**EGERTON UNIVERSITY**



**FACULTY OF SCIENCE**

**COMPUTER SCIENCE DEPARTMENT**

**SYSTEM TEST PLAN**

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COMP 390 TEAMWORK PROJECT

ASSET MANAGEMENT SYSTEM

**PRESENTED TO:**

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FOR THE PARTIAL FULFILMENT OF DEGREE IN COMPUTER SCIENCE OF EGERTON UNIVERSITY

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**Introduction**

This test elaborates the function of each of the program files such as MySQL that have been used to build each module of the system

It also outlines how the UI interface will be used in order to give us the best results

During the a number of testing techniques will be used such as the black-box testing. This ensures that the system works as required specifications

The decision on which type of technique to use in each section of the code depends on the team leader decision

**1.1 Purpose**

* Identify each existing project information
* Identify the approach to be tested
* Identify the features to be tested
* Recommend and describe the testing strategies
* List the required test requirement
* Identify the required resources and provide an estimation of the test efforts
* Fix the schedule of the intended testing activities
* Identify the risk associated with the test strategies
* List the deliverable element of the test activities

**1.2 Scope**

The scope of the test includes user interface, database, login modules and all the databases

**1.3 Audience**

The testing of the system is done to the customer of the system so that they get the assurance that the system is working as required by the problem statement and meets all the requirement specifications

**2.0 Features to be tested**

|  |  |  |
| --- | --- | --- |
| **FEATURES** | **PRIORITY** | **DESCRIPTION** |
| Login | **1** | * Check that non existing names orpassword is not accepted * Check that the correct Username and password input gives access to the system |

|  |  |  |
| --- | --- | --- |
| Authorize  Lab technician/lecturers/system administrator | **1** | * Check that for a user to register as admin/lecturer they fill in the correct details in authorization form |
| Database Records | **1** | * Check out that all the fields are filled with no missing records and the records are true with no mistake * None of the asset is written twice * Ensure that all the users are written down in the users database * Ensure that the correct record of the missing assets are in place * Check if the after the database is updated it holds the changes |
| Log out |  | * Check that all the users can logout * Check out that when the user logs out cannot access the system * Check out that the user logout session variables are destroyed |
|  |  |  |
|  |  |  |

**FEATURES NOT TO BE TESTED**

All the above mentioned features will be tested if there is enough time, in case the time will not allow all the features to be tested , then the features with the highest priorities will be first to be considered first. Other features will not tested such as the following

|  |  |
| --- | --- |
| **FEATURE** | **DESCRIPTION** |
| Changing of the passwords | This is because the system has the inbuilt password for the users hence changing it is not catered for in this case |
| The Network Security | The Network security is beyond our scope |
|  |  |

**4.0 PROCESS OVERVIEW**

**4.1 Process Overview**

The following represent the overall flow of the testing process

1. Identify the requirements to be tested
2. Identify the tests to be used in each module
3. Review the test data and the test cases to ensure that the unit has been thoroughly verified and the test cases are adequate to verify the operation of the unit
4. Identify the results of each test case
5. Document the test case configuration, test data and expected results
6. Perform the test
7. Document the test data, test cases and test configuration used during the testing process
8. Successful unit testing is acquired before the unit is eligible for the integration testing
9. Unsuccessful testing requires a bug report form to be generated

**5.0 Testing process**

Execute System Test

Sign Off

Design System Test

Design Test procedure

Build Test Enviroment

Organizing Project

**6.0 TEST STRATEGY**

**6.1 Testing Strategy**

Testing will be done including the manual test and special test tools. The testing will cover all the requirements for all the different roles participating in the booking of the assets

The following describe the outline that will be used for unit, integration and system testing

The template contain the following figures

|  |  |
| --- | --- |
| Tested by |  |
| Date |  |
| Test Type |  |
| Test Case Number |  |
| Test Case Name |  |
| Test Case Description |  |
|  |  |
|  |  |

**Specifications**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Tested ID | SCENARIO | \Expected results | Actual Results |  |
|  |  | Procedural steps |  |  |

**7.2 Unit Testing**