

# **Week 1: Environment Setup & First Test Script**

## **1. Test Lead**

- **Select the target demo e-commerce website (e.g., Swag Labs).**
- **Write the first Selenium test script to open the homepage and check the page title.**
- **Document the environment setup steps for the whole team.**

## **2. Environment Specialist**

- **Install Selenium WebDriver and required browser drivers (e.g., ChromeDriver).**
- **Verify compatibility of browser versions and drivers.**
- **Ensure Selenium runs successfully on all team members' machines.**

## **3. Automation Engineer #1**

- **Support the Lead in creating and debugging the first Selenium test script.**
- **Run the script on multiple browsers to validate setup.**

## **4. Automation Engineer #2**

- **Create a basic project folder structure, e.g.:**
  - **tests/ → test scripts**
  - **pages/ → future Page Objects**
  - **drivers/ → browser drivers**
  - **utils/ → helper functions**

## **5. Test Case Designer**

- **Write the first manual test case (Open homepage → Verify title).**
- **Start creating a test case document for future scenarios.**

## **6. Framework Specialist**

- **Review the initial folder structure and suggest improvements.**
- **Propose a simple test runner (Pytest/JUnit) for future use.**

### **Deliverables:**

- **A working Selenium environment for all team members.**
- **First test script (homepage title verification).**
- **Document confirming the chosen target website.**

# **Week 2: Automating Core User Journeys**

## **1. Test Lead**

- **Co-develop the Login Automation Script with Automation Engineer #1.**
- **Add basic assertions to verify login success.**

## **2. Test Case Designer**

- **Write manual test cases for:**
  - 1. Successful login.**
  - 2. Search for a product and add it to the cart.**

## **3. Automation Engineer #1**

- **Automate the Login flow.**
- **Store login credentials in a small external file (CSV/JSON).**

## **4. Automation Engineer #2**

- **Automate the Search & Add to Cart flow.**
- **Test with multiple products to increase coverage.**

## **5. Environment Specialist**

- **Implement Explicit Waits in all scripts.**
- **Set up logging for script execution results.**

## **6. Framework Specialist**

- **Review naming conventions and coding style (e.g., test\_login.py, test\_cart.py).**
- **Ensure scripts are reusable and consistent.**

## **Deliverables:**

- **Automated Login Script.**
- **Automated Search & Add to Cart Script.**
- **Stable scripts that run reliably with waits.**



# **Week 3: Checkout Flow & Assertions**

## **1. Test Lead**

- **Co-develop the Checkout Script with Automation Engineer #2.**
- **Add assertions to verify items in the cart before checkout.**
- **Begin collecting execution results (pass/fail).**

## **2. Test Case Designer**

- **Prepare test data (usernames, passwords, dummy checkout info).**
- **Document checkout test cases.**

### **3. Automation Engineer #1**

- **Add assertions to existing scripts (Login + Search).**
- **Verify correct UI messages appear after each action.**

### **4. Automation Engineer #2**

- **Develop the Checkout Automation Script:**
  - **Navigate to cart → Verify items → Proceed to checkout → Fill in dummy user details → Confirm order.**

### **5. Environment Specialist**

- **Set up a basic test data management system (CSV/Excel/JSON).**
- **Run scripts with externalized test data.**

### **6. Framework Specialist**

- **Standardize assertion style across all scripts.**
- **Add automated HTML/Allure reports for test runs.**

### **Deliverables:**

- **Complete Checkout test script.**
- **All scripts updated with assertions.**
- **Centralized test data management.**

## **Week 4: Code Refactoring & Final Reporting (Adjusted)**

### **1. Test Lead**

- **Refactor the Login Script using Page Object Model (POM).**
- **Write the final project report with Test Case Designer.**
- **Validate the entire suite runs successfully.**

### **2. Framework Specialist**

- **Build the POM foundation (BasePage, locators, utilities).**
- **Assign refactoring tasks to team members.**
- **Review refactored scripts for quality and consistency.**

### **3. Automation Engineer #1**

- **Refactor the Search Script into POM format.**
- **Verify functionality inside the suite.**

### **4. Automation Engineer #2**

- **Refactor the Checkout Script into POM.**
- **Add detailed assertions into the POM classes.**

### **5. Environment Specialist**

- **Create a test suite to run all tests together (Pytest/JUnit).**
- **Integrate into a CI/CD pipeline (GitHub Actions/Jenkins).**
- **Verify automated execution after commits.**

### **6. Test Case Designer**

- **Finalize documentation of all test cases (manual + automated).**
- **Support the Lead in writing the final coverage/results report.**

### **Deliverables:**

- **Fully refactored test scripts using POM.**
- **Unified test suite with CI/CD integration.**
- **Final report including test coverage and results.**