PROJECT URL : https://bstackdemo.com/

Plan for the interns for above capstone projects is outlined below which will be applied by the team to whom a specific project is allocated.

Tools Used: Python, Selenium, Pytest, MySQL, JIRA , AGILE/Scrum, GIT, Gitlab

Objective is to implement Scrum ceremonies, Test Board Management, Test Execution Manual and Automation , Report Generation and Go-n-Go Report analysis.

Technical objective: OOPS, POM, Selenium Locator Stretegies, Waits, GIT, Database and CI, CD

The website "bstackdemo.com" is a demo e-commerce application designed to be used for testing with tools like Selenium.

Task is to create testing board in JIRA as Agile project and Zphyr testing board. Also test the site with Selenium , Python , HTML reporter , Pytest using Page Object Model and Data Driven Model using mySQL as DAO

The project flow for using bstackdemo.com with Selenium and integrating it with various tools like GitHub and Jira:

1. Project Setup:

o Create a GitHub repository.

o Clone the repository locally and set up the project structure.

2. Selenium Automation:

o Write Selenium scripts for key functionalities (e.g., login, product search).

o Commit and push scripts to GitHub.

3. Jira Integration:

o Create user stories and tasks in Jira.

o Use Zephyr in Jira to create test cases for each task.

4. Continuous Integration:

o Set up CI/CD pipeline with tools like Jenkins or GitHub Actions to run Selenium tests.

o Automatically update test results in Jira.

5. Reporting and Analysis:

o Generate and analyze test reports.

o Iterate on test cases and scripts based on results.

For a capstone project using Selenium and Python, here is an example of suggested flow:

1. Set Up Selenium Environment:

o Install Selenium and WebDriver.

o Set up Python environment.

2. Define Test Cases:

o User login/logout.

o Browse and search products.

o Add items to cart.

o Checkout process.

3. Write Test Scripts:

o Use Selenium to automate each test case.

o Handle elements, form submissions, and navigation.

4. Run Tests:

o Execute tests.

o Capture results and screenshots.

5. Report and Analysis:

o Analyze test results.

o Generate reports.

To integrate the bstackdemo.com website with a Jira Agile board, you can follow these steps in your capstone project:

1. Set Up Jira: Create a Jira project and configure an Agile board (Scrum or Kanban).

2. Define User Stories:

o Login/logout functionality

o Product browsing and searching

o Adding items to the cart

o Checkout process

3. Create Tasks: Break down user stories into tasks (e.g., write Selenium script for login, verify search functionality).

4. Selenium Integration:

o Write Selenium scripts for each task.

o Execute scripts and link test results to Jira issues.

5. Continuous Integration: Use CI tools (e.g., Jenkins) to automate test execution and update Jira with results.

To set up a Zephyr test board for your project with bstackdemo.com, follow these steps:

1. Install Zephyr for Jira:

o Ensure you have the Zephyr plugin installed in your Jira instance.

2. Create a New Test Cycle:

o Navigate to the Zephyr section in Jira.

o Create a new test cycle for your project.

3. Add Test Cases:

o Define test cases for different functionalities (e.g., login, product search).

o Assign these test cases to the relevant test cycle.

4. Execute Tests:

o Execute your test cases manually or integrate with automation tools.

o Update the test results in Zephyr.

5. Generate Reports:

o Utilize Zephyr’s reporting features to track test progress and outcomes.

To set up a GitHub repository for your capstone project involving bstackdemo.com, follow these steps:

1. Create a Repository:

o Go to GitHub and create a new repository.

2. Clone Repository:

o Clone the repository to your local machine using git clone <repository-url>.

3. Set Up Project Structure:

o Create directories for Selenium scripts, configuration files, and reports.

4. Write Selenium Scripts:

o Add your Selenium Python scripts to the repository.

5. Commit and Push:

o Commit your changes and push them to the GitHub repository using git add, git commit, and git push.

6. Integrate with CI:

o Optionally, set up Continuous Integration (CI) with GitHub Actions or another CI tool to automate testing.