Group 2 – Playwright SRS

1. Introduction
   1. Purpose – The purpose of this document is to provide the user with an overview of the software requirements, functional requirements, non-functional requirements and other specifications related to the Playwright framework lab as it interacts with the fruit stand application.
   2. Scope – This document outlines the requirements needed to run and operate the Playwright framework as it interacts with the fruit stand application.
2. System Overview
   1. Objectives of Playwright lab
      1. Familiarize the user with the basic uses of Playwright framework as it interacts with a web application utilizing the python programming language.
      2. Enhance user’s knowledge on testing strategies, frameworks and methodologies within the Python programming language.
   2. Technologies Used
      1. IDE of choice (Pycharm, VS Code etc.)
      2. Python (Version 3.8 or newer)
      3. Flask (Version 3.0.1 or newer)
      4. Playwright (Version 1.40 or newer)
3. Functional Requirements
   1. Cart interactions
      1. Users should be able to check current quantities of fruit from inventory.
      2. Users should be able to check select a fruit object and add it into their cart.
      3. Users should be able to select a fruit object that is currently in the cart and have it be removed from the cart.
   2. User interface Interactions
      1. Users should be able to test the button functionalities of the website such as ‘Add to cart’, ‘Submit’ and, ‘remove from cart’.
      2. Users should be able to verify the dropdown menu’s options and add the correct items to the cart.
      3. Users should be able to test that the text fields populate with the correct text and accept the appropriate inputs.
      4. Users should be able to launch different sources of the application such as the initial webpage, the cart page, and the receipt page.
4. Non-Functional Requirements
   1. Performance requirements
      1. The system should be able to process the user requests and run the tests within a reasonable time.
   2. Scalability Requirements
      1. The system should be able to handle multiple tests and user requests without creating a degradation in performance.
      2. Tests should be designed in such a way that would be able to accommodate new functions.
5. Setup and Environments
   1. Supported web browser for Fruit Stand application launch.
   2. Python version 3.8 or newer.
   3. Preferred IDE software
6. Deliverables
   1. Familiarization with the basic functions and flows of the Playwright framework in conjunction with a web application.
7. This lab is meant be a basic walkthrough utilizing the functionalities of the Playwright framework requests used in conjunction with a Fruit Stand web application.
8. Appendices
   1. Reference Materials Used
      1. Python Documentation - https://www.python.org/doc/
      2. Flask Documentation - https://flask.palletsprojects.com/en/3.0.x/
      3. Playwright Documentation - https://playwright.dev/docs/intro