Test Plan for Automation Exercise Website

1. Project Information

- Project Name: Automation Exercise Testing

- Team Members: [Malak, Heba, Karim, Ahmed, Samir, Mostafa]

- Project Duration: [starts February 27 and ends May 9]

- Test Plan Version: 1.0

- Date Created: [27 February 2025]

2. Objective

The objective of this test plan is to ensure the Automation Exercise website functions correctly by performing Manual, API, and Automation Testing. The testing will validate core functionalities, identify defects, and ensure system stability before deployment.

3. Scope of Testing

✅ In Scope:
- Functional / Manual Testing
- API Testing
- Automation Testing

❌ Out of Scope:
- Security Testing
- Load Testing
- UI/UX Testing
- Performance Testing

4. Test Strategy

4.1 Manual Testing
- Each team member will test different functionalities manually.
- Test cases will be written for core functionalities (Login, Signup, Product Search, Checkout, etc.).
- Issues will be logged in a defect tracking tool.
- Bug reports will be documented and shared with the team.

Team Roles:

- Malak: Test Plan creation, Test Cases

- Karim: Functional Requirements

- Heba: User Story creation

- Ahmed: Non-functional Requirements

- Samir & Mustafa: Test Cases

- All Members: Manual testing & Bug Reporting

4.2 API Testing
- Postman will be used for API testing.
- Each API request (GET, POST, PUT, DELETE) will be validated against expected responses.
- API response codes and payloads will be analyzed.

Team Roles:

- Karim: User authentication API tests

- Malak: Product listing & search API tests

- Heba: Order creation & checkout API tests

- Ahmed: Payment gateway integration API tests

- Samir: Error handling & response validation

-Mustafa: API data validation and response consistency

4.3 Automation Testing
- Selenium WebDriver with Java will be used for automation.
- Key user journeys will be automated (Login, Product Search, Add to Cart, Checkout).
- Test scripts will be executed regularly to ensure system stability.

Team Roles:

- Karim & Ahmed :Automating login and signup flows

-Malak & Heba: Automating product search & filtering scenarios

- Samir & Mustafa: Automating checkout & payment workflows

5. Test Environment

- Devices: Laptops/PCs
- Browsers: Chrome, Firefox, Edge
- API Testing Tool: Postman
- Automation Framework: Selenium with TestNG/JUnit (or any other framework chosen)
- Test Bases: Requirements documents, user stories, business rules, design documents

6. Test Execution & Schedule

Task	Assigned To	Duration
Manual Testing	All Members	3 weeks
API Testing	All Members	3 weeks
Automation Testing	All Members	3 weeks
Bug Fix Validation	All Members	Ongoing

7. Test Deliverables

- Test Cases Document
- API Test Reports
- Automation Test Scripts
- Bug Reports
- Final Test Report

8. Risk Management Schedule

Risk	Category	Mitigation Strategy	Timeline
Functional issues	Product	Ensure full test coverage	Throughout testing
API failures	Product	Work with developers to fix	As issues arise
UI problems	Product	Regular testing and feedback	Ongoing
Performance issues	Product	Plan for future performance tests	Future phase
Testing delays	Project	Set clear deadlines	Weekly review
Limited resources	Project	Prioritize test cases	Throughout testing
Requirement changes	Project	Regular team discussions	Sprint meetings
Environment issues	Project	Use virtual environments	Setup & ongoing

9. Communication Plan

- Weekly meetings every Monday
- Reports shared via Google Drive
- Communication through Slack, Email, or Teams.
- Urgent issues handled via direct messages or calls.

10. Entry & Exit Criteria

Entry Criteria:
- Test environment setup is completed and stable.
- Test cases are approved and ready for execution.
- All required test data is available.
- The application is deployed in the testing environment.

Exit Criteria:
- All planned test cases have been executed.
- No critical or high-priority defects remain open.
- Test execution report is reviewed and approved.
- Stakeholders have signed off on the test completion.

11. Conclusion

This Test Plan provides a structured approach to testing the Automation Exercise website. The testing team will ensure all functionalities meet expected requirements before project completion.