SE 2226 Test PlanTemplate

(Based on ISO/IEC/IEEE 2G11G-2 Section 7.2)

1. Context of testing

1.1 Project/test levels/test types

The project will attempt to test the Hepsiburada (found at: https://www.hepsiburada.com/) system. The tests will be done on an acceptance, system and integration level. The system will be tested for basic security vulnerabilities; normal, alternative and exceptional flows and as individual system components.

1.2 Test items

The testing items for this project include software items such as the search button, the purchase system, the filter and the sorting functions for products, and basic penetration testing.

1.3 Test scope

The tests will include system UI components in an individual and use case context. The security of the system will be tested through basic penetration testing strategies. Components such as network modules will not be tested as we do not have the capabilities for large (or even medium) scale load testing.

1.4 Test basis

The current department curriculum for SE 2226 will be used as a basis for requirements.

2. Assumptions and constraints

It is assumed that team members will collaborate remotely. The source code is not available and as such cannot be tested for functional and mutational tests. The servers cannot be load tested due to legal complications.

It should also be considered that the project has a severely limited budget.

3. Test strategy

3.1 General

The tests will be done on an integration, acceptance and security level. System integration, security testing (penetration testing) and browser testing will be performed.

A test plan, use case reports, test status reports and a completion report will be delivered.

Firstly a test plan will be drafted. Then for approximately one to two weeks tests will be designed, implemented and executed. Afterwards the results will be compiled into a presentation.

3.2 Test levels

- Integration testing
- System security testing
- System testing
- System acceptance testing

3.3 Test types

- Security Testing (Penetration Tests)
- Browser Testing
- System Integration

3.4 Test deliverables

Throughout the project the reports and deliverables produced will be:

- Test Plan
- Use Case Report(s)
- Test Status Report
- Test Completion Report

3.5 Test design techniques

- Use Case Testing
- Penetration Testing

3.6 Entry and exit criteria

Test Planning:

Entry Criteria:
Project requirements and scope defined. Test strategy developed.

Exit Criteria:
Test plan approved. Test plan document finalised.

Test Design:

Entry Criteria:
Test plan approved. Requirements analysed.

Exit Criteria:
Test cases developed and reviewed. Test cases approved.

Test Execution:

Entry Criteria:
Test cases developed and approved. Test data prepared.

Exit Criteria:
Test execution completed. Test results recorded.

Test Closure:

Entry Criteria:
Test execution completed. All metrics recorded.

Exit Criteria:
Test completion report prepared.

3.7 Test completion criteria

All test cases have been executed and have met functional and nonfunctional requirements.

3.8 Metrics to be collected

— Test Coverage Data

— Test Success Rate

3.9 Test data requirements

— Burner Email Account

3.10 Test environment requirements

— Selenium IDE

— Selenium Web Driver

— Penetration Test Tools

3.11 Testing activities and estimates

— Test Planning - 1 Week

— Test Design and Implementation - 1 Week

— Test Execution - 1 Week

4. Staffing

4.1 General

3 people will be working as developers. The project will take approximately three weeks to implement and execute tests with one week being left for compilation and presentation.

4.2 Roles and responsibilities

Şehran Kartal: Developer.

Can Berk Soydan: Developer.

Rüzgar Erdem: Developer.

4.3 Schedule

Week 1: Test planning.

Week 2: Test execution.

Week 3: Test data evaluation.

Week 4: Preparing presentation.