



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

**SCHOOL OF COMPUTING**  
Faculty of Engineering

# Group Project

SECD2523 DATA BASE

SEMESTER I, SESSION 2020/2021

**Title: UTM Rubric Grading System**

Phase: P1 – Database Planning & System Definition

Lecturer: Dr. Haslina binti Hashim

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Section: 06

Programme: Bachelor of Computer Science (Software Engineering)

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## **1.0 Introduction: Overview of The Current / Existing System**

School of Computing is an association that handle student's courses that related to the field of computing. This association register the students according to the program that they choose. Each of the programs provides courses that are compulsory for them to enrol. Every course will have lecturer to evaluate the assessment that they receive based on the rubrics that were implemented from the senior lecturer. The implementation of rubric helps to grade the student based on Course Learning Outcome (CLO) and Program Learning Outcome (PLO). However, the implementation of a rubric is not being utilized by some of the lecturers since it is hard to be implemented. The grading system that is used by the lecturer is based on experiences of them.

Since there is no rubric grading system for School of Computing, the course coordinator has to create the rubric manually based on CLO and PLO. It is hard for the course coordinator to come up with a rubric and provide a report of CLO and PLO achievement for each of the section at the end of each semester to be given to program coordinator. As the system is manually done, the course coordinator has to seek and ask for each lecturer that teaches the particular course to submit their report so that it can be compiled to form a report of the course, then the report will then be given to program coordinator. As the number of students enrolls into the course are increasing, it is quite a burden for the association to come up will the report using the manual system. Hence, a new system needs to be implemented.

## **2.0 Database Planning**

### **Mission statement**

The main purpose of the Rubric Grading Database System is to perform centralized data storage for all relevant data to support online data transactions. This system should be able to increase efficiency and replace the old manual grading system. One of the problems that the current grading system suffered is the difficulty in creating assignment rubric in an entirely manual system. Therefore, the Rubric Grading Database System is designed to solve this problem by providing a bank of rubrics templates consisting of different subjects and types to be provided in a medium. Last but not least, the Rubric Grading Database System should ease the integration of grading rubric into the grading assignment process so that the instructors are not required to manually calculate the score of the student's assignment.

### **Mission Objective**

The mission objectives of the database planning are:

- A) To maintain (adding, deleting and updating data on student, lecturer and program coordinator
- B) To maintain (adding, deleting, updating) data on the rubric, grade report, assignment submission, achievement report
- C) To perform searches on the rubric
- D) To perform searches on student and section performance
- E) To track the status of assignment submission
- F) To report on the student grade report
- G) To report on CLO and PLO achievement report

### 3.0 System Definition

#### 3.1 System Boundary

In our system, the admin is responsible to maintain the database to ensure it can be run smoothly. The lecturer generally will be able to use all the system functionality as well as responsible for the management of data resources. On perspective as a program coordinator, they can view courses CLO and PLO achievement report. For the students, they will have a minimal view, whereas they only can view their assignments as well as the grade report.

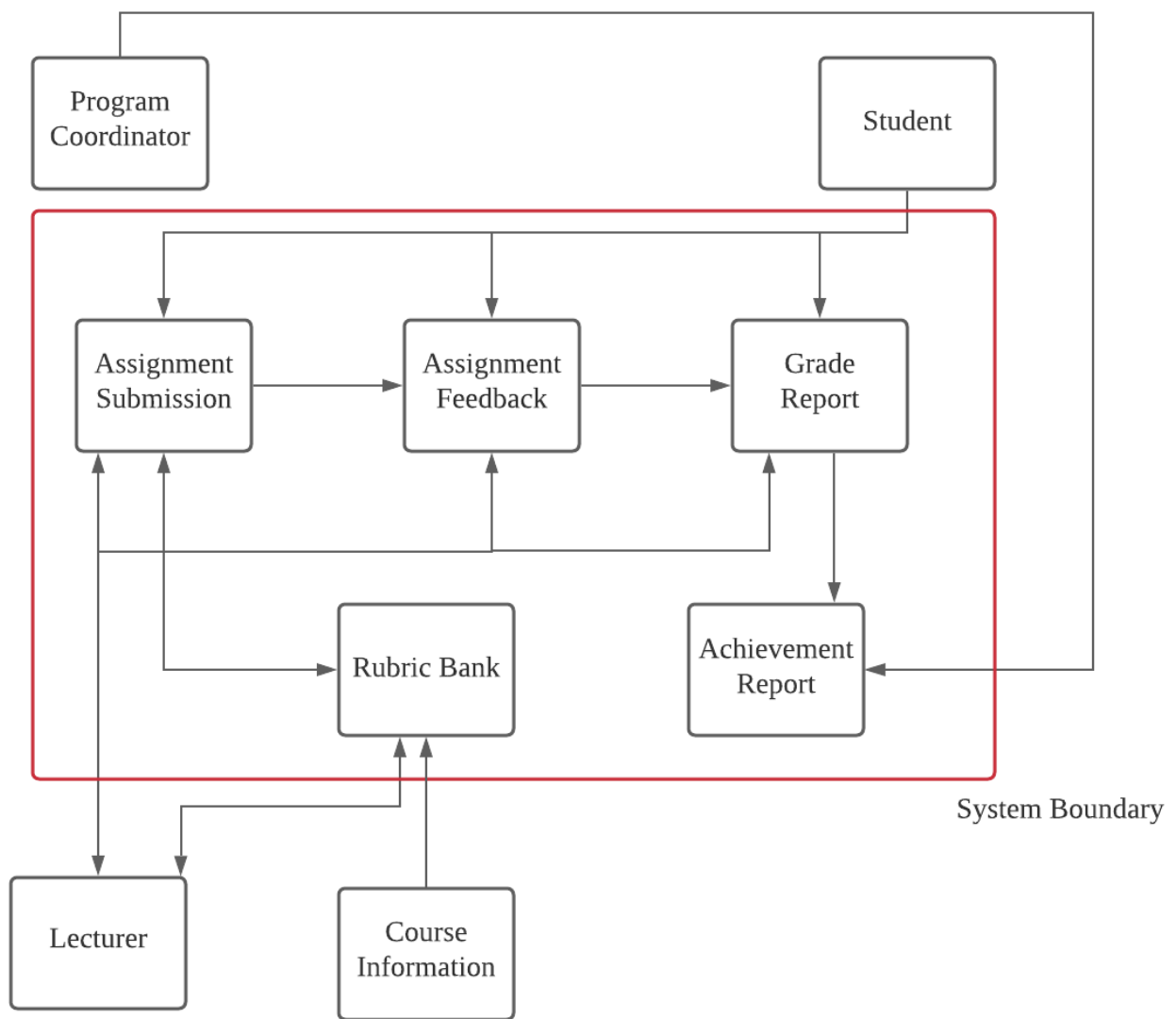


Figure 3.1: System Boundary Diagram

### **3.2 Major User View**

#### Admin

- Able to access all the physical design of the database using Database Management Software (DBMS).
- Able to implement and manipulate data gathered.
- Able to maintain the system

#### Lecturer

- Able to view the physical design of the database.
- Able to alter data in the database.

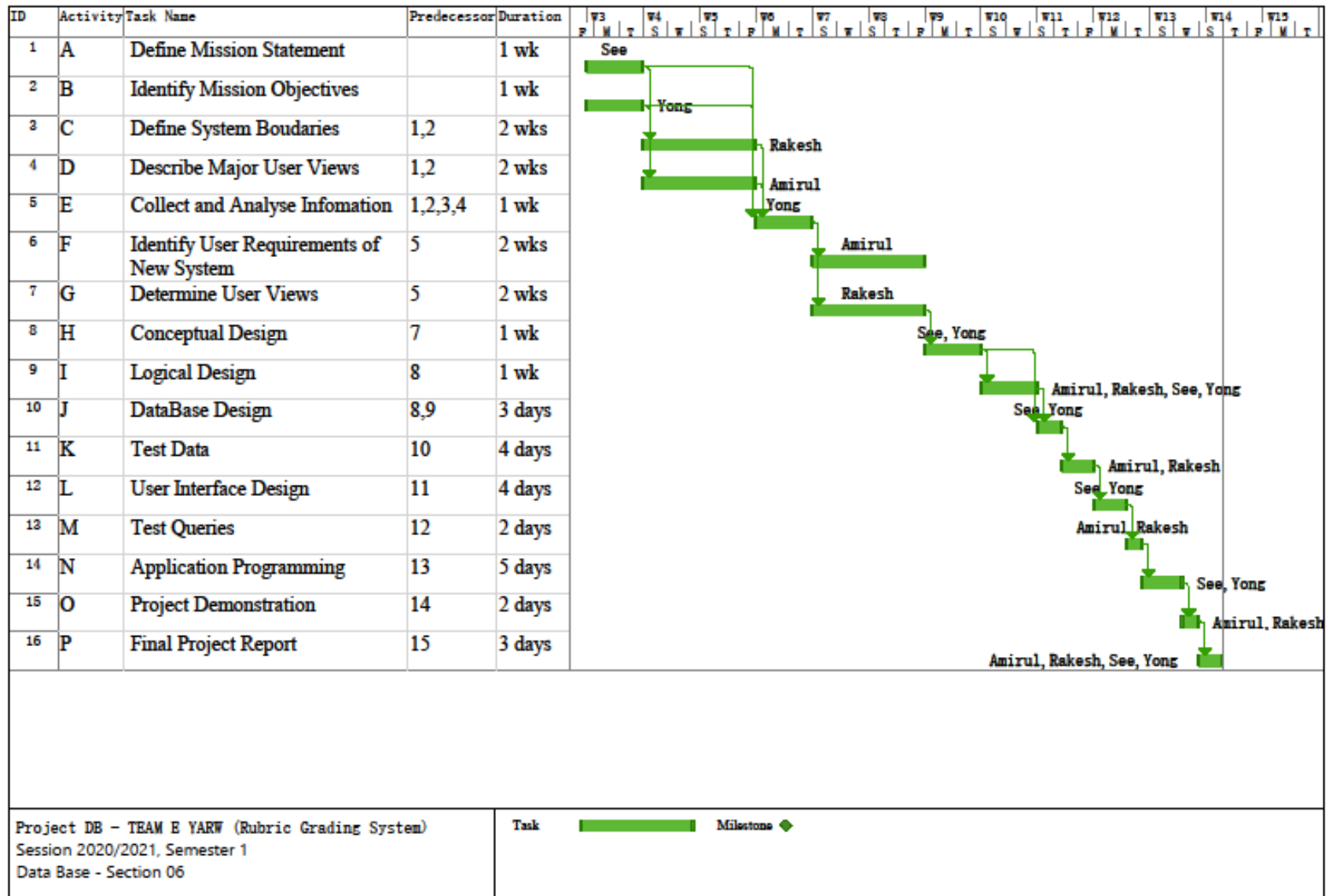
#### Students

- Able to view data related to the user.

Table 3.1: Major User Views

Data	Access Type	Admin	Program Coordinator	Lecturer	Student
Assignment Submission	Maintain			X	X
	Query			X	
	Report			X	X
Rubric Bank	Maintain			X	
	Query			X	
	Report			X	
Assignment Feedback	Maintain			X	
	Query			X	
	Report			X	X
Grade Report	Maintain			X	
	Query			X	
	Report			X	X
Achievement Report	Maintain			X	
	Query		X		
	Report		X		
Student	Maintain	X			
	Query	X		X	
	Report			X	X
Lecturer	Maintain	X			
	Query	X			
	Report				
Program Coordinator	Maintain	X			
	Query	X			
	Report				

#### 4.0 Gantt Chart







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SECD2523 DATA BASE

SEMESTER I, SESSION 2020/2021

**Title: UTM Rubric Grading System**

Phase: P2 – User’s Requirement Specification

Lecturer: Dr. Haslina binti Hashim

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## 1.0 Data Requirements

<b>Entity</b>	<b>Data to be stored</b>	<b>Description</b>
Submission	<ol style="list-style-type: none"> <li>1. SubmissionTime</li> <li>2. SubmissionStatus</li> <li>3. SubmissionDue</li> <li>4. SubmissionID</li> </ol>	<ul style="list-style-type: none"> <li>• Submission ID are unique.</li> <li>• Duration left for the submission are calculated based on submission due and submission time.</li> </ul>
Feedback	<ol style="list-style-type: none"> <li>1. FeedbackTime</li> <li>2. FeedbackMessage</li> <li>3. AssignmentMarks</li> <li>4. FeedbackID</li> </ol>	<ul style="list-style-type: none"> <li>• Feedback ID are unique</li> </ul>
Rubric Bank	<ol style="list-style-type: none"> <li>1. RubricID</li> <li>2. RubricContent</li> <li>3. RatingReview</li> <li>4. Author</li> </ol>	<ul style="list-style-type: none"> <li>• Rubric ID are unique.</li> </ul>
Achievement Report	<ol style="list-style-type: none"> <li>1. ReportID</li> <li>2. CLO_KPI</li> <li>3. PLO_KPI</li> <li>4. CLO_Achievement</li> <li>5. PLO_Achievement</li> </ol>	<ul style="list-style-type: none"> <li>• Report ID are unique.</li> </ul>
Grade Report	<ol style="list-style-type: none"> <li>1. Score</li> <li>2. CLO_Achievement</li> <li>3. PLO_Achievement</li> </ol>	<ul style="list-style-type: none"> <li>• No unique attributes</li> </ul>
Admin	<ol style="list-style-type: none"> <li>1. AdminID</li> <li>2. Password</li> <li>3. Email</li> </ol>	<ul style="list-style-type: none"> <li>• There is one admin only for the system</li> <li>• Admin ID are unique</li> </ul>
Student	<ol style="list-style-type: none"> <li>1. StudentID</li> <li>2. Password</li> <li>3. Email</li> <li>4. StudentName</li> </ol>	<ul style="list-style-type: none"> <li>• Student ID are unique.</li> </ul>
Lecturer	<ol style="list-style-type: none"> <li>1. StaffID</li> <li>2. StaffName</li> <li>3. Email</li> <li>4. CourseID</li> <li>5. SectionNo</li> <li>6. Password</li> </ol>	<ul style="list-style-type: none"> <li>• The combination of Staff ID and Course ID are unique</li> </ul>
Program Coordinator	<ol style="list-style-type: none"> <li>1. ProgramID</li> <li>2. AppointSession</li> <li>3. Password</li> <li>4. StaffName</li> <li>5. StaffID</li> <li>6. Email</li> </ol>	<ul style="list-style-type: none"> <li>• Program ID are unique.</li> </ul>

## 2.0 Transaction Requirements

Entity	Data	Data Entry	Data Update	Data Delete	Data Queries
Submission	SubmissionTime SubmissionStatus SubmissionDue SubmissionID	Submission data enter by the lecturer	Submission data update by the lecturer and student	Submission data delete by the lecturer and student	Query on submission data by lecturer.  Student can view own assignment submission.
Rubric Bank	RubricID RubricContent RatingReview Author	Create rubric by lecturer.	Rubric update by lecturer.	Rubric delete by lecturer.	Search on rubric template by lecturer, and view by lecturer.
Feedback	FeedbackID FeedbackTime FeedbackMessage AssignmentMarks	Feedback send by lecturer.	Feedback update by lecturer.	Feedback delete by lecturer.	Student can view feedback.  lecturer can view the feedback given to student
Grade Report	Score CLO_Achievement PLO_Achievement	Student and course name enter manually by lecturer.  Score, CLO, PLO is generated automatically by system	Student and course name update by lecturer.  Score, CLO, PLO update by system	Grade Report delete manually by lecturer.	Query on student grade report by lecturer.  Student can view own grade report
Achievement Report	ReportID CLO_KPI PLO_KPI CLO_Achievement PLO_Achievement	Achievement data is sent by lecturer.	Achievement data update by lecturer.	Achievement data delete by lecturer.	Query on section achievement report by program coordinator

Student	StudentName StudentID Password Email	Sign up student account by admin	Admin update student information	Admin delete student	Query on student information by lecturer, admin.  Student can view information.
Lecturer	StaffName StaffID CourseID SectionNo Email Password	Sign up lecturer account by admin	Admin update lecturer information	Admin delete lecturer	Query on lecturer information by admin.  Instructor can view information
Program Coordinator	StaffName StaffID AppointSession ProgramID ReportID	Sign up program coordinator account by admin	Admin update program coordinator information	Admin delete program coordinator	Query on program coordinator information by admin
Admin	Name StaffID Password Email	Admin create own account	Admin update own information	Admin delete its own account	Admin can view own information

### 3.0 Cross-Reference

<b>Data</b>	<b>Access Type</b>	<b>Admin</b>	<b>Program Coordinator</b>	<b>Lecturer</b>	<b>Student</b>
Assignment Submission	Insert			X	
	Update			X	X
	Delete			X	X
	View			X	X
Rubric Bank	Insert			X	
	Update			X	
	Delete			X	
	View			X	
Assignment Feedback	Insert			X	
	Update			X	
	Delete			X	
	View			X	X
Grade Report	Insert			X	
	Update			X	
	Delete			X	
	View			X	X

Achievement Report	Insert			X	
	Update			X	
	Delete			X	
	View		X		
Student	Insert	X			
	Update	X			
	Delete	X			
	View	X		X	X
Lecturer	Insert	X			
	Update	X			
	Delete	X			
	View	X		X	
Program Coordinator	Insert	X			
	Update	X			
	Delete	X			
	View	X			



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SEMESTER I, SESSION 2020/2021

