that the login page is displayed correctly when the app is launched.

1. **No credentials provided**
   1. Leave both fields blank.
   2. Click on the submit button.
   3. Verify that error message “Enter a valid user name and password” is displayed.

**NOTE:** Based on the observed behavior of the application. Specification allows for no error message in this case. Desired behavior should be clarified.

1. **Incorrect username with blank password**
   1. Enter an incorrect username and leave the password field blank.
   2. Click on the submit button.
   3. Verify that an error message "This user does not exist" is displayed.
2. **Valid username with wrong password**
   1. Enter a valid username but an incorrect password.
   2. Click on the submit button.
   3. Verify that an error message "Invalid Password" is displayed.
3. **Clear button is functional**
   1. Click on the clear button.
   2. Verify that both fields are cleared.
4. **Blank password not allowed**
   1. Enter the valid username.
   2. Leave password field blank.
   3. Click the submit button.
   4. Verify that an error message "Invalid password" is displayed.
5. **Blank username is not allowed**
   1. Enter valid password in the password field.
   2. Leave username field blank.
   3. Click the submit button.
   4. Verify that an error message "This user does not exist" is displayed.
6. **Valid credentials should allow logging in**
   1. Enter a valid username (admin) and password (p@$$w0rd).
   2. Click on the submit button.
   3. Verify that the user is redirected to the home page.

### Home Page

**Prerequisites:** Validate that the home page is displayed correctly after the user logged in successfully. Date field should be empty and the favorite team field should be inactive.

1. **Verify empty date causes an error message**
   1. Click on submit button without selecting or entering the date.
   2. Verify that an alert with the message "Please fill out all fields" is displayed
2. **Verify date picker is displayed**
   1. Click on the calendar icon on the right side of date field
   2. Verify that it opens the date picker with the current date selected.

**NOTE:** Problematic to automate due to the system date picker getting displayed – skipping in the automation for now.

1. **Verify manual date input is validated**
   1. Click on the date field.
   2. Enter the invalid date “23-23-2323”. Date displayed should be “02/31/0323”.
   3. Verify the favorite team field is not active and “Please select a date first” error message is displayed.
2. **Verify date can be entered manually**
   1. Click on the date field.
   2. Enter the valid date.
   3. Verify the correct date is displayed.
3. **Verify empty team name is not allowed**
   1. Enter valid date.
   2. Click on the submit button.
   3. Verify that an alert with the message "Please fill out all fields" is displayed.
4. **Verify favorite team field activates on date selection**
   1. Select a valid date from the date picker
   2. Wait for the favorite team field to become selectable.
   3. Verify the favorite team field is active and presents a dropdown with team names.
   4. Verify team name can be selected from the dropdown.
5. **Verify player name field activates on team selection**
   1. Select a valid date from the date picker
   2. Wait for the favorite team field to become selectable.
   3. Select favorite team from the dropdown.
   4. Verify that player name field is visible and can get focus.
6. **Verify player name can not be empty**
   1. Select a valid date from the date picker
   2. Wait for the favorite team field to become selectable.
   3. Select favorite team from the dropdown.
   4. Leave player name field empty.
   5. Submit the form.
   6. Verify that an alert with the message "Please fill out all fields" is displayed.
7. **Verify the form can be submitted**
   1. Select a valid date from the date picker
   2. Wait for the favorite team field to become selectable.
   3. Select favorite team from the dropdown.
   4. Fill in the player name.
   5. Submit the form.
   6. Verify that “Thank You!” message is displayed.