

## Project Plan for ToDoMVC Testing

### Week 1: Planning & Environment Setup

Define project objectives:

- Conduct Manual Testing to understand ToDoMVC functionalities.
- Implement Automation Testing using Selenium.
- Cover core features: adding, editing, deleting, and filtering tasks.

Set up the testing environment:

- Install Selenium WebDriver, TestNG.
- Set up browser drivers (Chrome, Firefox, Edge).
- Configure Git/GitHub for version control.
- Select a defect tracking tool (Jira).

Tools used:

- Manual Testing: Test case documentation (Jira).
- Automation Testing: Selenium, TestNG.
- Defect Tracking: Jira.
- Version Control: Git/GitHub.

### Week 2: Manual Test Design & Execution

Identify manual test scenarios:

- UI Testing: Verify layout, buttons, input fields.
- Functional Testing: Ensure task addition, editing, deletion, and filtering work correctly.
- Negative Testing: Test empty inputs, duplicate tasks, and unexpected inputs.

Write manual test cases:

- Document test cases in Jira
- Define test data and expected results.

Execute manual test cases:

- Perform testing on Chrome & Firefox.

### **Week 3: Automation Test Script Implementation**

Automate core test cases using Selenium:

- Adding a task → Verify task appears in the list.
- Editing a task → Ensure updates reflect correctly.
- Marking a task as completed → Validate checkbox functionality.
- Deleting a task → Confirm removal from the list.
- Filtering tasks (Active, Completed, All) → Check correct filtering behavior.

Implement Assertions & Locators:

- Use TestNG to validate results.

Code Management:

- Push test scripts to GitHub repository.
- Organize test cases using Page Object Model (POM) for maintainability.

### **Week 4: Test Execution & Debugging**

- Execute both Manual & Automated test cases.
- Identify and log defects using Jira or a defect tracking tool.
- Debug failing test scripts and refine locators/logic.
- Perform Cross-Browser Testing (Chrome, Firefox).

### **Week 5: Performance & API Testing**

Basic performance testing:

- Use JMeter to measure page load time.

API Testing :

- Use Postman to verify API requests (GET, POST, DELETE).

### **Week 6: Reporting & Final Evaluation**

Generate reports:

- Manual Test Report: Document test cases, results, and defects.
- Automation Test Report: Generate TestNG/Extent Reports.

- Bug Report: Summary of identified issues.

Final Presentation:

- Showcase manual and automation testing workflow.
- Discuss challenges and key learnings.