Test Approach Document

# 1. Introduction

* Purpose: This document outlines the approach for testing the software application.
* Scope: It defines the scope, strategy, resources, and schedule for the testing activities.
* References: Requirements Specification, Design Documents.

# 2. Objectives

* To validate the functionality, performance, and security of the ENSEK customer purchase website.
* To ensure the application meets the business and technical requirements.

# 3. Test Strategy

* Levels of Testing: Unit, Integration, System, and User Acceptance Testing (UAT).
* Types of Testing: Functional, Regression, Smoke, Performance, and Security Testing.
* Test Design Techniques: Equivalence Partitioning, Boundary Value Analysis.
* Test Data Strategy: Use of synthetic and anonymised production data.

# 4. Test Environment

* Hardware: Standard test servers and client machines.

Dell Latitude 5540 (Intel i7, 16GB RAM, 512GB SSD)

HP EliteBook 840 G9

MacBook Pro M2 (16GB RAM)

* Software: Operating systems, browsers, and application servers.

Windows 11 Pro / Windows Server 2022

macOS Ventura

Android 14 / iOS 17

Browser

Google Chrome (latest stable and beta versions)

Mozilla Firefox

Microsoft Edge

Safari (for macOS and iOS testing)

Application Servers

Apache Tomcat

Microsoft IIS

* Network: Configured to simulate production-like conditions.

# 5. Test Tools

* Test Management: JIRA, TestRail.
* Automation: Selenium, Postman.
* Performance Testing: JMeter.

# 6. Roles and Responsibilities

* Test Lead: Overall test planning and coordination.
* QA Engineers: Test case design, execution, and defect reporting.
* Developers: Fixing defects and supporting testing activities.

# 7. Entry and Exit Criteria

* Entry Criteria: Code complete, unit testing done, test environment ready.
* Exit Criteria: All critical test cases passed, no high severity defects open.

# 8. Test Deliverables

* Test Plan, Test Cases, Test Scripts, Test Summary Report, Defect Reports.

# 9. Risks and Mitigation

* Risk: Tight deadlines may impact test coverage.
* Mitigation: Prioritise critical test cases and automate regression tests.

# 10. Schedule

* Test Planning: Week 1
* Test Case Design: Week 2-3
* Test Execution: Week 4-6
* Reporting: Week 7