**Title: UTM Rubric Grading System**

Phase: P3 – Conceptual Design

Lecturer: Dr. Haslina binti Hashim

Group name: YARW	
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AMIRUL SYAFIQ BIN MOHD QISTI	A19EC0020
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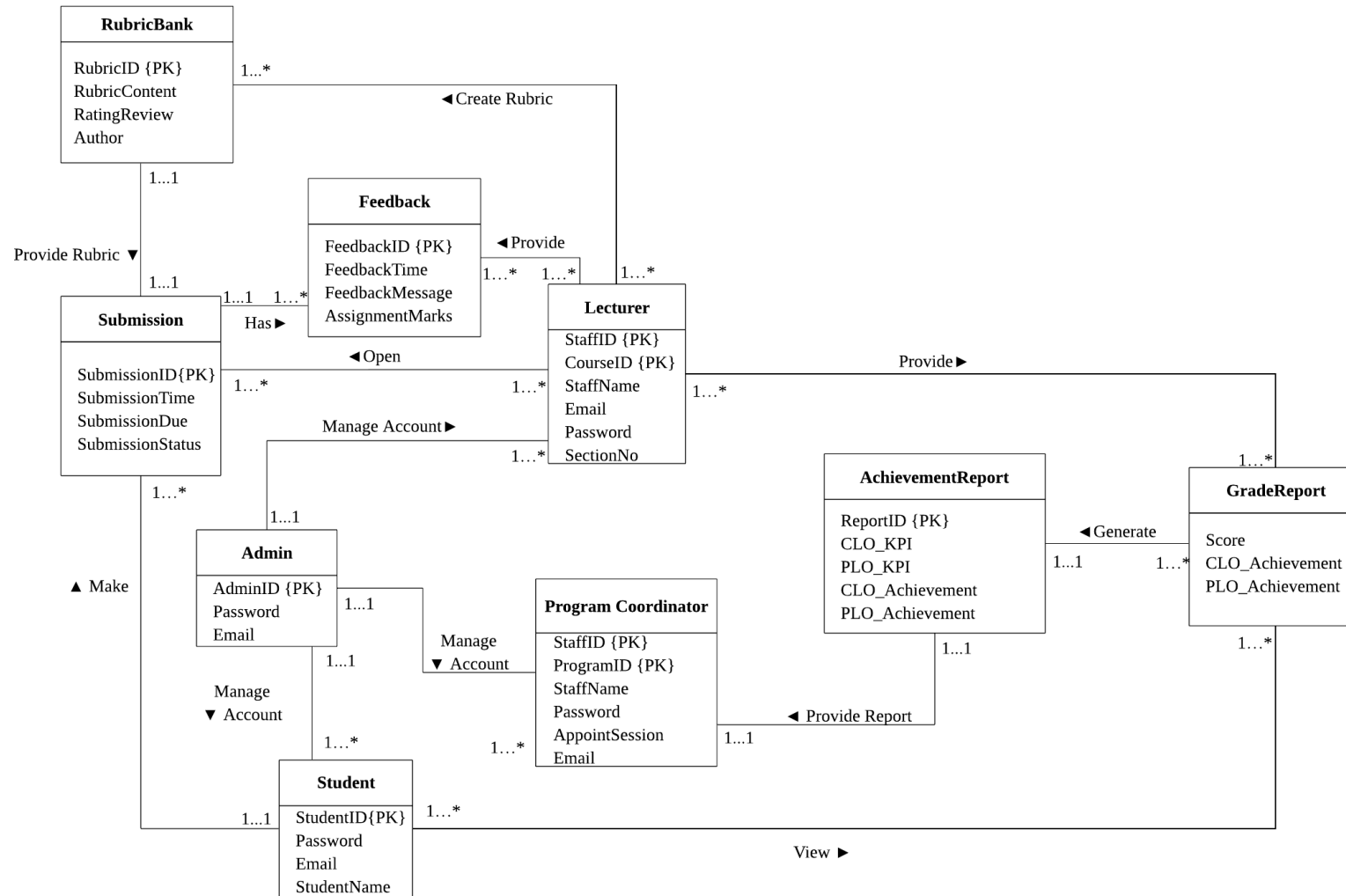
Programme: Bachelor of Computer Science (Software Engineering)



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# 1.0 Entities Relationship Diagram (ERD)



## 2.0 Data Dictionary

### 2.1 Description of Entities

Entity	Description	Occurrence
Admin	Hold data of admin	Admin is the manager of the system. Admin can manage registration of student and lecturer. Admin can add, update and delete account of student and lecturer.
Lecturer	Hold data of lecturer	Lecturer is staff in UTM and has staff ID. Lecturer teaches courses. Lecturer can add and edit the rubric in rubric bank. Lecturer can give feedback on student's assignment. Lecturer manage student's assignment submission and student's grade report. Lecturer report student's CLO and PLO achievement to program coordinator.
Program Coordinator	Hold data of program coordinator	Program coordinator is owner of a specific program of school. Program coordinator needs to view CLO and PLO Cohort Report and achievement of every course under the program.

Student	Hold data of student	Student submit assignment answer. Student can view their grade report and feedback from lecturer.
Grade Report	Hold data of grade report	Grade report consists of each student's CLO and PLO achievement and score. Grade report can view by student, lecturer.
Assignment Submission	Hold data of student assignment submission	Assignment submission is sent by student and manage by lecturer.
Feedback	Hold data of lecturer feedback	Feedback is made by lecturer. Student can view feedback.
Achievement Report	Hold data of achievement report	Achievement report is generated from students' grade report. Achievement report is viewed by program coordinator.
Rubric Bank	Hold data of rubric	Rubric bank stored rubric and rubric templates. Lecturer can access and make query from rubric bank.

## 2.2 Description of Relationship

Entity	Multiplicity	Relationship	Multiplicity	Entity
Admin	1..1	Manage Account	1...*	Student
	1..1	Manage Account	1...*	Lecturer
	1..1	Manage Account	1...*	Program Coordinator
Lecturer	1...*	Provide	1...*	Grade Report
	1...*	Open	1...*	Submission
	1...*	Provide	1...*	Feedback
	1...*	Create Rubric	1...*	Rubric Bank
Student	1...*	View	1...*	Grade Report
	1..1	Make	1..*	Submission
Submission	1...*	Provide answer script	1...*	Lecturer
	1..1	Have	1...*	Feedback
Rubric Bank	1..1	Provide Rubric	1.. 1	Submission
Achievement Report	1..1	Provide Report	1..1	Program Coordinator
Grade Report	1...*	Generate	1..1	Achievement Report

### 2.3 Description of Attributes

Entity	Attribute	Description	Data Type	Constraint
Admin	AdminID	ID of admin account	VARCHAR2(25)	PRIMARY KEY
	Password	Account password	VARCHAR2(25)	NOT NULL
	Email	Account email	VARCHAR2(25)	NOT NULL
Lecturer	StaffID	ID of UTM staff	VARCHAR2(25)	PRIMARY KEY
	CourseID	ID of course	VARCHAR2(25)	PRIMARY KEY
	StaffName	Name of UTM staff	VARCHAR2(25)	NOT NULL
	Email	Email of UTM staff	VARCHAR2(25)	NOT NULL
	Password	Password of account	VARCHAR2(25)	NOT NULL
	SectionNo	Code of section	NUMBER(2)	NOT NULL
Program Coordinator	ProgramID	ID of program	VARCHAR2(25)	PRIMARY KEY
	StaffID	ID of UTM staff	VARCHAR2(25)	PRIMARY KEY
	StaffName	Name of UTM staff	VARCHAR2(25)	NOT NULL
	AppointSession	Session duration of program coordinator	NUMBER(4)	NOT NULL
	Password	Password of account	VARCHAR2(25)	NOT NULL
	Email	Email of UTM staff	VARCHAR2(25)	NOT NULL

Student	StudentID	ID of student	VARCHAR2(25)	PRIMARY KEY
	Password	Password of account	VARCHAR2(25)	NOT NULL
	Email	Student UTM email	VARCHAR2(25)	NOY NULL
	StudentName	Name of student	VARCHAR2(25)	NOT NULL
Submission	SubmissionID	ID of assignment submission	VARCHAR2(25)	PRIMARY KEY
	SubmissionTime	Time of submission made	TIMESTAMP	NOT NULL
	SubmissionStatus	Status of submission	VARCHAR2(15)	NOT NULL
	SubmissionDue	Submission due date	TIMESTAMP	NOT NULL
Feedback	FeedbackID	ID of feedback	VARCHAR2(25)	PRIMARY KEY
	FeedbackTime	Time when feedback created	TIMESTAMP	NOT NULL
	FeedbackMessage	Message wrote in feedback	VARCHAR2(400)	NOT NULL
	AssignmentMarks	Score of assignment	NUMBER(4)	NOT NULL
RubricBank	RubricID	ID of rubric made	VARCHAR2(25)	PRIMARY KEY
	RubricContent	Information of rubric	VARCHAR2(500)	NOT NULL
	RatingReview	Review rate	NUMBER(3)	NOT NULL
	Author	Rubric Author	VARCHAR2(25)	NOT NULL

Achievement Report	ReportID	ID of report	VARCHAR2(25)	PRIMARY KEY
	CLO_KPI	KPI of CLO	NUMBER(4)	NOT NULL
	PLO_KPI	KPI of PLO	NUMBER(4)	NOT NULL
	CLO_Achievement	Sections CLO results	NUMBER(4)	NOT NULL
	PLO_Achievement	Sections PLO results	NUMBER(4)	NOT NULL
Grade Report	Score	Score of student	NUMBER(4)	NOT NULL
	CLO_Achievement	Student CLO result	NUMBER(4)	NOT NULL
	PLO_Achievement	Student PLO result	NUMBER(4)	NOT NULL



### **3.0 System's Functional Requirement**

#### **3.1 Data Requirements**

<b>Entity</b>	<b>Data to be stored</b>	<b>Description</b>
Submission	<ol style="list-style-type: none"><li>1. SubmissionTime</li><li>2. SubmissionStatus</li><li>3. SubmissionDue</li><li>4. SubmissionID</li></ol>	<ul style="list-style-type: none"><li>• Submission ID are unique.</li><li>• Duration left for the submission are calculated based on submission due and submission time.</li></ul>
Feedback	<ol style="list-style-type: none"><li>1. FeedbackTime</li><li>2. FeedbackMessage</li><li>3. AssignmentMarks</li><li>4. FeedbackID</li></ol>	<ul style="list-style-type: none"><li>• Feedback ID are unique</li></ul>
Rubric Bank	<ol style="list-style-type: none"><li>1. RubricID</li><li>2. RubricContent</li><li>3. RatingReview</li><li>4. Author</li></ol>	<ul style="list-style-type: none"><li>• Rubric ID are unique.</li></ul>
Achievement Report	<ol style="list-style-type: none"><li>1. ReportID</li><li>2. CLO_KPI</li><li>3. PLO_KPI</li><li>4. CLO_Achievement</li><li>5. PLO_Achievement</li></ol>	<ul style="list-style-type: none"><li>• Report ID are unique.</li></ul>
Grade Report	<ol style="list-style-type: none"><li>1. Score</li><li>2. CLO_Achievement</li><li>3. PLO_Achievement</li></ol>	<ul style="list-style-type: none"><li>• No unique attributes</li></ul>

Admin	<ol style="list-style-type: none"> <li>1. AdminID</li> <li>2. Password</li> <li>3. Email</li> </ol>	<ul style="list-style-type: none"> <li>• There is one admin only for the system</li> <li>• Admin ID are unique</li> </ul>
Student	<ol style="list-style-type: none"> <li>1. StudentID</li> <li>2. Password</li> <li>3. Email</li> <li>4. StudentName</li> </ol>	<ul style="list-style-type: none"> <li>• Student ID are unique.</li> </ul>
Lecturer	<ol style="list-style-type: none"> <li>1. StaffID</li> <li>2. StaffName</li> <li>3. Email</li> <li>4. CourseID</li> <li>5. SectionNo</li> <li>6. Password</li> </ol>	<ul style="list-style-type: none"> <li>• The combination of Staff ID and Course ID are unique.</li> </ul>
Program Coordinator	<ol style="list-style-type: none"> <li>1. ProgramID</li> <li>2. AppointSession</li> <li>3. Password</li> <li>4. Email</li> <li>5. StaffID</li> <li>6. StaffName</li> </ol>	<ul style="list-style-type: none"> <li>• Program ID are unique.</li> </ul>

### 3.2 Transaction Requirements

Entity	Data	Data Entry	Data Update	Data Delete	Data Queries
Submission	SubmissionTime SubmissionStatus SubmissionDue SubmissionID	Submission data enter by the lecturer	Submission data update by the lecturer and student	Submission data delete by the lecturer and student	Query on submission data by lecturer.  Student can view own assignment submission.
Rubric Bank	RubricID RubricContent RatingReview Author	Create rubric by lecturer.	Rubric update by lecturer.	Rubric delete by lecturer.	Search on rubric template by lecturer, and view by lecturer.
Feedback	FeedbackID FeedbackTime FeedbackMessage AssignmentMarks	Feedback send by lecturer.	Feedback update by lecturer.	Feedback delete by lecturer.	Student can view feedback.  lecturer can view the feedback given to student
Grade Report	Score CLO_Achievement PLO_Achievement	Student and course name enter manually by lecturer.  Score, CLO, PLO is generated automatically by system	Student and course name update by lecturer.  Score, CLO, PLO update by system	Grade Report delete manually by lecturer.	Query on student grade report by lecturer.  Student can view own grade report
Achievement Report	ReportID CLO_KPI PLO_KPI CLO_Achievement PLO_Achievement	Achievement data is sent by lecturer.	Achievement data update by lecturer.	Achievement data delete by lecturer.	Query on section achievement report by program coordinator

Student	StudentName StudentID Password Email	Sign up student account by admin	Admin update student information	Admin delete student	Query on student information by lecturer, admin.  Student can view information.
Lecturer	StaffName StaffID CourseID SectionNo Email Password	Sign up lecturer account by admin	Admin update lecturer information	Admin delete lecturer	Query on lecturer information by admin.  Instructor can view information
Program Coordinator	StaffName StaffID AppointSession ProgramID ReportID	Sign up program coordinator account by admin	Admin update program coordinator information	Admin delete program coordinator	Query on program coordinator information by admin
Admin	Name StaffID Password Email	Admin create own account	Admin update own information	Admin delete its own account	Admin can view own information

