**HKMU Student Academic Record Management System**

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### **1 Introduction**

The Test Plan is designed to prescribe the scope of all testing activities of the project Student Academic Record Management System.

The plan identifies the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing and the resources to complete testing with the plan.

#### **1.1 Scope**

#### **1.1.1 In Scope**

All the feature of Student Academic Record Management System which were defined in software requirement specs need to be tested

|  |  |  |
| --- | --- | --- |
| **Module Name** | **Applicable Roles** | **Description** |
| Profile | Teacher  Student | Teacher: The teacher can view and modify their profile.  Student: Students can view and modify their profile. |
| Academic Record | Student | Student: View a student's academic performance and calculate a student's cGPA |
| Course Schedule | Student | Student: View schedule |
| Study Materials | Teacher  Student | Teacher: The teacher can add and delete the class notes in the system.  Student: The student can view the class notes in the system. |
| Submit Assignment | Student | Student: The student can submit the assignment in the system. |
| Couse Enrollment | Student | Student: The student can use the system to sign up for specific courses or extracurricular activities. |
| Discussion Area | Student | Student: The student can access online discussion forums to exchange ideas. |
| Contact | Student | Student: The student can send a message to find a teacher or admin. |
| Apply Scholarship | Student | Student: The student can use the system to apply for scholarships. |
| Grading System | Teacher | Teacher: The teachers can access a system to rate student's scores. |
| Student Inbox | Teacher | Teacher: The teacher can use the system to reply to student messages. |
| Course Manage | Teacher | Teacher: The teachers can use the system to manage their own courses. |
| Grading Assignment | Teacher | Teacher: The Teacher can use the system to grade the student's assignment. |
| Online Class | Teacher | Teacher: Teachers can start live online teaching through the system. |
| Edit Profile | Admin | Admin: A admin can edit, add, and delete system accounts. |
| Curriculum Planning | Admin | Admin: A admin can edit, add, and delete course names, course numbers and course credits. |
| Liaison | Admin | Admin: A admin can use the system to make calls to other school departments. |
| Generate Report | Admin | Admin: A admin should be able to track student performance and generate grade analysis and reports. |

#### **1.1.2 Out of Scope**

These features are not tested because they are not included in the software requirement specs

* User Interfaces
* Hardware Interfaces
* Software Interfaces
* Database logical
* Communications Interfaces
* Website Security and Performance

#### **1.2 Quality Objective**

The test objectives are to verify the Functionality of Management System, the project should focus on testing system such as Account Management, Grade Management, and Reporting…etc. to guarantee all these operations can work normally in bona fide business environment.

#### **1.3 Roles and Responsibilities**

The project should use team member as the tester

|  |  |  |
| --- | --- | --- |
| **No.** | **Member** | **Tasks** |
| **1.** | Test Admin | Builds up and ensures test environment and assets are managed and maintained  Support Tester to use the test environment for test execution |
| **2.** | Test Teacher | Test Teachers use the teacher page for test execution |
| **3.** | Test Student | Test Students use the student page for test execution |

### **2 Test Methodology**

#### **2.1 Test Levels**

* Integration Testing: Conducted on any bugs or issues arising from coding errors between modules.
* System Testing: Conducted on a complete system to evaluate the system’s compliance with its specified requirements.

#### **2.2 Suspension Criteria and Resumption Requirements**

If the team members report that 40% of test cases failed, suspend testing until the development team fixes all the failed cases.

#### **2.3 Test Completeness**

* Specifies the criteria that denote a successful completion of a test phase
* The run rate is mandatory to be 100% unless an apparent reason is given.
* Pass rate is 80%, achieving the pass rate is mandatory

#### **3 Test Deliverables**

Test deliverables are provided as below

**Before testing phase**

* Test plans document
* Test cases documents
* Test Design specifications

**During the testing**

* Test Data
* Test UI

**After the testing cycles is over**

* Test results reports
* [Defect Report](https://www.guru99.com/defect-management-process.html)
* Installation and Testing Program Guide

### **4 Resource & Environment Needs**

#### **4.1 Testing Tools**

|  |  |  |
| --- | --- | --- |
| **No** | **Resources** | **Descriptions** |
| **1.** | Server | Need a Database server which install MySQL server |
| **2.** | Network | Setup a LAN Gigabit and 1 internet line with the speed at least 5 Mb/s |
| **3.** | Computer | At least 1 computer run Windows 7, Ram 2GB, CPU 3.4GHZ |

### **4.2 Test Environment**

It mentions the minimum hardware and software requirements that will be used to test the Application.

The following software is required in addition to client-specific software.

* Windows 7 and above
* MacOS 10.10 and above