## Test Plan Template:

**Prepared by: Yazan Atary**

1. OBJECTIVES: The primary goal of this test plan is to ensure that the developed application meets the required performance and reliability standards. This test plan aims to detect and correct defects, verify that the application behaves as expected under different conditions, and ensure that it meets user requirements. By running a series of planned tests, including unit testing, integration, system, and user acceptance, we will ensure that the application is ready for deployment and use in real-world environments.
2. SCOPE: The scope of this test plan covers all aspects of the application, including individual components (unit testing), their interactions (integration testing), the system as a whole (system testing), and overall user experience (acceptance test). The test will be conducted on the developed OptiShop app, with a focus on ensuring that core functions such as product management, customer management, and notification systems work smoothly. The scope includes functional testing, performance testing, and regression testing to ensure the application runs as expected in different scenarios.
3. Testing Strategy: The testing strategy is designed to ensure that all essential components of an OptiShop app are thoroughly tested at different stages of development:

**Unit testing:** Tests will be performed on individual modules and components to verify that each part of the system operates independently. Emphasis will be placed on product management functions, customer management, and notification features.

**Integration testing:** Integration testing will focus on validating interactions between different system units. This will ensure that the product and customer modules, as well as notifications, work together without problems.

**System testing:** The entire application will be tested in a simulated production environment. System tests will evaluate overall functionality, including boundary states, error handling, and user workflow.

**User Acceptance Test (UAT):** The final phase of testing involves users verifying that the app meets their expectations and is ready for deployment. This test will be based on realistic scenarios to ensure that the system provides the expected results.

1. Hardware Requirements

RAM: 6GB

CPU: intel i7 10900k

GPU: integrated graphics

Storage: 1 GB

1. Environment Requirements:

**Operating System**: Windows 10 or higher  
**Database**: MySQL version 8.0 or higher  
**Development Framework**: .NET Framework 4.8, Visual Studio 2022  
**Network**: Stable internet connection for client-server communication during testing  
**Test Tools**: NUnit for unit testing, and the application’s UI for system testing  
**Browsers**: Google Chrome (latest version) for browser-based tests (if applicable)

1. Test Schedule:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Unit Testing | System & integration testing | User acceptance testing |
| 21st/April/2024 | Start and end unit testing | - | - |
| 22nd/April/2024 | - | System integration capability will be tested | - |
| 23rd/April/2024 | - | - | The form will be published |
| 24th/April/2024 | - | - | Continued receipt of results |