#### 4.0 Logical DFD

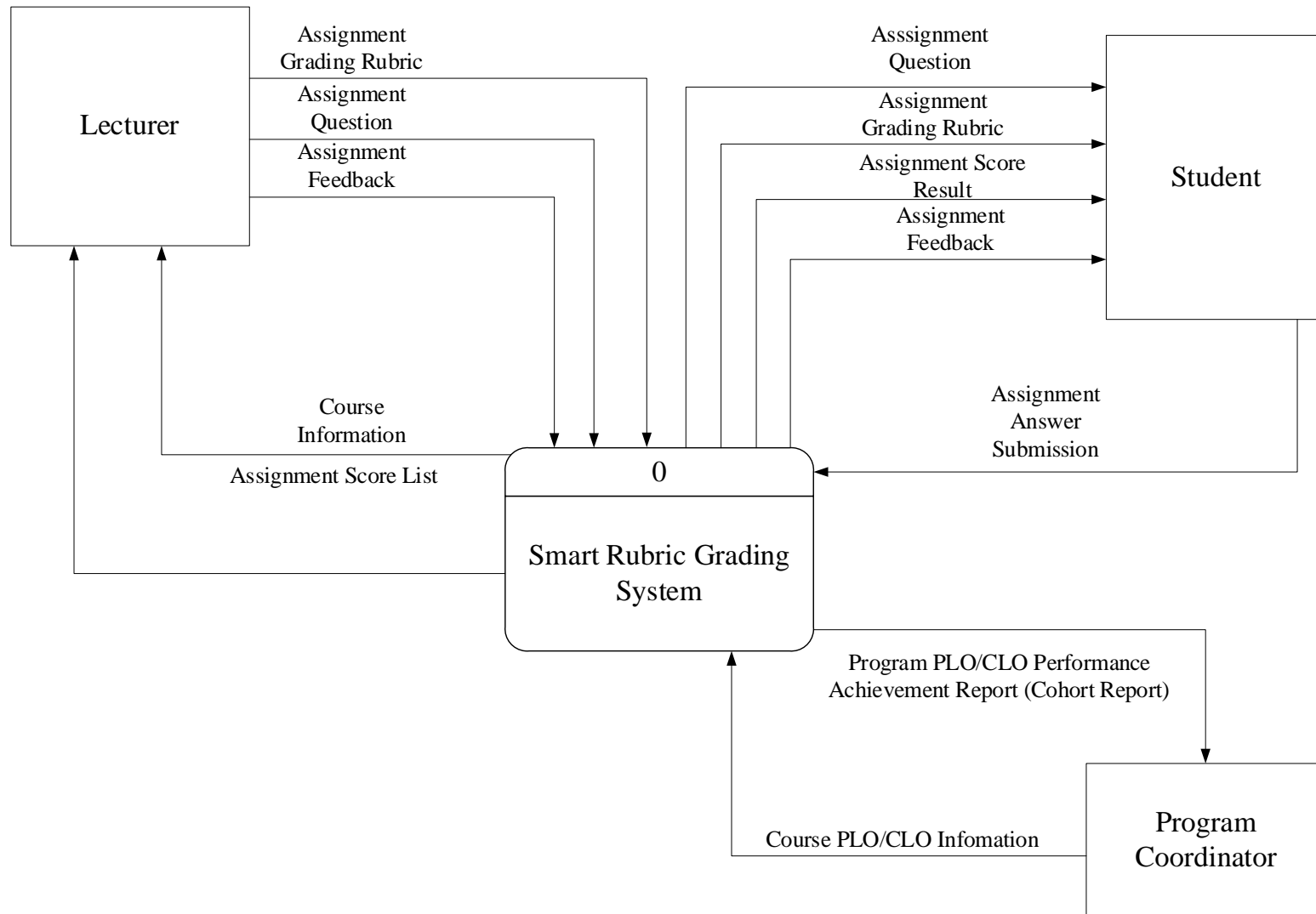


Figure 4.1 Context Diagram

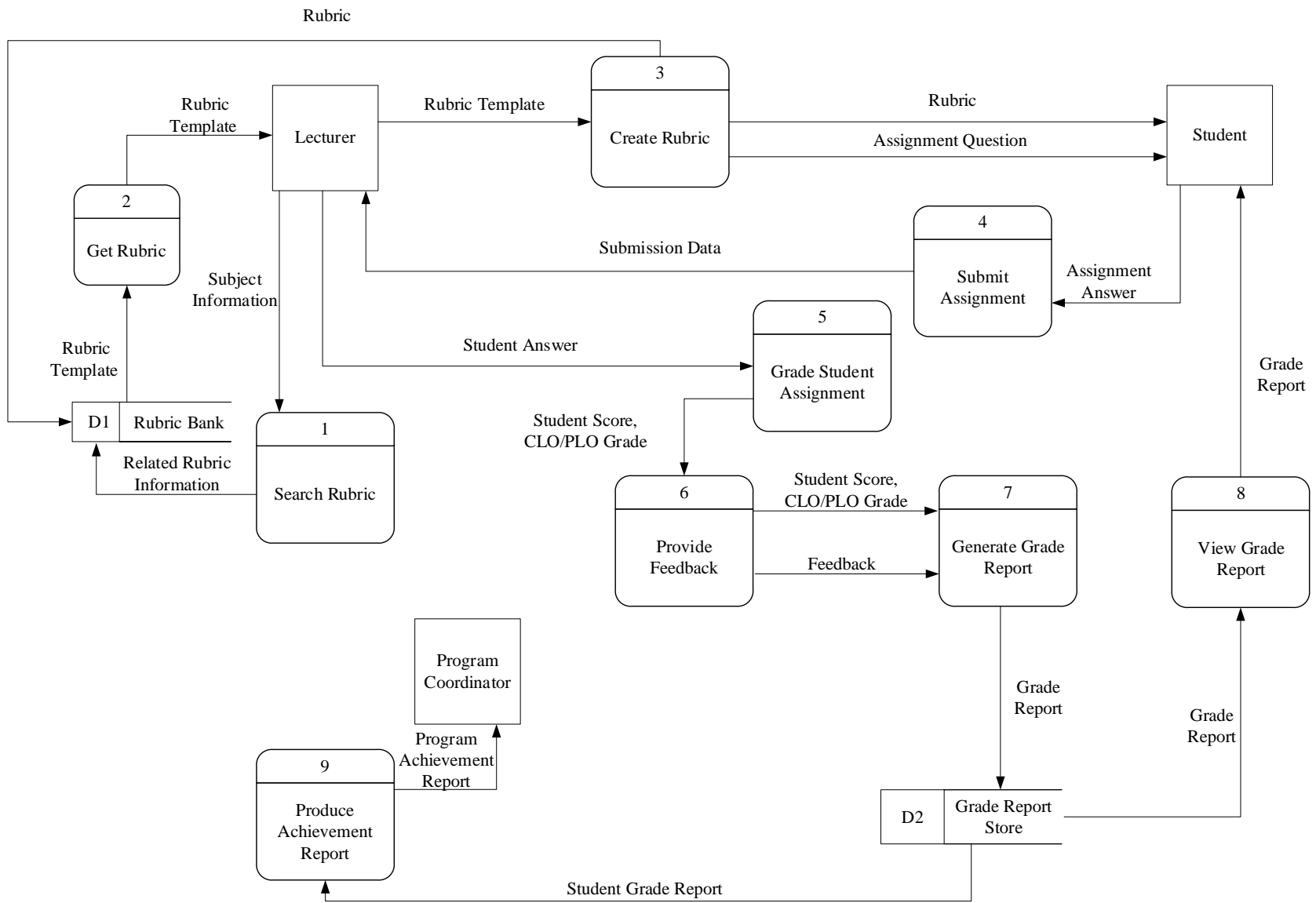


Figure 4.2 Parent Diagram

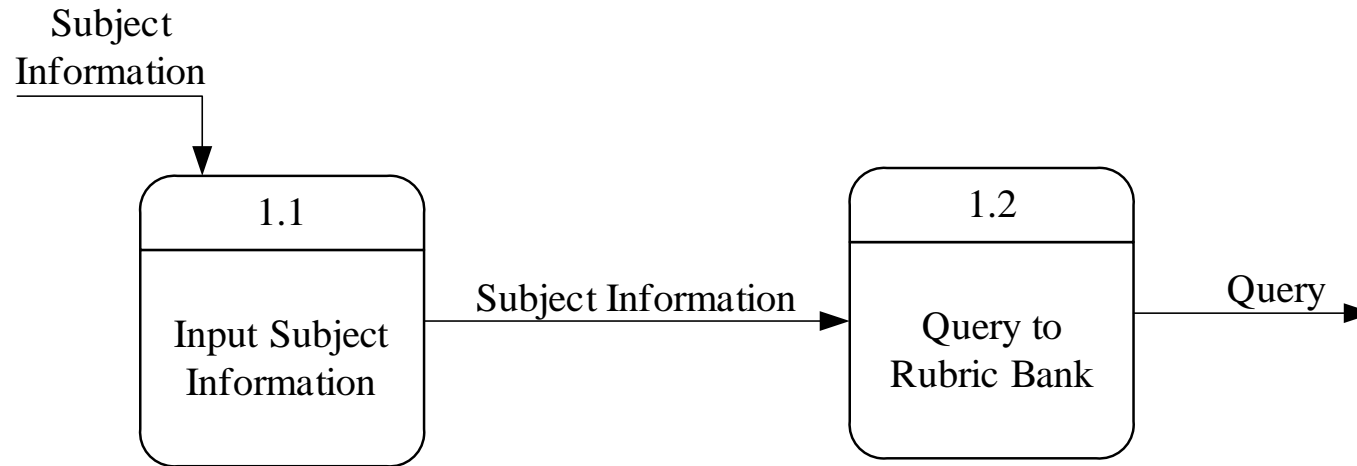


Figure 4.3 Child Diagram (Process 1)

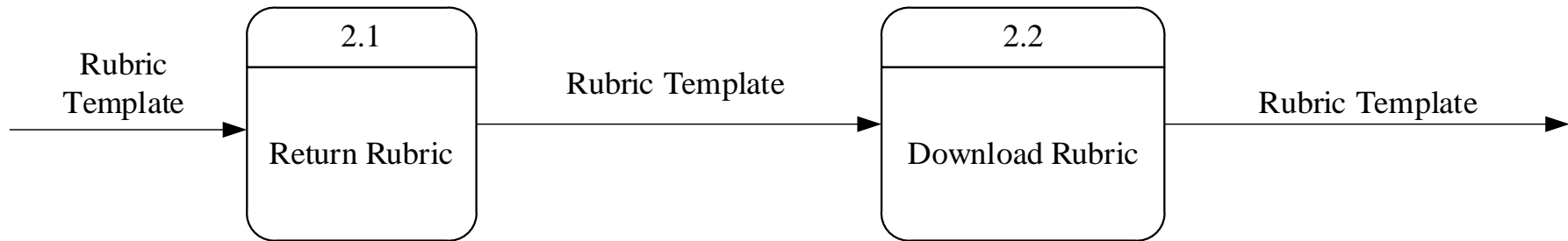


Figure 4.4 Child Diagram (Process 2)

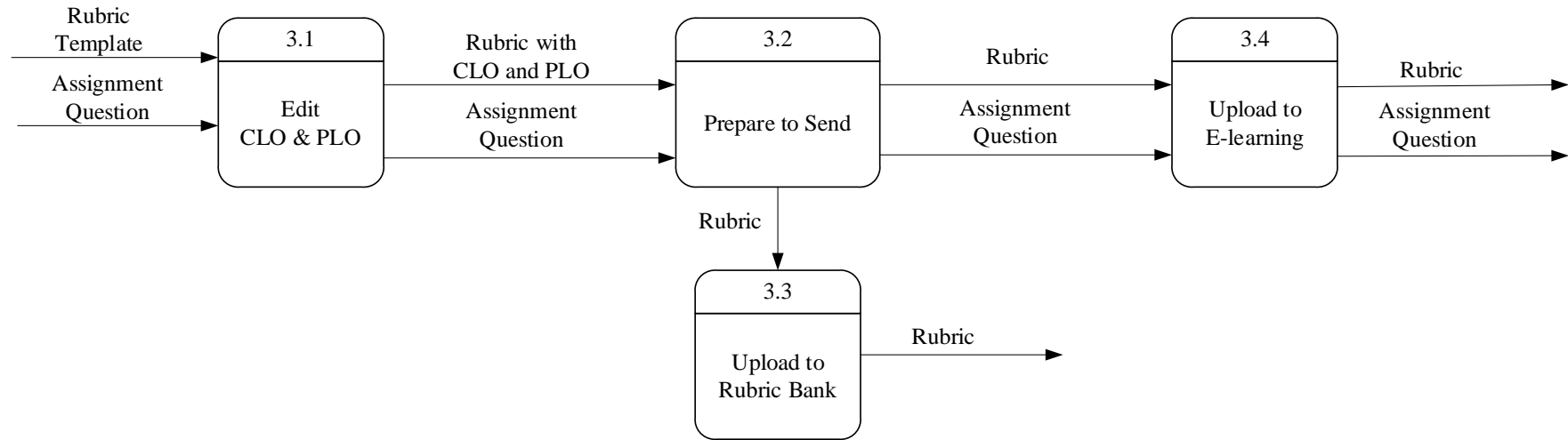


Figure 4.5 Child Diagram (Process 3)

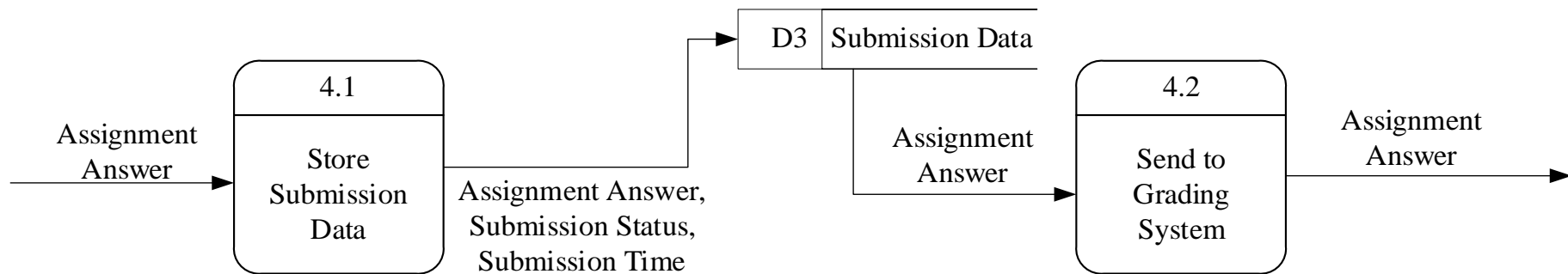


Figure 4.6 Child Diagram (Process 4)



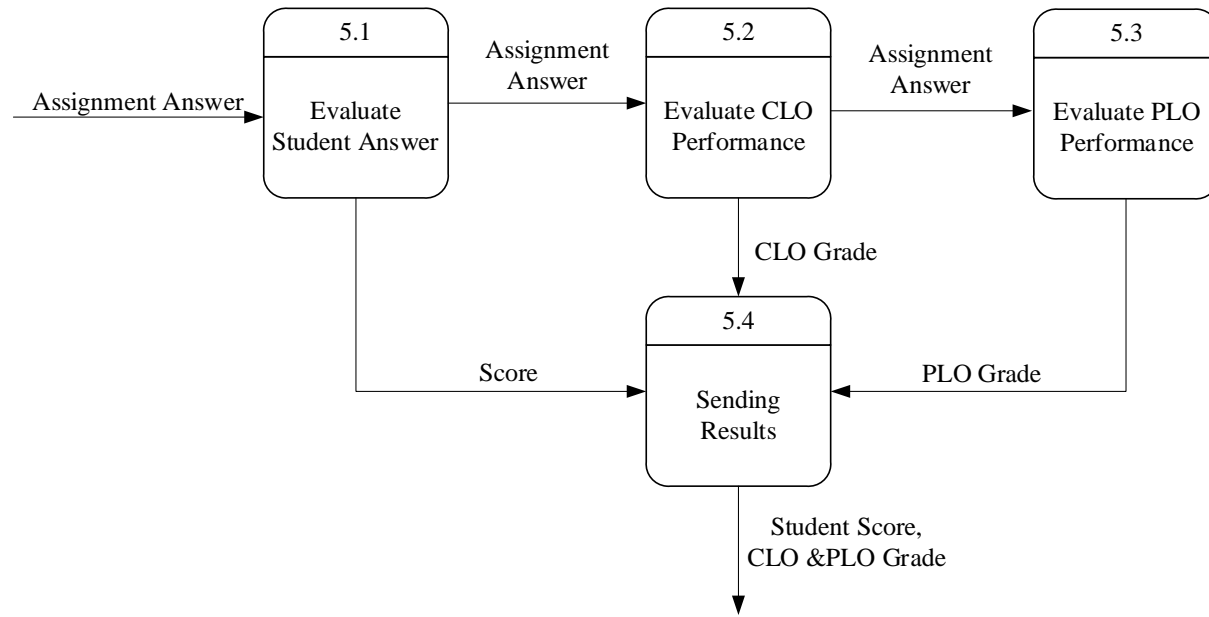


Figure 4.7 Child Diagram (Process 5)

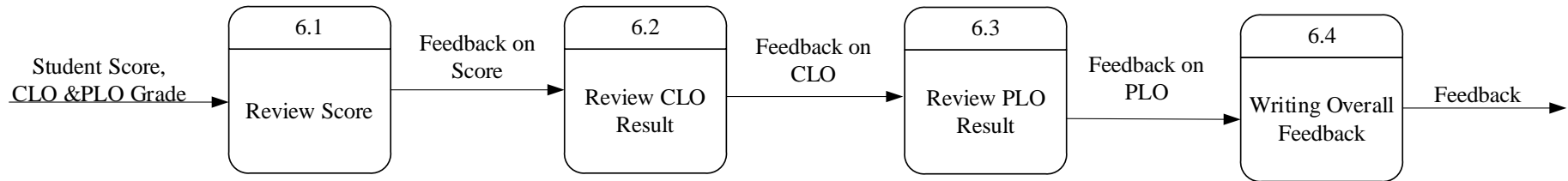


Figure 4.8 Child Diagram (Process 6)

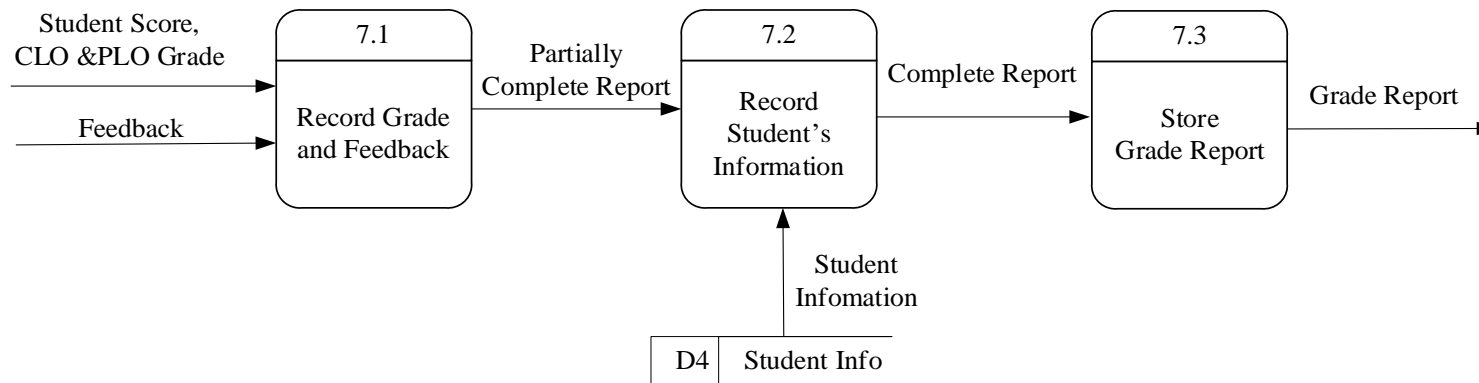


Figure 4.9 Child Diagram (Process 7)

