

TECHINNOVA SOLUTIONS

TEST PLAN

MENTORSHIP MANAGEMENT APPLICATION

Presented by: Lloyd Nkomo
Zilindile Nkambule
Daniel Tunda

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1. INTRODUCTION

1.1. Purpose:

This document outlines the testing plan of the Mentorship Application Version 1.0. It shows a description of the scope, the approach and resources that will be used for testing the Mentorship software.

1.2. Project Overview:

The Mentorship application is a system designed to improve the process of mentor-mentee pairing making it more efficient, quicker and enhance the interaction of the pair.

2. TEST STRATEGY

2.1. Objectives

To test the functional and non-functional requirements of the system. The test will verify that all components work according to the specifications. Positive and negative tests will be carried out.

2.2. Assumptions

Performance testing is not considered for this estimation.

The Test Team assumes all necessary inputs required during Test design and execution will be supported by Development Team appropriately.

Scrum Master/Project Manager will review and sign-off all test deliverables

2.3. Test Principles

There will be entrance and exit criteria.

Testing will be a repeatable, quantifiable, and measurable activity

Testing will be focused on meeting the business objectives, cost efficiency, and quality.

Testing processes will be well defined, yet flexible, with the ability to change as needed.

Testing activities will build upon previous stages to avoid redundancy or duplication of effort.

3. RESOURCES

3.1. Resources Requirements

Staff Requirement:

Development Team

Product Owner

Scrum Master/Project Manager

Client Requirements:

Reliable Internet

Web Browser

4. SCOPE OF TESTING

4.1. Features to be tested:

- Login User
- Register User
- Search Mentor
- Request Mentor
- Accept Request
- Rate Mentor
- Update Profile

4.2. Features not to be tested:

- Update Profile

Reasons: Not to be included in this release of the Software.

- Archive User

Reasons: Not to be included in this release of the Software.

- View Mentee

Reasons: Profile Low risk, has been used before and was considered stable.

- View Mentor

Reasons: Profile Low risk, has been used before and was considered stable.

5. TESTING APPROACH

5.1. Functional Requirements

Positive and Negative tests are performed for verification and validation. The above mentioned features are to be tested from the user perspective.

5.2. Functional requirements

Quality

To ensure that the system is bug-free and is maintainable. We will use a two-step process of independent verification and validation. First a verification process to evaluate Requirement Analysis Documents to ensure that the end result of the application is testable. Second, an actual testing to be performed to ensure that the requirements are met.

Reliability

Reliability consists in consistency and repeatability of the application. To ensure reliability the test approach will include negative and positive functional tests.

Performance

We will use different activities in our approach to test the performance of the application. These activities include test execution, iteration, Design and the performance criteria such response time.

Security

To identify potential security vulnerabilities of the system, the following attributes are taken into consideration: Authentication, Authorisation, Integrity, and Confidentiality. A security architecture analysis will be carried out to identify threats and security risks.

6. PASS/FAIL CRITERIA

This section defines the completion criteria for this specific test phase.

6.1. Component Pass/Fail criteria

Tests on a component are considered a pass when they satisfy the signatures, constraints and interfaces as specified by the requirements. This includes positive tests, negative and stress tests.

6.2. System Pass/Fail criteria

Functional requirements, non-functional requirements, and use cases determine the pass or fail of tests executed against the system.

If a test exhibits a product failure to meet the objectives of any of the functional requirements, non-functional requirements, or the use cases, it will fail.

7. ENTRY/EXIT CRITERIA

7.1. Entry criteria:

- All source codes are unit tested
- All Quality Assurance resource has enough functional knowledge
- Hardware and Software are in place
- Test plans and test cases are reviewed and signed off

7.2. Exit criteria:

- No defect over a period of time or testing effort
- Planned deliverables are ready
- High severity defects are fixed

8. TEST DELIVERABLES

The following test documentation will be produced:

- Test Plan - This document deals with what needs to be done in UAT.
- Test Cases - The values input and results expected from tests.
- Test Logs - The results of running the tests.
- Incident Reports - Observations of unexpected results.
- Test Summary Report - Summary of testing.
- The test data.

9. TESTING SCHEDULE

Test Schedule

Test Phase	Time
Test Plan Creation	2 week
Test Specification Creation	3 weeks
Component Testing	3 weeks
System Testing	2 weeks
Performance Testing	1 week
Use Case Validation	2 weeks

10. TEST PLAN APPROVAL

The undersigned acknowledge they have reviewed the Mentorship Management Application Test Plan document and agree with the approach it presents. Any changes to this Requirements Definition will be coordinated with and approved by the undersigned or their designated representatives.

Signature: _____ Date: _____
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