Software Project Test Plan/User Guide

Project: Bug Tracker Application

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# Purpose

The purpose of sections 2-4 of this document is to outline the test strategy and overall test approach for the Bug Tracker Application for CMSC 495. This includes test methodologies, test scripts, and the test matrix. Sections 5 and 6 serve as the User and Administrator Guides for the application, guiding users in effective usage of the application and administration of application users, respectively.

# Audience

The audience of sections 2-4 this document is the project team and the project management team. The testers should be able to utilize this document to understand the scope of work that must be accomplished. The document is intended to accomplish its purpose only for the intended audience.

Section 5 is intended for all users of the application, guiding them in the proper usage of the application. Section 6 is intended for administrative users of the application, guiding them in the administration and management of registered users for the application.

# 1. Testing introduction

## 1.1 Test Objectives

The objective of the test suite is to confirm that all required system functionality exists, functions correctly, and can be reliably reproduced.

## 1.2 Extent of Tests

The tests are written to validate use cases and functional requirements, simulating both the expected functionality by an end user and the overall system functionality as observed by the software developers.

# 2. Testing details

## 2.1 Test sequencing

Tests will be carried out sequentially, simulating a new user’s first interactions with the application. Each test is designed to validate the functionality of a specific software component or aspect of user interaction.

## 2.2 Testing process

Testing will be carried out using the test scripts specified in this document, which specify actions to be taken by the tester. The scripts are named and numbered sequentially to reflect the sequence of events as a new user would likely experience them, or as the system administrator might experience them when managing users of the application. If all steps of a script are completed successfully, the script is considered Passed, and the intended functionality has been successfully validated. The success or failure of each script, and reasons for failure (if applicable), will be documented in the Testing Matrix found in Section 4.

## 2.3 Testing Scope (TODO)

Due to the time constraints of this project, all user-facing functionality of the application will be tested.

## 2.4 Hardware/software requirements

Testing will be conducted on a machine with the following specifications:

* Hardware: [TODO]
* Operating system:
* Software components:
  + Python v3.9
  + Django
  + TODO

# 3 Test Scripts

## 3.1 New User Test Scripts

### 3.1.1 Starting the application

### 3.1.2 Creating an account

### 3.1.3 Signing in & out of account

### 3.1.4 Create a ticket

### 3.1.5 Modify a ticket

### 3.1.6 Delete a ticket

### 3.1.7 Search for a ticket

## 3.2 User Administration Test Scripts (TODO)

### 3.2.1 View Users

### 3.2.2 Add Users

### 3.2.3 Modify Users

### 3.2.4 Delete Users

# 4 Test Matrix

|  |  |  |  |
| --- | --- | --- | --- |
| Script Number | Script Name | Pass (Y/N) | Reason for Failure |
| 3.1.1 | Starting the application |  |  |
| 3.1.2 | Creating an account |  |  |
| 3.1.3 | Signing in & out of account |  |  |
| 3.1.4 | Create a ticket |  |  |
| 3.1.5 | Modify a ticket |  |  |
| 3.1.6 | Delete a ticket |  |  |
| 3.1.7 | Search for a ticket |  |  |
| 3.2.1 | View users |  |  |
| 3.2.2 | Add users |  |  |
| 3.2.3 | Modify users |  |  |
| 3.2.4 | Delte users |  |  |
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# 5 User Guide

## 5.1 Introduction

## 5.2 Bug tracker features

## 5.3 Creating an account

## 5.4 Submitting a ticket

## 5.5 Updating a ticket

## 5.6 Deleting a ticket

# 6 Administrator Guide

## 6.1 Introduction

## 6.2 Viewing users

## 6.3 Adding users

## 6.4 Modifying users

## 6.5 Deleting users