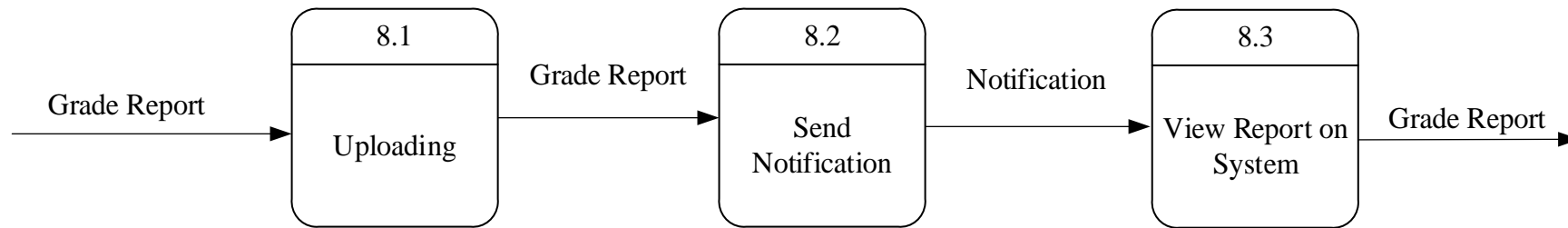


Figure 4.10 Child Diagram (Process 8)

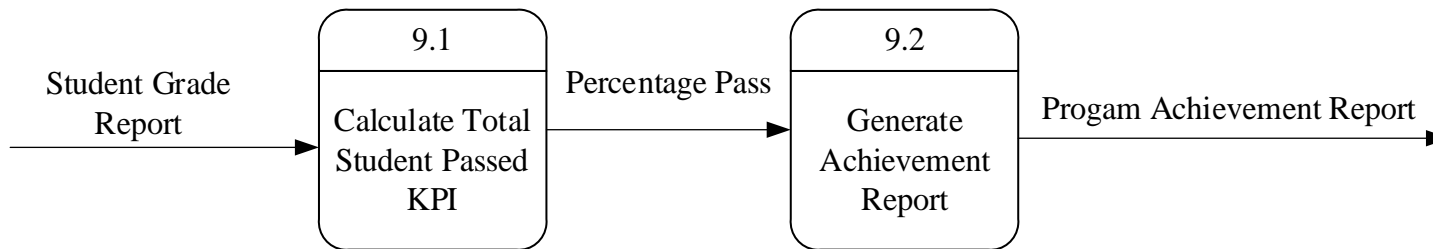


Figure 4.11 Child Diagram (Process 9)



**UTM**  
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**SCHOOL OF COMPUTING**  
Faculty of Engineering

# Group Project

SECD2523 DATA BASE

SEMESTER I, SESSION 2020/2021

**Title: UTM Rubric Grading System**

Phase:P4 – Logical Design

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Programme: Bachelor of Computer Science (Software Engineering)

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# 1. Logical ERD

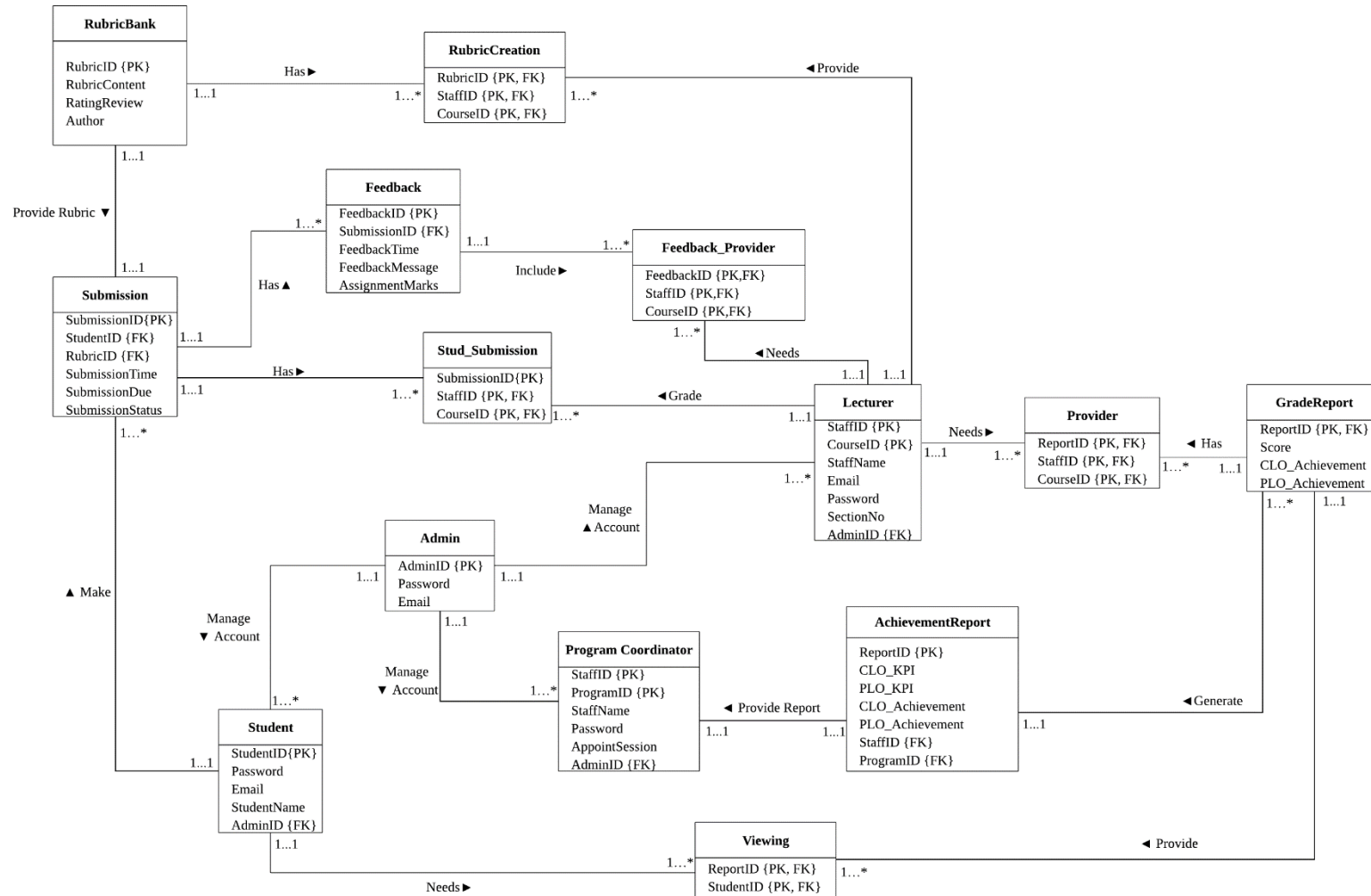


Figure 1.1 Logical ERD

## 2. Functional Dependencies

### First Normal Form(1NF)

FD1 -Primary Key: RubricID → Rating Review, Author, Rubric\_content

FD2 -Primary Key: StaffID, CourseID → StaffName, Email, SectionNo, AdminID, Password

FD3 -Partial Dependency: StaffID → StaffName, Email, Password

FD4 -Partial Dependency: CourseID → SectionNo

FD5 -Transitive Dependency: Email → Password

FD6 -Primary Key: SubmissionID → StudentID, RubricID, Submission Time, Submission Due,  
Submission Status

FD7 -Primary Key: FeedbackID → SubmissionID, FeedbackTime, FeedbackMessage,  
AssignmentMarks

FD8 -Primary Key: ReportID → PLO\_Achievement,, Score, CLO\_Achievement

FD9 -Primary Key: AdminID → Email, Password

FD10 -Transitive Dependency: Email → Password

FD11-Primary Key :StudentID → Email, StudentName, AdminID, Password

FD12 -Primary Key: StaffID, ProgramID → StaffName, Password, AppointSession, AdminID

FD13 -Partial Dependency :StaffID → StaffName, Password

FD14 -Primary Key : ReportID → CLO\_KPI, PLO\_KPI, PLO\_Achievement, StaffID, ProgramID

### 3. Normalization

#### First Normal Form (1NF)

##### **All of the Entity are already in First Normal Form(1NF)**

RubricBank(RubricID, Rubric\_content, RatingReview, Author)

RubricCreation(RubricID, StaffID, CourseID)

Lecturer(StaffID, CourseID, StaffName, Email, SectionNo, AdminID, Password)

Submission( SubmissionID, StudentID, RubricID, Submission Time, Submission Due, SubmissionStatus)

Feedback( FeedbackID, SubmissionID, FeedbackTime, FeedbackMessage, AssignmentMarks)

FeedbackProvider(FeedbackID, StaffID, CourseID)

Stud\_Submission(SubmissionID, StaffID, CourseID)

Provider(ReportID, StaffID, CourseID)

GradeReport(ReportID, Score, CLO\_Achievement, PLO\_Achievement)

Admin(AdminID, Email, Password)

Student(StudentID, Email, StudentName, AdminID, Password)

ProgramCoordinator(StaffID, ProgramID, StaffName, Password, AppointSession, AdminID)

AchievementReport(ReportID, CLO\_KPI, PLO\_KPI, CLO\_Achievement PLO\_Achievement, StaffID, ProgramID)

Viewing (ReportID, StudentID)

Second Normal Form (2NF)

RubricBank(RubricID, Rubric\_content, RatingReview, Author)

RubricCreation(RubricID, StaffID, CourseID)

**Lecturer(StaffID, CourseID, StaffName, Email, SectionNo, AdminID, Password)-(1NF)  
(2NF)→**

**Staff(StaffID, StaffName, Email, Password)**

**Course(CourseID, SectionNo)**

**Lecturer(StaffID, CourseID, AdminID)**

Submission(SubmissionID, StudentID, RubricID, Submission Time, Submission Due,  
SubmissionStatus)

Feedback( FeedbackID, SubmissionID, FeedbackTime, FeedbackMessage, AssignmentMarks)

FeedbackProvider(FeedbackID, StaffID, CourseID)

Stud\_Submission(SubmissionID, StaffID, CourseID)

Provider(ReportID, StaffID, CourseID)

GradeReport(ReportID, Score, CLO\_Achievement, PLO\_Achievement)

Admin(AdminID, Email, Password)

Student(StudentID, Email, StudentName, AdminID, Password)

Staff(StaffID, StaffName, Password)

ProgramCoordinator(StaffID, ProgramID, AppointSession, AdminID)

AchievementReport(ReportID, CLO\_KPI, PLO\_KPI, PLO\_Achievement, StaffID, ProgramID)

Viewing (ReportID, StudentID)



Third Normal Form (3NF)

RubricBank(RubricID, Rubric\_content, RatingReview, Author)

RubricCreation(RubricID, StaffID, CourseID)

**Staff(StaffID, StaffName, Email, password) -2NF**

(3NF) →

A                      B              C

**FD3:StaffID→StaffName, Email, Password**

B              C

**FD5:Email→Password**

**Emel(email, password)**

**Staff(StaffID, StaffName, Email)**

Course(CourseID, SectionNo)

Lecturer(StaffID, CourseID, AdminID)

Submission( SubmissionID, StudentID, RubricID, Submission Time, Submission Due,  
SubmissionStatus)

Feedback(FeedbackID, SubmissionID, FeedbackTime, FeedbackMessage, AssignmentMarks)

FeedbackProvider(FeedbackID, StaffID, CourseID)

Stud\_Submission(SubmissionID, StaffID, CourseID)

Provider(ReportID, StaffID, CourseID)

GradeReport(ReportID, Score, CLO\_Achievement, PLO\_Achievement)

**Admin(AdminID, Email, Password) - 2NF**

(3NF) →

A                      B              C

**FD9:AdminID→Email, Password**

B              C

**FD10:Email→Password**

**Admin(AdminID, Email)**

**Student(StudentID, Email, StudentName, AdminID, Password) -2NF**

(3NF)→

A            B    C

**FD11:StudentID→Email, StudentName, AdminID, Password**

B            C

**FD10:Email→Password**

**Student(StudentID, Email, StudentName, AdminID)**

Staff(StaffID, StaffName)

ProgramCoordinator(StaffID, ProgramID, AppointSession, AdminID)

AchievementReport(ReportID, CLO\_KPI, PLO\_KPI, PLO\_Achievement, StaffID, ProgramID)

Viewing (ReportID, StudentID)

Boyce-Codd Normal Form (BCNF)

**All 3NF relation are already BCNF**

RubricBank (RubricID, Rubric\_content, RatingReview, Author)

RubricCreation (RubricID, StaffID, CourseID)

Emel (Email, Password)

Staff (StaffID, StaffName, Email)

Course (CourseID, SectionNo)

Lecturer (StaffID, CourseID, AdminID)

Submission (SubmissionID, StudentID, RubricID, Submission Time, Submission Due, SubmissionStatus)

Feedback (FeedbackID, SubmissionID, FeedbackTime, FeedbackMessage, AssignmentMarks)

FeedbackProvider (FeedbackID, StaffID, CourseID)

Stud\_Submission (SubmissionID, StaffID, CourseID)

Provider (ReportID, StaffID, CourseID)

GradeReport (ReportID, Score, CLO\_Achievement, PLO\_Achievement)

Admin (AdminID, Email)

Student (StudentID, Email, StudentName, AdminID)

ProgramCoordinator (StaffID, ProgramID, AppointSession, AdminID)

AchievementReport (ReportID, CLO\_KPI, PLO\_KPI, PLO\_Achievement, StaffID, ProgramID)

Viewing (ReportID, StudentID)

## 4. Normalized Logical ERD

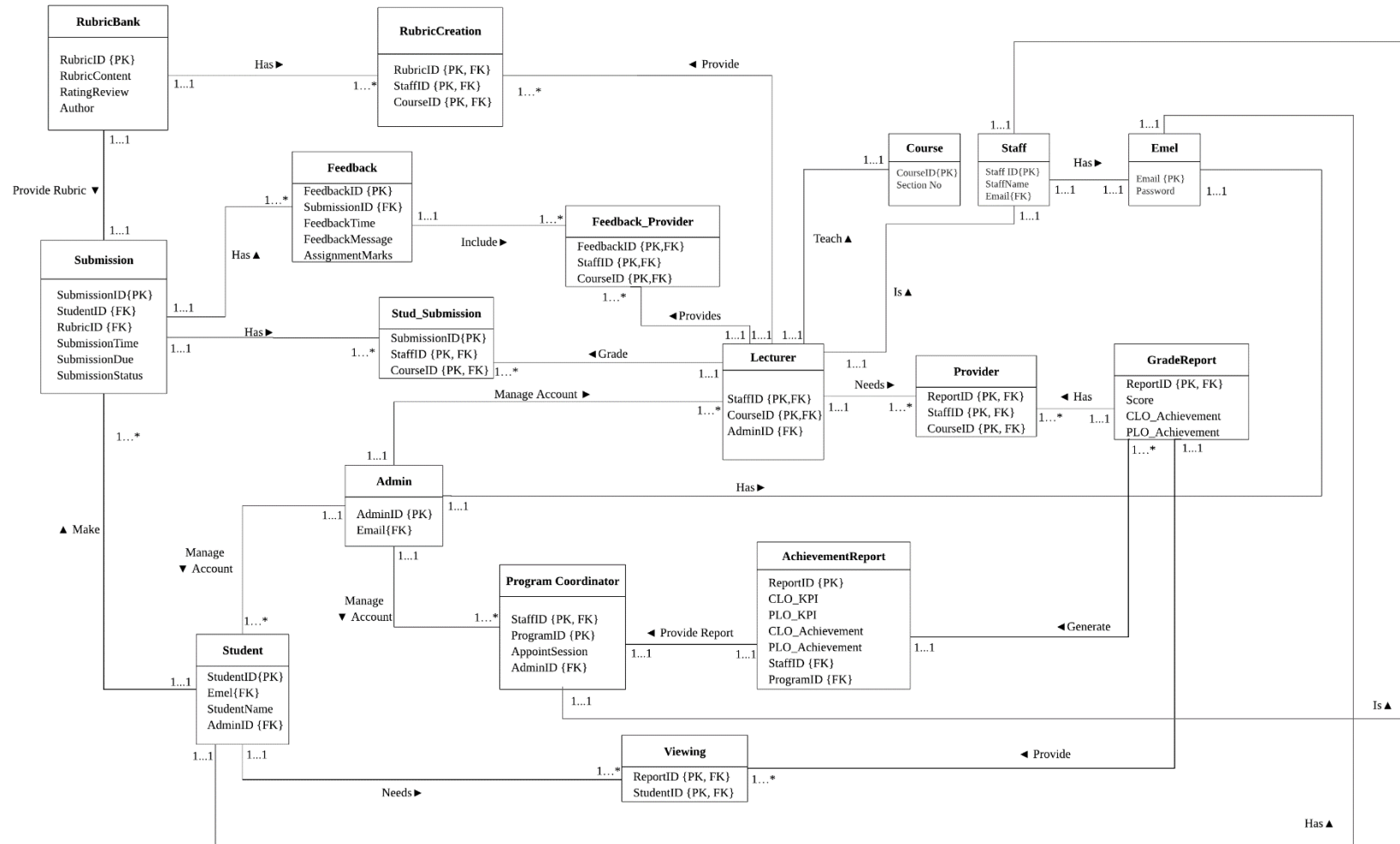


Figure 4.1 Normalized ERD

## 5. Data Dictionary

### 5.1 Description of Entities

Entity	Description	Occurrence
Admin	Hold data of admin	Admin is the manager of the system. Admin can manage registration of student and lecturer. Admin can add, update and delete account of student and lecturer.
Lecturer	Hold data of lecturer	Lecturer is staff in UTM and has staff ID. Lecturer teaches courses. Lecturer can add and edit the rubric in rubric bank. Lecturer can give feedback on student's assignment. Lecturer manage student's assignment submission and student's grade report. Lecturer report student's CLO and PLO achievement to program coordinator.
Program Coordinator	Hold data of program coordinator	Program coordinator is owner of a specific program of school. Program coordinator needs to view CLO and PLO Cohort Report and achievement of every course under the program.

