

ACADEMYX

## Requirement Document

GROUP NO 12

# Learning & Manage Information System



DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY  
FACULTY OF TECHNOLOGY  
UNIVERSITY OF RUHUNA

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## 1) System Description

The AcademyX Student Management System (SMS) and Management Information System (MIS) database stands at the forefront of modern educational technology. In an era where both private and governmental entities are embracing digital transformation, educational institutions, especially those catering to diverse student populations, are pioneers in this movement.

Within this landscape, the SMS-MIS database emerges as a pivotal tool, meticulously crafted to meet the nuanced needs of students, lecturers, mentors, demonstrators, administrative staff, and technical officers. This system serves as the cornerstone of AcademyX's educational framework, seamlessly integrating all stakeholders into a cohesive and efficient educational ecosystem.

## 2) Requirement Analysis

### 1. Manage Student

- I. Student should have a **unique ID**, name, date of birth, contact information, address, gender and an associated department.
- II. Ability to register new students and update existing student information.
- III. View student profiles, including personal information, courses enrolled, attendance, and grades.

### 2. Manage Lecturer

- I. Lecturer should have a unique ID, name, contact information, address, and an associated department.
- II. Ability to add new lecturers and update existing lecturer information.
- III. View lecturer profiles, including personal information and courses taught.

### 3. Manage Mentor

- I. The mentor should have a unique ID, name, contact information, address, and an associated department.
- II. Ability to assign mentors to students.
- III. View mentor profiles and the list of students they are mentoring.

#### 4. Manage Demonstrator

- I. Demonstrators should have a unique ID, name, address, contact information, and an associated department.
- II. Ability to assign demonstrators to specific courses or labs.
- III. View demonstrator profiles and their assigned courses.

#### 5. Manage Department

- I. Department should have a unique ID, name, and list of associated courses.
- II. Ability to add new departments and update existing department information.
- III. View department profiles and the list of courses it offers.

#### 6. Manage Course Unit

- I. Course unit should have a unique ID, name, associated department, lecturer(s), and a list of enrolled students.
- II. Ability to add new course units, update existing ones, and assign lecturers.
- III. View course unit details, including enrolled students and their performance.

#### 7. Manage Attendance

- I. Attendance records should be associated with specific course units and dates.
- II. Ability to record and update attendance for students.
- III. View attendance reports for each course unit

#### 8. Medical Submission

- I. Medical submissions should be associated with specific students and dates.
- II. Ability to record and update medical submissions.
- III. View medical submission records.

## 9. Manage Past Papers

- I. Past papers should be associated with specific course units and exam types.
- II. Ability to upload, update past papers, view & download past papers.

## 10. Manage Exam Registration

- I. Exam registration should be associated with specific course units, students, and exam dates.
- II. Ability to register students for exams and update registrations.
- III. View exam registration details

## 11. Manage GPA

- I. GPA should be calculated based on the grades earned in course units.
- II. Ability to view GPA for individual students and generate reports.

## 12. Manage Notices

- I. Notices should be associated with specific departments or the entire institution.
- II. Ability to create and distribute notices to students and staff.
- III. View and archive notices.

## 13. Manage Payable

- I. Payables should be associated with specific students and fee types.
- II. Ability to record and update payables.
- III. View payable records and generate invoices.

## 14. Manage Marks

- I. Marks should be associated with a specific course unit, student, and assessment type (e.g., midterm, final exam).
- II. Ability to enter and update student marks.

- III. View student marks and calculate course unit grades.

### 3) Data Dictionaries

Student Table		
Field Name	Data Type	Field Size
<u>Student_ID</u>	VARCHAR	5
Name	VARCHAR	20
Date of Birth	DATE	10
Contact info	VARCHAR	15
Address	VARCHAR	20
Gender	CHAR	1

Lecture Table		
Field Name	Data Type	Field Size
Lecture_ID	VARCHAR	5
Name	VARCHAR	20
Date of Birth	DATE	10
Contact info	VARCHAR	15
Address	VARCHAR	20
Gender	CHAR	1

Group Contribution	
TG/2021/1072	IMAL KESARA
TG/2021/1078	NIWANTHA NILUKA
TG/2021/1037	GIHAN SACHITH
TG/2021/1021	RAVINDU HARSHANA

THANK YOU... .