Student	Hold data of student	Student submit assignment answer. Student can view their grade report and feedback from lecturer.
Grade Report	Hold data of grade report	Grade report consists of each student's CLO and PLO achievement and score. Grade report can view by student, and lecturer.
Assignment Submission	Hold data of student assignment submission	Assignment submission is sent by student and manage by lecturer.
Feedback	Hold data of lecturer feedback	Feedback is made by the lecturer. Student can view feedback.
Achievement Report	Hold data of achievement report	Achievement report is generated from students' grade report. Achievement report is viewed by program coordinator.
Rubric Bank	Hold data of rubric	Rubric bank stored rubric and rubric templates. Lecturer can access and make query from rubric bank.
RubricCreation	Send data for rubric creation	Lecturer create a rubric and send to rubric creation to be stored in rubric bank
Emel	Store email id and password	To be used by all users to access the system
Staff	Store data for utm staff	Information is used by Lecturer and Program Coordinator
Course	Store courseID and section no	Lecturer has course that he taught together with the section
FeedbackProvider	Holds data of Lecturer and feedback	Lecturer provides feedback which will be hold by feedback provider
Stud_Submission	Holds data of lecturer and submission	Lecturer grade submission from data obtained from stud_submission. Submission is grade by receiving the data from stud_submission.
Viewing	Holds data of Student and GradeReport	Grade Report provide viewing to let student to view their Grade Report

## 5.2 Description of Relationship

Entity	Multiplicity	Relationship	Multiplicity	Entity
Admin	1..1	Manage Account	1..*	Student
	1..1	Manage Account	1..*	Lecturer
	1..1	Manage Account	1..*	ProgramCoordinator
	1..1	Has	1..1	Emel
Lecturer	1..1	Needs	1..*	Provider
	1..1	Grade	1..*	Stud_Submission
	1..1	Provide	1..*	FeedbackProvider
	1..1	Provide	1..*	RubricCreation
	1..1	Teach	1..1	Course
	1..1	Is	1..1	Staff
Student	1..1	Needs	1..*	Viewing
	1..1	Has	1..1	Emel
	1..1	Make	1..*	Submission
Submission	1..1	Has	1..*	Stud_Submission
	1..1	Have	1..*	Feedback
Rubric Bank	1..1	Has	1.. 1	RubricCreation
	1..1	ProvideRubric	1..1	Submission
Achievement Report	1..1	Provide Report	1..1	Program Coordinator
Grade Report	1..*	Generate	1..1	Achievement Report
	1..1	Provide	1..*	Viewing
	1..1	Has	1..*	Provider
Staff	1..1	Has	1..1	Emel
Program Coordinator	1..1	Is	1..1	Staff

### 5.3 Description of Attributes

Entity	Attribute	Description	Data Type	Constraint
Admin	AdminID	ID of admin account	VARCHAR2(25)	PRIMARY KEY
	Email	Account email	VARCHAR2(25)	FOREIGN KEY
Lecturer	StaffID	ID of UTM staff	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	CourseID	ID of course	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	AdminID	ID of Admin handle the account	VARCHAR2(25)	FOREIGN KEY
Program Coordinator	ProgramID	ID of program	VARCHAR2(25)	PRIMARY KEY
	StaffID	ID of UTM staff	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	AppointSession	Session duration of program coordinator	NUMBER(4)	NOT NULL
	AdminID	ID of Admin handle the account	VARCHAR2(25)	FOREIGN KEY

Student	StudentID	ID of student	VARCHAR2(25)	PRIMARY KEY
	Email	Student UTM email	VARCHAR2(25)	FOREIGN KEY
	StudentName	Name of student	VARCHAR2(25)	NOT NULL
	AdminID	ID of Admin handle the account	VARCHAR2(25)	FOREIGN KEY
Submission	SubmissionID	ID of assignment submission	VARCHAR2(25)	PRIMARY KEY
	StudentID	ID of student	VARCHAR2(25)	FOREIGN KEY
	RubricID	ID of rubric made	VARCHAR2(25)	FOREIGN KEY
	SubmissionTime	Time of submission made	TIMESTAMP	NOT NULL
	SubmissionStatus	Status of submission	VARCHAR2(15)	NOT NULL
	SubmissionDue	Submission due date	TIMESTAMP	NOT NULL
Feedback	FeedbackID	ID of feedback	VARCHAR2(25)	PRIMARY KEY
	SubmissionID	ID of assignment submission	VARCHAR2(25)	FOREIGN KEY
	FeedbackTime	Time when feedback created	TIMESTAMP	NOT NULL
	FeedbackMessage	Message wrote in feedback	VARCHAR2(400)	NOT NULL
	AssignmentMarks	Score of assignment	NUMBER(4)	NOT NULL
RubricBank	RubricID	ID of rubric made	VARCHAR2(25)	PRIMARY KEY
	RubricContent	Information of rubric	VARCHAR2(500)	NOT NULL
	RatingReview	Review rate	NUMBER(3)	NOT NULL
	Author	Rubric Author	VARCHAR2(25)	NOT NULL



RubricCreation	RubricID	ID of rubric made	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	StaffID	ID of UTM staff	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	CourseID	ID of course	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
Emel	Email	Student UTM email	VARCHAR2(25)	PRIMARY KEY
	Password	Password of UTM email	VARCHAR2(25)	NOT NULL
Staff	StaffID	ID of UTM staff	VARCHAR2(25)	PRIMARY KEY
	StaffName	Name of UTM staff	VARCHAR2(25)	NOT NULL
	Email	Student UTM email	VARCHAR2(25)	FOREIGN KEY
Course	CourseID	ID of course	VARCHAR2(25)	PRIMARY KEY
	SectionNo	Section for the course	NUMBER(2)	NOT NULL
FeedbackProvider	FeedbackID	ID of feedback	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	StaffID	ID of UTM staff	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	CourseID	ID of course	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
Stud_Submission	SubmissionID	ID of assignment submission	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	StaffID	ID of UTM staff	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	CourseID	ID of course	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
Provider	ReportID	ID of report	VARCHAR2(25)	PRIMARY KEY FOREIGN KEY
	StaffID	ID of UTM staff	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	CourseID	ID of course	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY

Achievement Report	ReportID	ID of report	VARCHAR2(25)	PRIMARY KEY
	CLO_KPI	KPI of CLO	NUMBER(4)	NOT NULL
	PLO_KPI	KPI of PLO	NUMBER(4)	NOT NULL
	CLO_Achievement	Sections CLO results	NUMBER(4)	NOT NULL
	PLO_Achievement	Sections PLO results	NUMBER(4)	NOT NULL
	StaffID	ID of Staff	VARCHAR(25)	FOREIGN KEY
	Program ID	ID of Program Coordinator	VARCHAR(25)	FOREIGN KEY
Grade Report	ReportID	ID of report	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	Score	Score of student	NUMBER(4)	NOT NULL
	CLO_Achievement	Student CLO result	NUMBER(4)	NOT NULL
	PLO_Achievement	Student PLO result	NUMBER(4)	NOT NULL
Viewing	ReportID	ID of report	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY
	StudentID	ID of student	VARCHAR2(25)	PRIMARY KEY, FOREIGN KEY



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Faculty of Engineering

# Group Project

SECD2523 DATA BASE

SEMESTER I, SESSION 2020/2021

**Title: UTM Rubric Grading System**

Phase:P5 – Project Implementation

Lecturer: Dr. Haslina binti Hashim

Group name: YARW	
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Section: 06

Programme: Bachelor of Computer Science (Software Engineering)

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## 1.0 Relational Database Schemas

Emel (Email, Password)

Staff (StaffID, StaffName, Email)

Course (CourseID, SectionNo)

RubricBank (RubricID, Rubric\_content, RatingReview, Author)

Admin (AdminID, Email)

FK: Email references Emel(Email)

Lecturer (StaffID, CourseID, AdminID)

FK: StaffID references Staff(StaffID)

FK: CourseID references Course(CourseID)

FK: AdminID references Admin(AdminID)

ProgramCoordinator (ProgramID, StaffID, AppointSession, AdminID)

FK: StaffID references Staff(StaffID)

FK: AdminID references Admin(AdminID)

Student (StudentID, Email, StudentName, AdminID)

FK: Email references Emel(Email)

FK: AdminID references Admin(AdminID)

Submission (SubmissionID, StudentID, RubricID, Submission Time, Submission Due, SubmissionStatus)

FK: StudentID references Student(StudentID)

FK: RubricID references RubricBank(RubricID)

Feedback (FeedbackID, SubmissionID, FeedbackTime, FeedbackMessage, AssignmentMarks)

FK: SubmissionID references Submission(SubmissionID)

RubricCreation (RubricID, StaffID, CourseID)

FK: RubricID references RubricBank(RubricID,)

FK: StaffID references Staff(StaffID)

FK: CourseID references Course(CourseID)

FeedbackProvider (FeedbackID, StaffID, CourseID)

FK: FeedbackID references Feedback(FeedbackID)

FK: StaffID references Staff(StaffID)

FK: CourseID references Course(CourseID)

Stud\_Submission (SubmissionID, StaffID, CourseID)

FK: SubmissionID references Submission(SubmissionID)

FK: StaffID references Staff(StaffID)

FK: CourseID references Course(CourseID)

AchievementReport (ReportID, CLO\_KPI, PLO\_KPI, CLO\_Achievement, PLO\_Achievement, StaffID, ProgramID)

FK: StaffID references ProgramCoordinator(StaffID)

FK: ProgramID references ProgramCoordinator(ProgramID)

GradeReport (ReportID, Score, CLO\_Achievement, PLO\_Achievement)

FK: ReportID references AchievementReport(ReportID)

Provider (ReportID, StaffID, CourseID)

FK: ReportID references GradeReport(ReportID)

FK: StaffID references Lecturer(StaffID)

FK: CourseID references Lecturer(CourseID)

Viewing (ReportID, StudentID)

FK: ReportID references GradeReport(ReportID)

FK: StudentID references Student(StudentID)

## 2.0 Database

### 2.1 Create the database and tables (SQL-DDL)

```
1 CREATE TABLE EMEL
2 (
3     Email VARCHAR2(25) PRIMARY KEY,
4     Password VARCHAR2(25) NOT NULL
5 );
6
7 CREATE TABLE STAFF
8 (
9     StaffID VARCHAR2(25) PRIMARY KEY,
10    StaffName VARCHAR2(25) NOT NULL,
11    Email VARCHAR2(25) REFERENCES EMEL(Email)
12 );
13
14 CREATE TABLE COURSE
15 (
16    CourseID VARCHAR2(25) PRIMARY KEY,
17    SectionNo NUMBER(2) NOT NULL
18 );
19
20 CREATE TABLE RUBRICBANK
21 (
22    RubricID VARCHAR2(25) PRIMARY KEY,
23    RubricContent VARCHAR2(500) NOT NULL,
24    RatingReview NUMBER(3) NOT NULL,
25    Author VARCHAR2(25) NOT NULL
26 );
27
28 CREATE TABLE ADMIN
29 (
30    AdminID VARCHAR2(25) PRIMARY KEY,
31    Email VARCHAR2(25) REFERENCES EMEL(Email)
32 );
33
34 CREATE TABLE LECTURER
35 (
36    StaffID VARCHAR2(25) REFERENCES STAFF(StaffID),
37    CourseID VARCHAR2(25) REFERENCES COURSE(CourseID),
38    AdminID VARCHAR2(25) REFERENCES ADMIN(AdminID),
39    CONSTRAINT LECTURER_PK PRIMARY KEY (StaffID, CourseID)
40 );
```

```

41
42 CREATE TABLE ProgramCoordinator
43 (
44     ProgramID VARCHAR2(25) NOT NULL,
45     StaffID VARCHAR2(25) REFERENCES STAFF(StaffID),
46     AppointSession NUMBER(4) NOT NULL,
47     AdminID VARCHAR2(25) REFERENCES ADMIN(AdminID),
48     CONSTRAINT ProgramCoordinator_PK PRIMARY KEY (ProgramID,
StaffID)
49 );
50
51 CREATE TABLE STUDENT
52 (
53     StudentID VARCHAR2(25) PRIMARY KEY,
54     Email VARCHAR2(25) REFERENCES EMEL(Email),
55     StudentName VARCHAR2(25) NOT NULL,
56     AdminID VARCHAR2(25) REFERENCES ADMIN(AdminID)
57 );
58
59 CREATE TABLE SUBMISSION
60 (
61     SubmissionID VARCHAR2(25) PRIMARY KEY,
62     StudentID VARCHAR2(25) REFERENCES STUDENT(StudentID),
63     RubricID VARCHAR2(25) REFERENCES RUBRICBANK(RubricID),
64     SubmissionTime TIMESTAMP NOT NULL,
65     SubmissionStatus VARCHAR2(15) NOT NULL,
66     SubmissionDue TIMESTAMP NOT NULL
67 );
68
69 CREATE TABLE FEEDBACK
70 (
71     FeedbackID VARCHAR2(25) PRIMARY KEY,
72     SubmissionID VARCHAR2(25) REFERENCES SUBMISSION(SubmissionID),
73     FeedbackTime TIMESTAMP NOT NULL,
74     FeedbackMessage VARCHAR2(400) NOT NULL,
75     AssignmentMarks NUMBER(4) NOT NULL
76 );
77
78 CREATE TABLE RubricCreation
79 (
80     RubricID VARCHAR2(25) REFERENCES RUBRICBANK(RubricID),
81     StaffID VARCHAR2(25) REFERENCES STAFF(StaffID),
82     CourseID VARCHAR2(25) REFERENCES COURSE(CourseID),
83     CONSTRAINT RubricCreation_PK PRIMARY KEY (RubricID, StaffID,
CourseID)
84 );

```



```

85
86 CREATE TABLE FeedbackProvider
87 (
88     FeedbackID VARCHAR2(25) REFERENCES FEEDBACK(FeedbackID),
89     StaffID VARCHAR2(25) REFERENCES STAFF(StaffID),
90     CourseID VARCHAR2(25) REFERENCES COURSE(CourseID),
91     CONSTRAINT FeedbackProvider_PK PRIMARY KEY (FeedbackID,
StaffID, CourseID)
92 );
93
94 CREATE TABLE Stud_Submission
95 (
96     SubmissionID VARCHAR2(25) REFERENCES SUBMISSION(SubmissionID),
97     StaffID VARCHAR2(25) REFERENCES STAFF(StaffID),
98     CourseID VARCHAR2(25) REFERENCES COURSE(CourseID),
99     CONSTRAINT Stud_Submission_PK PRIMARY KEY (SubmissionID,
StaffID, CourseID)
100 );
101
102 CREATE TABLE AchievementReport
103 (
104     ReportID VARCHAR2(25) PRIMARY KEY,
105     CLO_KPI NUMBER(4) NOT NULL,
106     PLO_KPI NUMBER(4) NOT NULL,
107     CLO_Achievement NUMBER(4) NOT NULL,
108     PLO_Achievement NUMBER(4) NOT NULL,
109     StaffID VARCHAR2(25) NOT NULL,
110     ProgramID VARCHAR2(25) NOT NULL,
111     Foreign Key (StaffID, ProgramID) references
ProgramCoordinator(StaffID, ProgramID)
112 );
113
114 CREATE TABLE GradeReport
115 (
116     ReportID VARCHAR2(25) REFERENCES AchievementReport(ReportID),
117     Score NUMBER(4) NOT NULL,
118     CLO_Achievement NUMBER(4) NOT NULL,
119     PLO_Achievement NUMBER(4) NOT NULL,
120     CONSTRAINT GradeReport_PK PRIMARY KEY (ReportID)
121 );

```

```
122
123 CREATE TABLE Provider
124 (
125 ReportID VARCHAR2(25) NOT NULL,
126 StaffID VARCHAR2(25) NOT NULL,
127 CourseID VARCHAR2(25) NOT NULL,
128 Foreign Key (StaffID, CourseID) references LECTURER(StaffID,
CourseID),
129 Foreign Key (ReportID) references GradeReport(ReportID),
130 CONSTRAINT Provider_PK PRIMARY KEY (ReportID, StaffID,
CourseID)
131 );
132
133 CREATE TABLE Viewing
134 (
135 ReportID VARCHAR2(25) REFERENCES GradeReport(ReportID),
136 StudentID VARCHAR2(25) REFERENCES STUDENT(StudentID),
137 CONSTRAINT Viewing_PK PRIMARY KEY (ReportID, StudentID)
138 );
```

## 2.2 Test data (SQL-DML)

```
1 /*INSERT email -admin*/
2 INSERT INTO EMEL VALUES ('ahmad@utm.my', '12333');
3
4 /*INSERT email -staff - lec*/
5 INSERT INTO EMEL VALUES ('sitifatimah@utm.my', '12121');
6 INSERT INTO EMEL VALUES ('fariz@utm.my', '323434');
7 INSERT INTO EMEL VALUES ('engwengho@utm.my', '32sds');
8 INSERT INTO EMEL VALUES ('chansiweng@utm.my', '32dfdf');
9 INSERT INTO EMEL VALUES ('abdullah@utm.my', '3dfdfss');
10 INSERT INTO EMEL VALUES ('syafiq@utm.my', 'dsjdkjs');
11 INSERT INTO EMEL VALUES ('amirulabu@utm.my', 'dskdsk');
12 INSERT INTO EMEL VALUES ('chen@utm.my', 'rt67565');
13 INSERT INTO EMEL VALUES ('akhmal@utm.my', 'ertrer');
14 INSERT INTO EMEL VALUES ('christina@utm.my', 'lmxns');
15
16 /*INSERT email - staff -pc*/
17 INSERT INTO EMEL VALUES ('haslina@utm.my', '3ksksk');
18 INSERT INTO EMEL VALUES ('syafurah@utm.my', 'ldkdkd');
19 INSERT INTO EMEL VALUES ('chongjie@utm.my', 'dskdls');
20 INSERT INTO EMEL VALUES ('rafiq@utm.my', 'cjsjdshf');
21 INSERT INTO EMEL VALUES ('ali@utm.my', 'cjsf');
22 INSERT INTO EMEL VALUES ('ngsihui@utm.my', 'zdshf');
23 INSERT INTO EMEL VALUES ('rahman@utm.my', 'pjsjhf');
24 INSERT INTO EMEL VALUES ('chrischan@utm.my', 'lljdsdhf');
25 INSERT INTO EMEL VALUES ('yati@utm.my', 'dshf');
26 INSERT INTO EMEL VALUES ('mahmud@utm.my', 'cjsjdshf');
27
28 /*INSERT email - student*/
29 INSERT INTO EMEL VALUES ('amirul@graduate.utm.my', 'wosoojsod');
30 INSERT INTO EMEL VALUES ('rakesh@graduate.utm.my', 'djsdksj');
31 INSERT INTO EMEL VALUES ('wenxiang@graduate.utm.my', 'sldsodsj');
32 INSERT INTO EMEL VALUES ('jingxuan@graduate.utm.my', 'wiosdnd');
33 INSERT INTO EMEL VALUES ('desmond@graduate.utm.my', 'wosoojsos');
34 INSERT INTO EMEL VALUES ('kaijie@graduate.utm.my', 'w37eshjd');
35 INSERT INTO EMEL
VALUES ('alganzory@graduate.utm.my', 'mxnvbhsdu');
36 INSERT INTO EMEL VALUES ('ahman@graduate.utm.my', 'disodus');
37 INSERT INTO EMEL VALUES ('clc@graduate.utm.my', 'wdsdeeff');
38 INSERT INTO EMEL VALUES ('chanyilin@graduate.utm.my', 'wisodsi');
39 INSERT INTO EMEL VALUES ('william@graduate.utm.my', 'xmksdjjsk');
40 INSERT INTO EMEL VALUES ('syahmimi@graduate.utm.my', 'dsdiscn');
41 INSERT INTO EMEL VALUES ('brandon@graduate.utm.my', 'wovfg');
42 INSERT INTO EMEL VALUES ('sootoh@graduate.utm.my', 'soooooo');
43 INSERT INTO EMEL VALUES ('qiawtorng@graduate.utm.my', 'qtqtqtqt');
44
45 /*INSERT staff-lec*/
46 INSERT INTO STAFF VALUES ('L10EC01', 'Dr Siti
Fatimah', 'sitifatimah@utm.my');
47 INSERT INTO STAFF VALUES ('L10EC02', 'Dr Fariz', 'fariz@utm.my');
```

```

48 INSERT INTO STAFF VALUES ('L10EC03', 'Dr Eng Weng
Ho', 'engwengho@utm.my');
49 INSERT INTO STAFF VALUES ('L10EC04', 'Dr Chan Si
Weng', 'chansiweng@utm.my');
50 INSERT INTO STAFF VALUES ('L10EC05', 'Dr
Abdullah', 'abdullah@utm.my');
51 INSERT INTO STAFF VALUES ('L10EC06', 'Dr Syafiq', 'syafiq@utm.my');
52 INSERT INTO STAFF VALUES ('L10EC07', 'Dr Amirul
Abu', 'amirulabu@utm.my');
53 INSERT INTO STAFF VALUES ('L10EC08', 'Dr Chen
Long', 'chen@utm.my');
54 INSERT INTO STAFF VALUES ('L10EC09', 'Dr Akhmal', 'akhmal@utm.my');
55 INSERT INTO STAFF VALUES ('L10EC010', 'Dr
Christina', 'christina@utm.my');
56
57 /*INSERT staff-pc*/
58 INSERT INTO STAFF VALUES ('P10EC01', 'Dr
Haslina', 'haslina@utm.my');
59 INSERT INTO STAFF VALUES ('P10EC02', 'Dr
Syafurah', 'syafurah@utm.my');
60 INSERT INTO STAFF VALUES ('P10EC03', 'Dr Chong
Jie', 'chongjie@utm.my');
61 INSERT INTO STAFF VALUES ('P10EC04', 'Dr Rafiq', 'rafiq@utm.my');
62 INSERT INTO STAFF VALUES ('P10EC05', 'Dr Ng Si
Hui', 'ngsihui@utm.my');
63 INSERT INTO STAFF VALUES ('P10EC06', 'Dr Rahman', 'rahman@utm.my');
64 INSERT INTO STAFF VALUES ('P10EC07', 'Dr Chris
Chan', 'chrischan@utm.my');
65 INSERT INTO STAFF VALUES ('P10EC08', 'Dr Yati', 'yati@utm.my');
66 INSERT INTO STAFF VALUES ('P10EC09', 'Dr Mahmud', 'mahmud@utm.my');
67 INSERT INTO STAFF VALUES ('P10EC010', 'Dr Ali', 'ali@utm.my');
68
69 /*INSERT course*/
70 INSERT INTO COURSE VALUES ('SECD2613', 6);
71 INSERT INTO COURSE VALUES ('SECD2523', 6);
72 INSERT INTO COURSE VALUES ('SECV2113', 3);
73 INSERT INTO COURSE VALUES ('SECR1213', 6);
74 INSERT INTO COURSE VALUES ('SECJ2013', 6);
75 INSERT INTO COURSE VALUES ('SECR2300', 6);
76 INSERT INTO COURSE VALUES ('SECR1001', 6);
77 INSERT INTO COURSE VALUES ('SECV1011', 6);
78 INSERT INTO COURSE VALUES ('SECJ3011', 6);
79 INSERT INTO COURSE VALUES ('SECJ1013', 6);
80
81 /*insert rubricbank*/
82 INSERT INTO RUBRICBANK VALUES ('RSECJ2013', 'CLO1-Able to
understand concepts CLO2-Able
to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
83 3.5, 'Dr Abdullah');

```

```

84 INSERT INTO RUBRICBANK VALUES('RSECD2613','CLO1-Able to
understand concepts CLO2-Able
to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
85 3.6,'Dr Siti Fatimah');
86 INSERT INTO RUBRICBANK VALUES('RSECV2113','CLO1-Able to
understand concepts CLO2-Able
to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
87 3.5,'Dr Eng Weng Ho');
88 INSERT INTO RUBRICBANK VALUES('RSECD2523','CLO1-Able to
understand concepts CLO2-Able
to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
89 3.7,'Dr Fariz');
90 INSERT INTO RUBRICBANK VALUES('RSECR1213','CLO1-Able to
understand concepts CLO2-Able
to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
91 3.7,'Dr Chan Si Weng');
92 INSERT INTO RUBRICBANK VALUES('RSECJ1013','CLO1-Able to
understand concepts CLO2-Able
to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
93 3.7,'Dr Christina');
94 INSERT INTO RUBRICBANK VALUES('RSECJ3011','CLO1-Able to
understand concepts CLO2-Able
to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
95 3.7,'Dr Akhmal');
96 INSERT INTO RUBRICBANK VALUES('RSECV1011','CLO1-Able to
understand concepts CLO2-Able
to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
97 3.7,'Dr Chen Long');
98 INSERT INTO RUBRICBANK VALUES('RSECR1001','CLO1-Able to
understand concepts CLO2-Able
to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
99 3.7,'Dr Amirul Abu');
100 INSERT INTO RUBRICBANK VALUES('RSECR2300','CLO1-Able to
understand concepts CLO2-Able

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```

to acquire basic skills CLO3-Able to identify CLO-4 Able to create
CLO-5 Able to solve
PLO1-Undestand the fundamental PLO2-Ability to apply',
101 3.7,'Dr Syafiq');
102
103 /*INSERT admin*/
104 INSERT INTO ADMIN VALUES ('A10EC01','ahmad@utm.my');
105
106 /*INSERT LECTURER*/
107 INSERT INTO LECTURER VALUES ('L10EC01','SECD2613','A10EC01');
108 INSERT INTO LECTURER VALUES ('L10EC02','SECD2523','A10EC01');
109 INSERT INTO LECTURER VALUES ('L10EC03','SECV2113','A10EC01');
110 INSERT INTO LECTURER VALUES ('L10EC04','SECR1213','A10EC01');
111 INSERT INTO LECTURER VALUES ('L10EC05','SECJ2013','A10EC01');
112 INSERT INTO LECTURER VALUES ('L10EC06','SECR2300','A10EC01');
113 INSERT INTO LECTURER VALUES ('L10EC07','SECR1001','A10EC01');
114 INSERT INTO LECTURER VALUES ('L10EC08','SECV1011','A10EC01');
115 INSERT INTO LECTURER VALUES ('L10EC09','SECJ3011','A10EC01');
116 INSERT INTO LECTURER VALUES ('L10EC010','SECJ1013','A10EC01');
117
118 /*INSERT PROGRAM COORDINATOR*/
119 INSERT INTO ProgramCoordinator
VALUES ('SECJ','P10EC01',2021,'A10EC01');
120 INSERT INTO ProgramCoordinator
VALUES ('SECR','P10EC02',2021,'A10EC01');
121 INSERT INTO ProgramCoordinator
VALUES ('SECV','P10EC03',2021,'A10EC01');
122 INSERT INTO ProgramCoordinator
VALUES ('SECD','P10EC04',2021,'A10EC01');
123 INSERT INTO ProgramCoordinator
VALUES ('SEBQ','P10EC05',2021,'A10EC01');
124 INSERT INTO ProgramCoordinator
VALUES ('SEBJ','P10EC06',2021,'A10EC01');
125 INSERT INTO ProgramCoordinator
VALUES ('SEBC','P10EC07',2021,'A10EC01');
126 INSERT INTO ProgramCoordinator
VALUES ('SEBR','P10EC08',2021,'A10EC01');
127 INSERT INTO ProgramCoordinator
VALUES ('SEBK','P10EC09',2021,'A10EC01');
128 INSERT INTO ProgramCoordinator
VALUES ('SECK','P10EC010',2021,'A10EC01');
129
130 /*INSERT student*/
131 INSERT INTO STUDENT
VALUES ('A19EC0001','amirul@graduate.utm.my','Amirul','A10EC01');
132 INSERT INTO STUDENT
VALUES ('A19EC0002','rakesh@graduate.utm.my','Rakesh','A10EC01');
133 INSERT INTO STUDENT
VALUES ('A19EC0003','wenxiang@graduate.utm.my','See Wen
Xiang','A10EC01');

```

```

134 INSERT INTO STUDENT
VALUES ('A19EC0004', 'desmond@graduate.utm.my', 'Desmond
Chieng', 'A10EC01');
135 INSERT INTO STUDENT
VALUES ('A19EC0005', 'kaijie@graduate.utm.my', 'Chong Kai
Jie', 'A10EC01');
136 INSERT INTO STUDENT
VALUES ('A19EC0006', 'alganzory@graduate.utm.my', 'Mohamad
Alganzory', 'A10EC01');
137 INSERT INTO STUDENT
VALUES ('A19EC0007', 'clc@graduate.utm.my', 'Cheong Chien
Li', 'A10EC01');
138 INSERT INTO STUDENT
VALUES ('A19EC0008', 'chanyilin@graduate.utm.my', 'Chan Yi
Lin', 'A10EC01');
139 INSERT INTO STUDENT
VALUES ('A19EC0009', 'william@graduate.utm.my', 'William
Goy', 'A10EC01');
140 INSERT INTO STUDENT
VALUES ('A19EC0010', 'syahmimi@graduate.utm.my', 'Syahmimi', 'A10EC01')
;
141 INSERT INTO STUDENT
VALUES ('A19EC0011', 'brandon@graduate.utm.my', 'Brandon
Liew', 'A10EC01');
142 INSERT INTO STUDENT
VALUES ('A19EC0012', 'sootoh@graduate.utm.my', 'Sootoh Xin
Hui', 'A10EC01');
143 INSERT INTO STUDENT
VALUES ('A19EC0013', 'qiawtorng@graduate.utm.my', 'Tan Qiaw
Torng', 'A10EC01');
144 INSERT INTO STUDENT
VALUES ('A19EC0014', 'ahman@graduate.utm.my', 'Ahman', 'A10EC01');
145 INSERT INTO STUDENT
VALUES ('A19EC0015', 'jingxuan@graduate.utm.my', 'Yong Jing
Xuan', 'A10EC01');
146
147 /*insert submission*/
148 INSERT INTO SUBMISSION
VALUES ('S00001', 'A19EC0001', 'RSECD2523', timestamp '2021-01-31
11:30:00', 'Submitted', timestamp '2021-02-12 11:00:00');
149 INSERT INTO SUBMISSION
VALUES ('S00002', 'A19EC0002', 'RSECD2523', timestamp '2021-01-31
11:30:00', 'Submitted', timestamp '2021-02-12 11:00:00');
150 INSERT INTO SUBMISSION
VALUES ('S00003', 'A19EC0003', 'RSECD2523', timestamp '2021-01-31
14:30:00', 'Submitted', timestamp '2021-02-12 11:00:00');
151 INSERT INTO SUBMISSION
VALUES ('S00004', 'A19EC0004', 'RSECD2523', timestamp '2021-01-31
15:30:00', 'Submitted', timestamp '2021-02-12 11:00:00');
152 INSERT INTO SUBMISSION
VALUES ('S00005', 'A19EC0005', 'RSECD2523', timestamp '2021-01-31

```

```

16:30:00', 'Submitted', timestamp '2021-02-12 11:00:00');
153 INSERT INTO SUBMISSION
VALUES ('S00006', 'A19EC0006', 'RSECD2523', timestamp '2021-01-31
17:30:00', 'Submitted', timestamp '2021-02-12 11:00:00');
154 INSERT INTO SUBMISSION
VALUES ('S00007', 'A19EC0007', 'RSECD2523', timestamp '2021-01-31
17:45:00', 'Submitted', timestamp '2021-02-12 11:00:00');
155 INSERT INTO SUBMISSION
VALUES ('S00008', 'A19EC0008', 'RSECD2523', timestamp '2021-01-31
13:33:00', 'Submitted', timestamp '2021-02-12 11:00:00');
156 INSERT INTO SUBMISSION
VALUES ('S00009', 'A19EC0009', 'RSECD2523', timestamp '2021-01-31
11:10:00', 'Submitted', timestamp '2021-02-12 11:00:00');
157 INSERT INTO SUBMISSION
VALUES ('S00010', 'A19EC0010', 'RSECD2523', timestamp '2021-02-02
10:33:00', 'Submitted', timestamp '2021-02-12 11:00:00');
158 INSERT INTO SUBMISSION
VALUES ('S00011', 'A19EC0011', 'RSECD2523', timestamp '2021-02-02
16:11:00', 'Submitted', timestamp '2021-02-12 11:00:00');
159 INSERT INTO SUBMISSION
VALUES ('S00012', 'A19EC0012', 'RSECD2523', timestamp '2021-02-05
17:45:00', 'Submitted', timestamp '2021-02-12 11:00:00');
160 INSERT INTO SUBMISSION
VALUES ('S00013', 'A19EC0013', 'RSECD2523', timestamp '2021-02-11
17:46:00', 'Submitted', timestamp '2021-02-12 11:00:00');
161 INSERT INTO SUBMISSION
VALUES ('S00014', 'A19EC0014', 'RSECD2523', timestamp '2021-02-13
18:45:00', 'Late Submitted', timestamp '2021-02-12 11:00:00');
162
163 /*INSERT FEEDBACK*/
164 INSERT INTO FEEDBACK VALUES ('F00001', 'S00001', timestamp '2021-
02-17 11:15:00', 'Well
done!', 88.8);
165 INSERT INTO FEEDBACK VALUES ('F00002', 'S00002', timestamp '2021-
02-17 11:30:00', 'Well
done!', 82.8);
166 INSERT INTO FEEDBACK VALUES ('F00003', 'S00003', timestamp '2021-
02-17
11:50:00', 'Excellent!', 90.8);
167 INSERT INTO FEEDBACK VALUES ('F00004', 'S00004', timestamp '2021-
02-17 12:15:00', 'Need
improve more on basic concepts!', 70.3);
168 INSERT INTO FEEDBACK VALUES ('F00005', 'S00005', timestamp '2021-
02-17 12:45:00', 'Need
improve more on SQL skills!', 70);
169 INSERT INTO FEEDBACK VALUES ('F00006', 'S00006', timestamp '2021-
02-17 13:00:00', 'Well
done!', 85);
170 INSERT INTO FEEDBACK VALUES ('F00007', 'S00007', timestamp '2021-
02-17 13:40:00', 'Well
done!', 85);

```



```

171 INSERT INTO FEEDBACK VALUES('F00008','S00008',timestamp '2021-
02-17 14:05:00','Well
done!',85);
172 INSERT INTO FEEDBACK VALUES('F00009','S00009',timestamp '2021-
02-17 15:33:00','Well
done!',85);
173 INSERT INTO FEEDBACK VALUES('F00010','S00010',timestamp '2021-
02-17 16:15:00','Well
done!',88);
174 INSERT INTO FEEDBACK VALUES('F00011','S00011',timestamp '2021-
02-17
16:45:00','Fundamental is weak',50);
175 INSERT INTO FEEDBACK VALUES('F00012','S00012',timestamp '2021-
02-18
11:15:00','Fundamental is weak!',60);
176 INSERT INTO FEEDBACK VALUES('F00013','S00013',timestamp '2021-
02-18 11:45:00','Well
done!',88);
177 INSERT INTO FEEDBACK VALUES('F00014','S00014',timestamp '2021-
02-18 12:15:00','Late
Submit Reduce marks',80.5);
178
179 /*INSERT rubric creation*/
180 INSERT INTO RubricCreation
VALUES('RSECJ2013','L10EC05','SECJ2013');
181 INSERT INTO RubricCreation
VALUES('RSECD2613','L10EC01','SECD2613');
182 INSERT INTO RubricCreation
VALUES('RSECV2113','L10EC03','SECV2113');
183 INSERT INTO RubricCreation
VALUES('RSECD2523','L10EC02','SECD2523');
184 INSERT INTO RubricCreation
VALUES('RSECR1213','L10EC04','SECR1213');
185 INSERT INTO RubricCreation
VALUES('RSECJ1013','L10EC010','SECJ1013');
186 INSERT INTO RubricCreation
VALUES('RSECJ3011','L10EC09','SECJ3011');
187 INSERT INTO RubricCreation
VALUES('RSECV1011','L10EC08','SECV1011');
188 INSERT INTO RubricCreation
VALUES('RSECR1001','L10EC07','SECR1001');
189 INSERT INTO RubricCreation
VALUES('RSECR2300','L10EC06','SECJ1013');
190
191 /*INSERT FEEBACK PROVIDER*/
192 INSERT INTO FeedbackProvider
VALUES('F00001','L10EC02','SECD2523');
193 INSERT INTO FeedbackProvider
VALUES('F00002','L10EC02','SECD2523');
194 INSERT INTO FeedbackProvider
VALUES('F00003','L10EC02','SECD2523');

```

```

195 INSERT INTO FeedbackProvider
VALUES ('F00004', 'L10EC02', 'SECD2523');
196 INSERT INTO FeedbackProvider
VALUES ('F00005', 'L10EC02', 'SECD2523');
197 INSERT INTO FeedbackProvider
VALUES ('F00006', 'L10EC02', 'SECD2523');
198 INSERT INTO FeedbackProvider
VALUES ('F00007', 'L10EC02', 'SECD2523');
199 INSERT INTO FeedbackProvider
VALUES ('F00008', 'L10EC02', 'SECD2523');
200 INSERT INTO FeedbackProvider
VALUES ('F00009', 'L10EC02', 'SECD2523');
201 INSERT INTO FeedbackProvider
VALUES ('F00010', 'L10EC02', 'SECD2523');
202 INSERT INTO FeedbackProvider
VALUES ('F00011', 'L10EC02', 'SECD2523');
203 INSERT INTO FeedbackProvider
VALUES ('F00012', 'L10EC02', 'SECD2523');
204 INSERT INTO FeedbackProvider
VALUES ('F00013', 'L10EC02', 'SECD2523');
205 INSERT INTO FeedbackProvider
VALUES ('F00014', 'L10EC02', 'SECD2523');
206
207 /*INSERT STUDENT SUBMISSION*/
208 INSERT INTO Stud_Submission
VALUES ('S00001', 'L10EC02', 'SECD2523');
209 INSERT INTO Stud_Submission
VALUES ('S00002', 'L10EC02', 'SECD2523');
210 INSERT INTO Stud_Submission
VALUES ('S00003', 'L10EC02', 'SECD2523');
211 INSERT INTO Stud_Submission
VALUES ('S00004', 'L10EC02', 'SECD2523');
212 INSERT INTO Stud_Submission
VALUES ('S00005', 'L10EC02', 'SECD2523');
213 INSERT INTO Stud_Submission
VALUES ('S00006', 'L10EC02', 'SECD2523');
214 INSERT INTO Stud_Submission
VALUES ('S00007', 'L10EC02', 'SECD2523');
215 INSERT INTO Stud_Submission
VALUES ('S00008', 'L10EC02', 'SECD2523');
216 INSERT INTO Stud_Submission
VALUES ('S00009', 'L10EC02', 'SECD2523');
217 INSERT INTO Stud_Submission
VALUES ('S00010', 'L10EC02', 'SECD2523');
218 INSERT INTO Stud_Submission
VALUES ('S00011', 'L10EC02', 'SECD2523');
219 INSERT INTO Stud_Submission
VALUES ('S00012', 'L10EC02', 'SECD2523');
220 INSERT INTO Stud_Submission
VALUES ('S00013', 'L10EC02', 'SECD2523');

```

```

221 INSERT INTO Stud_Submission
VALUES ('S00014', 'L10EC02', 'SECD2523');
222
223 /*INSERT AchievementReport*/
224 INSERT INTO AchievementReport
VALUES ('RSECJ1000101', 65, 70, 82, 83, 'P10EC01', 'SECJ');
225 INSERT INTO AchievementReport
VALUES ('RSECR1000109', 50, 60, 48, 62, 'P10EC02', 'SECR');
226 INSERT INTO AchievementReport
VALUES ('RSECV1000110', 70, 65, 68, 70, 'P10EC03', 'SECV');
227 INSERT INTO AchievementReport
VALUES ('RSECD1001819', 75, 50, 78, 63, 'P10EC04', 'SECD');
228 INSERT INTO AchievementReport
VALUES ('RSEBQ1800509', 72, 65, 75, 66, 'P10EC05', 'SEBQ');
229 INSERT INTO AchievementReport
VALUES ('RSEBJ1000789', 55, 70, 60, 75, 'P10EC06', 'SEBJ');
230 INSERT INTO AchievementReport
VALUES ('RSEBC1008929', 73, 68, 48, 52, 'P10EC07', 'SEBC');
231 INSERT INTO AchievementReport
VALUES ('RSEBR1002568', 78, 68, 75, 70, 'P10EC08', 'SEBR');
232 INSERT INTO AchievementReport
VALUES ('RSEBK1000549', 70, 78, 65, 80, 'P10EC09', 'SEBK');
233 INSERT INTO AchievementReport
VALUES ('RSECK1004568', 65, 60, 68, 65, 'P10EC10', 'SECK');
234
235 /*INSERT GradeReport*/
236 INSERT INTO GradeReport VALUES ('RSECJ1000101', 65, 70, 82);
237 INSERT INTO GradeReport VALUES ('RSECR1000109', 50, 60, 48);
238 INSERT INTO GradeReport VALUES ('RSECV1000110', 70, 65, 68);
239 INSERT INTO GradeReport VALUES ('RSECD1001819', 75, 50, 78);
240 INSERT INTO GradeReport VALUES ('RSEBQ1800509', 72, 65, 75);
241 INSERT INTO GradeReport VALUES ('RSEBJ1000789', 55, 70, 60);
242 INSERT INTO GradeReport VALUES ('RSEBC1008929', 73, 68, 48);
243 INSERT INTO GradeReport VALUES ('RSEBR1002568', 78, 68, 75);
244 INSERT INTO GradeReport VALUES ('RSEBK1000549', 70, 78, 65);
245 INSERT INTO GradeReport VALUES ('RSECK1004568', 65, 60, 68);
246
247 /*INSERT Provider*/
248 INSERT INTO Provider
VALUES ('RSECJ1000101', 'L10EC05', 'SECJ2013');
249 INSERT INTO Provider
VALUES ('RSECR1000109', 'L10EC06', 'SECR2300');
250 INSERT INTO Provider
VALUES ('RSECV1000110', 'L10EC03', 'SECV2113');
251 INSERT INTO Provider
VALUES ('RSECD1001819', 'L10EC02', 'SECD2523');
252 INSERT INTO Provider
VALUES ('RSEBQ1800509', 'L10EC05', 'SECJ2013');
253 INSERT INTO Provider
VALUES ('RSEBJ1000789', 'L10EC08', 'SECV1011');

```

```
254 INSERT INTO Provider
VALUES ('RSEBC1008929', 'L10EC01', 'SECD2613');
255 INSERT INTO Provider
VALUES ('RSEBR1002568', 'L10EC010', 'SECJ1013');
256 INSERT INTO Provider
VALUES ('RSEBK1000549', 'L10EC09', 'SECJ3011');
257 INSERT INTO Provider
VALUES ('RSECK1004568', 'L10EC04', 'SECR1213'); 258
259 /*INSERT Viewing*/
260 INSERT INTO Viewing VALUES ('RSECJ1000101', 'A19EC0001');
261 INSERT INTO Viewing VALUES ('RSECR1000109', 'A19EC0002');
262 INSERT INTO Viewing VALUES ('RSECV1000110', 'A19EC0003');
263 INSERT INTO Viewing VALUES ('RSECD1001819', 'A19EC0004');
264 INSERT INTO Viewing VALUES ('RSEBQ1800509', 'A19EC0005');
265 INSERT INTO Viewing VALUES ('RSEBJ1000789', 'A19EC0006');
266 INSERT INTO Viewing VALUES ('RSEBC1008929', 'A19EC0007');
267 INSERT INTO Viewing VALUES ('RSEBR1002568', 'A19EC0008');
268 INSERT INTO Viewing VALUES ('RSEBK1000549', 'A19EC0009');
269 INSERT INTO Viewing VALUES ('RSECK1004568', 'A19EC0010');
```

## 2.3 Test Queries

### Test Queries by Admin

#### 1. Admin queries information of all staff

```
SELECT * FROM STAFF;
```

STAFFID	STAFFNAME	EMAIL
L10EC01	Dr Siti Fatimah	sitifatimah@utm.my
L10EC02	Dr Fariz	fariz@utm.my
L10EC03	Dr Eng Weng Ho	engwengho@utm.my
L10EC04	Dr Chan Si Weng	chansiweng@utm.my
L10EC05	Dr Abdullah	abdullah@utm.my
L10EC06	Dr Syafiq	syafiq@utm.my
L10EC07	Dr Amirul Abu	amirulabu@utm.my
L10EC08	Dr Chen Long	chen@utm.my
L10EC09	Dr Akhmal	akhmal@utm.my
L10EC010	Dr Christina	christina@utm.my
P10EC01	Dr Haslina	haslina@utm.my
P10EC02	Dr Syafurah	syafurah@utm.my
P10EC03	Dr Chong Jie	chongjie@utm.my
P10EC04	Dr Rafiq	rafiq@utm.my
P10EC05	Dr Ng Si Hui	ngsihui@utm.my
P10EC06	Dr Rahman	rahman@utm.my
P10EC07	Dr Chris Chan	chrischan@utm.my
P10EC08	Dr Yati	yati@utm.my
P10EC09	Dr Mahmud	mahmud@utm.my
P10EC010	Dr Ali	ali@utm.my

#### 2. Show Staff who is Lecturer

```
SELECT *  
STAFF  
StaffID LIKE 'L%';
```

STAFFID	STAFFNAME	EMAIL
L10EC01	Dr Siti Fatimah	sitifatimah@utm.my
L10EC02	Dr Fariz	fariz@utm.my
L10EC03	Dr Eng Weng Ho	engwengho@utm.my
L10EC04	Dr Chan Si Weng	chansiweng@utm.my
L10EC05	Dr Abdullah	abdullah@utm.my
L10EC06	Dr Syafiq	syafiq@utm.my
L10EC07	Dr Amirul Abu	amirulabu@utm.my
L10EC08	Dr Chen Long	chen@utm.my
L10EC09	Dr Akhmal	akhmal@utm.my
L10EC010	Dr Christina	christina@utm.my

```
FROM  
WHERE
```

### 3. Show Staff who is Program Coordinator

```
SELECT *
FROM STAFF
WHERE StaffID LIKE 'P%';
```

STAFFID	STAFFNAME	EMAIL
P10EC01	Dr Haslina	haslina@utm.my
P10EC02	Dr Syafurah	syafurah@utm.my
P10EC03	Dr Chong Jie	chongjie@utm.my
P10EC04	Dr Rafiq	rafiq@utm.my
P10EC05	Dr Ng Si Hui	ngsihui@utm.my
P10EC06	Dr Rahman	rahman@utm.my
P10EC07	Dr Chris Chan	chrischan@utm.my
P10EC08	Dr Yati	yati@utm.my
P10EC09	Dr Mahmud	mahmud@utm.my
P10EC010	Dr Ali	ali@utm.my

### 4. Show Information of Student

```
SELECT * FROM STUDENT;
```

STUDENTID	EMAIL	STUDENTNAME	ADMINID
A19EC001	amirul@graduate.utm.my	Amirul	A10EC01
A19EC002	rakesh@graduate.utm.my	Rakesh	A10EC01
A19EC003	wenxiang@graduate.utm.my	See Wen Xiang	A10EC01
A19EC004	desmond@graduate.utm.my	Desmond Chieng	A10EC01
A19EC005	kaijie@graduate.utm.my	Chong Kai Jie	A10EC01
A19EC006	alkanzory@graduate.utm.my	Mohamad Alkanzory	A10EC01
A19EC007	clc@graduate.utm.my	Cheong Chien Li	A10EC01
A19EC008	chanyilin@graduate.utm.my	Chan Yi Lin	A10EC01
A19EC009	william@graduate.utm.my	William Goy	A10EC01
A19EC010	syahmimi@graduate.utm.my	Syahmimi	A10EC01
A19EC011	brandon@graduate.utm.my	Brandon Liew	A10EC01
A19EC012	sootoh@graduate.utm.my	Sootoh Xin Hui	A10EC01
A19EC013	qiawtorng@graduate.utm.my	Tan Qiaaw Torng	A10EC01
A19EC014	ahman@graduate.utm.my	Ahman	A10EC01
A19EC015	jingxuan@graduate.utm.my	Yong Jing Xuan	A10EC01

### Test queries by Lecturer

#### 5. Lecturer queries student submission

```
SELECT * FROM SUBMISSION;
```

STUDENTID
A19EC001
A19EC002
A19EC003
A19EC004
A19EC005
A19EC006
A19EC007
A19EC008
A19EC009
A19EC010
A19EC011
A19EC012
A19EC013

### 6. Lecturer queries student who has submitted ON TIME

```
SELECT StudentID
FROM SUBMISSION
WHERE SubmissionStatus='Submitted';
```

SUBMISSIONID	STUDENTID	RUBRICID	SUBMISSIONTIME	SUBMISSIONSTATUS	SUBMISSIONDUE
S00001	A19EC0001	RSECD2523	31-JAN-21 11.30.00.000000 AM	Submitted	12-FEB-21 11.00.00.000000 AM
S00002	A19EC0002	RSECD2523	31-JAN-21 11.30.00.000000 AM	Submitted	12-FEB-21 11.00.00.000000 AM
S00003	A19EC0003	RSECD2523	31-JAN-21 02.30.00.000000 PM	Submitted	12-FEB-21 11.00.00.000000 AM
S00004	A19EC0004	RSECD2523	31-JAN-21 03.30.00.000000 PM	Submitted	12-FEB-21 11.00.00.000000 AM
S00005	A19EC0005	RSECD2523	31-JAN-21 04.30.00.000000 PM	Submitted	12-FEB-21 11.00.00.000000 AM
S00006	A19EC0006	RSECD2523	31-JAN-21 05.30.00.000000 PM	Submitted	12-FEB-21 11.00.00.000000 AM
S00007	A19EC0007	RSECD2523	31-JAN-21 05.45.00.000000 PM	Submitted	12-FEB-21 11.00.00.000000 AM
S00008	A19EC0008	RSECD2523	31-JAN-21 01.33.00.000000 PM	Submitted	12-FEB-21 11.00.00.000000 AM
S00009	A19EC0009	RSECD2523	31-JAN-21 11.10.00.000000 AM	Submitted	12-FEB-21 11.00.00.000000 AM
S00010	A19EC0010	RSECD2523	02-FEB-21 10.33.00.000000 AM	Submitted	12-FEB-21 11.00.00.000000 AM
S00011	A19EC0011	RSECD2523	02-FEB-21 04.11.00.000000 PM	Submitted	12-FEB-21 11.00.00.000000 AM
S00012	A19EC0012	RSECD2523	05-FEB-21 05.45.00.000000 PM	Submitted	12-FEB-21 11.00.00.000000 AM
S00013	A19EC0013	RSECD2523	11-FEB-21 05.46.00.000000 PM	Submitted	12-FEB-21 11.00.00.000000 AM
S00014	A19EC0014	RSECD2523	13-FEB-21 06.45.00.000000 PM	Late Submitted	12-FEB-21 11.00.00.000000 AM

### 7. Lecturer queries rubric with RubricID

```
SELECT * FROM RUBRICBANK WHERE RubricID ='RSECD2523';
```

RUBRICID	RUBRICCONTENT	RATINGREVIEW	AUTHOR
RSECD2523	CL01-Able to understand concepts CL02-Able to acquire basic skills CL03-Able to identify CL0-4 Able to create CL0-5 Able to solve PL01-Understand the fundamental PL02-Ability to apply	4	Dr Fariz

### 8. Lecturer queries score to Student to view

```
SELECT score FROM GradeReport WHERE ReportID = 'RSECD1001819';
```

SCORE
1 75

### 9. Lecturer query student who late submit assignment

```
SELECT st.StudentName, c.CourseID, c.SectionNO, s.SubmissionStatus
FROM Course c JOIN FeedbackProvider fp
ON c.courseID = fp.courseID
JOIN Feedback f ON f.FeedbackID = fp.FeedbackID
JOIN Submission s ON s.SubmissionID = f.SubmissionID
JOIN Student st ON st.StudentID = s.StudentID
WHERE s.SubmissionStatus = 'Late Submitted';
```

STUDENTNAME	COURSEID	SECTIONNO	SUBMISSIONSTATUS
1 Ahman	SECD2523	6	Late Submitted

## Insert Test by Admin

### 10. Admin Insert Staff Account

```
INSERT INTO EMEL  
VALUES ('johndoe@utm.my', 'sdsewfg');  
INSERT INTO STAFF VALUES ('L10EC011', 'Dr John  
Doe', 'johndoe@utm.my');
```

STAFFID	STAFFNAME	EMAIL
L10EC01	Dr Siti Fatimah	sitifatimah@utm.my
L10EC02	Dr Fariz	fariz@utm.my
L10EC03	Dr Eng Weng Ho	engwengho@utm.my
L10EC04	Dr Chan Si Weng	chansiweng@utm.my
L10EC05	Dr Abdullah	abdullah@utm.my
L10EC06	Dr Syafiq	syafiq@utm.my
L10EC07	Dr Amirul Abu	amirulabu@utm.my
L10EC08	Dr Chen Long	chen@utm.my
L10EC09	Dr Akhmal	akhmal@utm.my
L10EC010	Dr Christina	christina@utm.my
P10EC01	Dr Haslina	haslina@utm.my
P10EC02	Dr Syafurah	syafurah@utm.my
P10EC03	Dr Chong Jie	chongjie@utm.my
P10EC04	Dr Rafiq	rafiq@utm.my
P10EC05	Dr Ng Si Hui	ngsihui@utm.my
P10EC06	Dr Rahman	rahman@utm.my
P10EC07	Dr Chris Chan	chrischan@utm.my
P10EC08	Dr Yati	yati@utm.my
P10EC09	Dr Mahmud	mahmud@utm.my
P10EC010	Dr Ali	ali@utm.my
L10EC011	Dr John Doe	johndoe@utm.my

### 11. Delete Test by Admin

```
DELETE FROM STAFF  
WHERE StaffName='Dr John Doe';
```

STAFFID	STAFFNAME	EMAIL
L10EC01	Dr Siti Fatimah	sitifatimah@utm.my
L10EC02	Dr Fariz	fariz@utm.my
L10EC03	Dr Eng Weng Ho	engwengho@utm.my
L10EC04	Dr Chan Si Weng	chansiweng@utm.my
L10EC05	Dr Abdullah	abdullah@utm.my
L10EC06	Dr Syafiq	syafiq@utm.my
L10EC07	Dr Amirul Abu	amirulabu@utm.my
L10EC08	Dr Chen Long	chen@utm.my
L10EC09	Dr Akhmal	akhmal@utm.my
L10EC010	Dr Christina	christina@utm.my
P10EC01	Dr Haslina	haslina@utm.my
P10EC02	Dr Syafurah	syafurah@utm.my
P10EC03	Dr Chong Jie	chongjie@utm.my
P10EC04	Dr Rafiq	rafiq@utm.my
P10EC05	Dr Ng Si Hui	ngsihui@utm.my
P10EC06	Dr Rahman	rahman@utm.my
P10EC07	Dr Chris Chan	chrischan@utm.my
P10EC08	Dr Yati	yati@utm.my
P10EC09	Dr Mahmud	mahmud@utm.my
P10EC010	Dr Ali	ali@utm.my



## Insert Test by Lecturer

### 12. Lecturer Insert Feedback from New Submission

```
INSERT INTO SUBMISSION
VALUES ('S00015', 'A19EC0015', 'RSECD2523', timestamp '2021-02-10
18:45:00', 'Submitted', timestamp '2021-02-12 11:00:00');
INSERT INTO FEEDBACK VALUES ('F00015', 'S00015', timestamp '2021-02-17
16:45:00', 'Great', 80);
```

FEEDBACKID	SUBMISSIONID	FEEDBACKTIME	FEEDBACKMESSAGE	ASSIGNMENTMARKS
F00015	S00015	17-FEB-21 04.45.00.000000 PM	Great	80

## Update Test by Lecturer

### 13. Lecturer Update Feedback

```
UPDATE FEEDBACK SET FeedbackMessage = 'In overall are good' WHERE
FeedbackID = 'F00015';
```

FEEDBACKID	SUBMISSIONID	FEEDBACKTIME	FEEDBACKMESSAGE	ASSIGNMENTMARKS
F00015	S00015	17-FEB-21 04.45.00.000000 PM	In overall are good	80

### 14. Lecturer updates score of GradeReport of Student

```
UPDATE GradeReport SET Score = 80 WHERE ReportID = 'RSEBJ1000789';
```

	REPORTID	SCORE	CLO_ACHIEVEMENT	PLO_ACHIEVEMENT
1	RSECJ1000101	65	70	82
2	RSECR1000109	50	60	48
3	RSECV1000110	70	65	68
4	RSECD1001819	75	50	78
5	RSEBQ1800509	72	65	75
6	RSEBJ1000789	80	70	60
7	RSEBC1008929	73	68	48
8	RSEBR1002568	78	68	75
9	RSEBK1000549	70	78	65
10	RSECK1004568	65	60	68

15. Lecturer delete feedback

```
DELETE FROM FEEDBACK WHERE FeedbackID = 'F00015';
```

FEEDBACKID	SUBMISSIONID	FEEDBACKTIME	FEEDBACKMESSAGE	ASSIGNMENTMARKS
F00001	S00001	17-FEB-21 11.15.00.000000 AM	Well done!	89
F00002	S00002	17-FEB-21 11.30.00.000000 AM	Well done!	83
F00003	S00003	17-FEB-21 11.50.00.000000 AM	Excellent!	91
F00004	S00004	17-FEB-21 12.15.00.000000 PM	Need improve more on basic concepts!	70
F00005	S00005	17-FEB-21 12.45.00.000000 PM	Need improve more on SQL skills!	70
F00006	S00006	17-FEB-21 01.00.00.000000 PM	Well done!	85
F00007	S00007	17-FEB-21 01.40.00.000000 PM	Well done!	85
F00008	S00008	17-FEB-21 02.05.00.000000 PM	Well done!	85
F00009	S00009	17-FEB-21 03.33.00.000000 PM	Well done!	85
F00010	S00010	17-FEB-21 04.15.00.000000 PM	Well done!	88
F00011	S00011	17-FEB-21 04.45.00.000000 PM	Fundamental is weak	50
F00012	S00012	18-FEB-21 11.15.00.000000 AM	Fundamental is weak!	60
F00013	S00013	18-FEB-21 11.45.00.000000 AM	Well done!	88
F00014	S00014	18-FEB-21 12.15.00.000000 PM	Late Submit Reduce marks	81

16. Program Coordinator queries AchievementReport through key in ProgramID

```
SELECT * FROM AchievementReport WHERE ProgramID = 'SECV';
```

REPORTID	CLO_KPI	PLO_KPI	CLO_ACHIEVEMENT	PLO_ACHIEVEMENT	STAFFID	PROGRAMID
1 RSECV1000110	70	65	68	70	P10EC03	SECV

17. Lecturer calculate and covert assignment marks to coursework mark of students

```
SELECT SubmissionID "Submission ID",
AssignmentMarks*0.05 "Coursework 5%"
FROM Feedback;
```

	Submission ID	Coursework 5%
1	S00001	4.45
2	S00002	4.15
3	S00003	4.55
4	S00004	3.5
5	S00005	3.5
6	S00006	4.25
7	S00007	4.25
8	S00008	4.25
9	S00009	4.25
10	S00010	4.4
11	S00011	2.5
12	S00012	3
13	S00013	4.4
14	S00014	4.05

18. Test Condition Query NOT by Select Student Who is not Submitted Late

```
SELECT StudentID, SubmissionStatus
FROM SUBMISSION
WHERE NOT SubmissionStatus='Late
Submitted';
```

STUDENTID	SUBMISSIONSTATUS
A19EC0001	Submitted
A19EC0002	Submitted
A19EC0003	Submitted
A19EC0004	Submitted
A19EC0005	Submitted
A19EC0006	Submitted
A19EC0007	Submitted
A19EC0008	Submitted
A19EC0009	Submitted
A19EC0010	Submitted
A19EC0011	Submitted
A19EC0012	Submitted
A19EC0013	Submitted

19. Test Condition Query AND by Select Student Who Score 85 and Feedback is Well Done!

```
SELECT SubmissionID, AssignmentMarks,
FeedbackMessage
FROM FEEDBACK WHERE AssignmentMarks=85;
```

SUBMISSIONID	ASSIGNMENTMARKS	FEEDBACKMESSAGE
S00006	85	Well done!
S00007	85	Well done!
S00008	85	Well done!
S00009	85	Well done!

20. Test Condition Query OR by Select Lecturer who Teach SECD2613 or SECD2523

```
SELECT StaffID, CourseID
FROM LECTURER WHERE CourseID='SECD2613'
OR CourseID='SECD2523';
```

STAFFID	COURSEID
L10EC01	SECD2613
L10EC02	SECD2523

21. Student View own Grade Report

```
SELECT st.StudentName, p.CourseID, gr.Score
FROM STUDENT st JOIN Viewing v
ON st.StudentID = v.StudentID
JOIN GradeReport gr
ON gr.ReportID = v.ReportID
JOIN Provider p
ON p.ReportID = gr.ReportID
WHERE st.StudentName = 'See Wen Xiang';
```

STUDENTNAME	COURSEID	SCORE
1 See Wen Xiang	SECV2113	70

## 22. Student Edit own Assignment Submission

```
UPDATE SUBMISSION
SET SubmissionTime = timestamp '2021-02-05 15:00:00'
WHERE StudentID = 'A19EC0003';
```

SUBMISSIONID	STUDENTID	RUBRICID	SUBMISSIONTIME	SUBMISSIONSTATUS	SUBMISSIONDUE
1 S00001	A19EC0001	RSECD2523	31/01/2021 11:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
2 S00002	A19EC0002	RSECD2523	31/01/2021 11:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
3 S00003	A19EC0003	RSECD2523	05/02/2021 15:00:00.000000000	Submitted	12/02/2021 11:00:00.000000000
4 S00004	A19EC0004	RSECD2523	31/01/2021 15:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
5 S00005	A19EC0005	RSECD2523	31/01/2021 16:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
6 S00006	A19EC0006	RSECD2523	31/01/2021 17:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
7 S00007	A19EC0007	RSECD2523	31/01/2021 17:45:00.000000000	Submitted	12/02/2021 11:00:00.000000000
8 S00008	A19EC0008	RSECD2523	31/01/2021 13:33:00.000000000	Submitted	12/02/2021 11:00:00.000000000
9 S00009	A19EC0009	RSECD2523	31/01/2021 11:10:00.000000000	Submitted	12/02/2021 11:00:00.000000000
10 S00010	A19EC0010	RSECD2523	02/02/2021 10:33:00.000000000	Submitted	12/02/2021 11:00:00.000000000
11 S00011	A19EC0011	RSECD2523	02/02/2021 16:11:00.000000000	Submitted	12/02/2021 11:00:00.000000000
12 S00012	A19EC0012	RSECD2523	05/02/2021 17:45:00.000000000	Submitted	12/02/2021 11:00:00.000000000
13 S00013	A19EC0013	RSECD2523	11/02/2021 17:46:00.000000000	Submitted	12/02/2021 11:00:00.000000000
14 S00014	A19EC0014	RSECD2523	13/02/2021 18:45:00.000000000	Late Submitted	12/02/2021 11:00:00.000000000
15 S00015	A19EC0015	RSECD2523	14/02/2021 18:00:00.000000000	Late Submitted	12/02/2021 11:00:00.000000000

## 23. Student Delete Own Assignment Submission

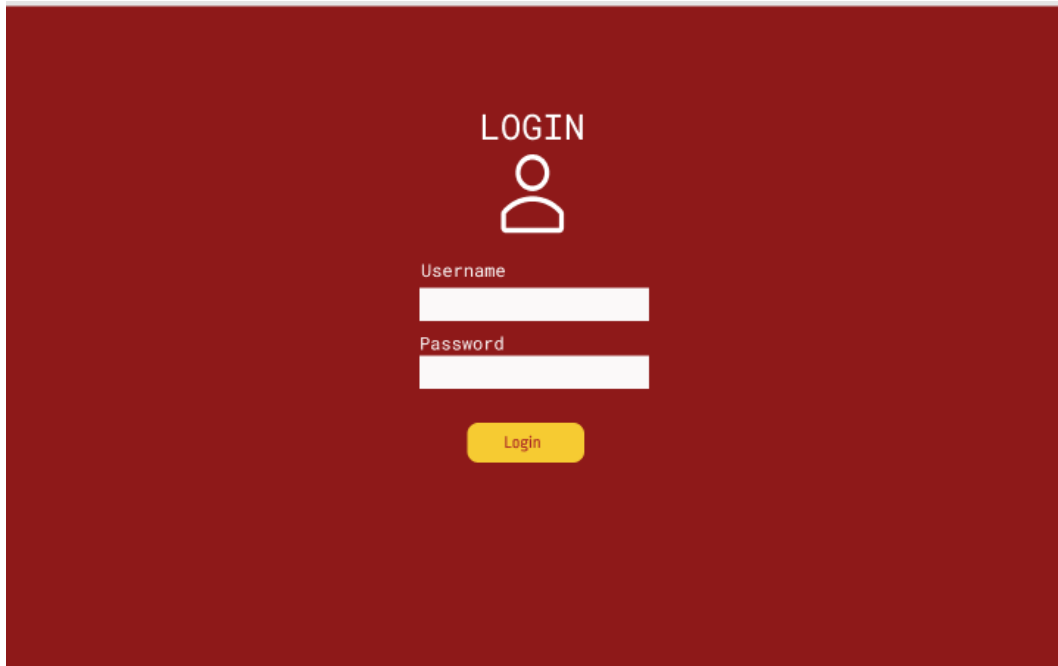
```
DELETE SUBMISSION
WHERE StudentID = 'A19EC0015';
```

SUBMISSIONID	STUDENTID	RUBRICID	SUBMISSIONTIME	SUBMISSIONSTATUS	SUBMISSIONDUE
1 S00001	A19EC0001	RSECD2523	31/01/2021 11:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
2 S00002	A19EC0002	RSECD2523	31/01/2021 11:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
3 S00003	A19EC0003	RSECD2523	05/02/2021 15:00:00.000000000	Submitted	12/02/2021 11:00:00.000000000
4 S00004	A19EC0004	RSECD2523	31/01/2021 15:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
5 S00005	A19EC0005	RSECD2523	31/01/2021 16:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
6 S00006	A19EC0006	RSECD2523	31/01/2021 17:30:00.000000000	Submitted	12/02/2021 11:00:00.000000000
7 S00007	A19EC0007	RSECD2523	31/01/2021 17:45:00.000000000	Submitted	12/02/2021 11:00:00.000000000
8 S00008	A19EC0008	RSECD2523	31/01/2021 13:33:00.000000000	Submitted	12/02/2021 11:00:00.000000000
9 S00009	A19EC0009	RSECD2523	31/01/2021 11:10:00.000000000	Submitted	12/02/2021 11:00:00.000000000
10 S00010	A19EC0010	RSECD2523	02/02/2021 10:33:00.000000000	Submitted	12/02/2021 11:00:00.000000000
11 S00011	A19EC0011	RSECD2523	02/02/2021 16:11:00.000000000	Submitted	12/02/2021 11:00:00.000000000
12 S00012	A19EC0012	RSECD2523	05/02/2021 17:45:00.000000000	Submitted	12/02/2021 11:00:00.000000000
13 S00013	A19EC0013	RSECD2523	11/02/2021 17:46:00.000000000	Submitted	12/02/2021 11:00:00.000000000
14 S00014	A19EC0014	RSECD2523	13/02/2021 18:45:00.000000000	Late Submitted	12/02/2021 11:00:00.000000000



### 3.0 Application Programming (User Manual)

#### Lecturer View



Login Page

STEP 1: User type in username registered and password.

STEP 2: User click login button to login.

Main Page

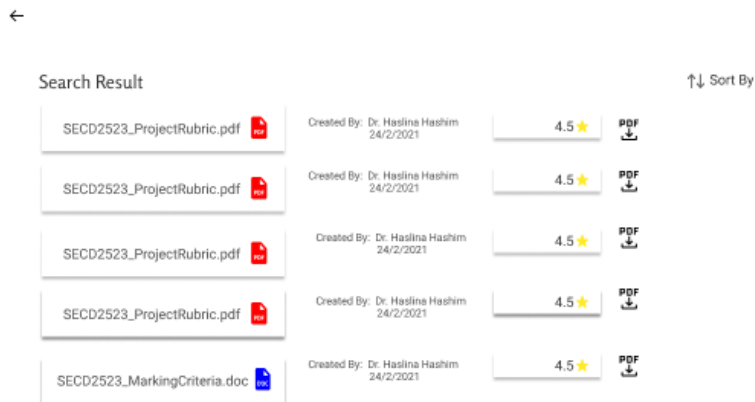


Search Rubric , Edit Rubric and Share Rubric.

STEP 1: Click rubric button.



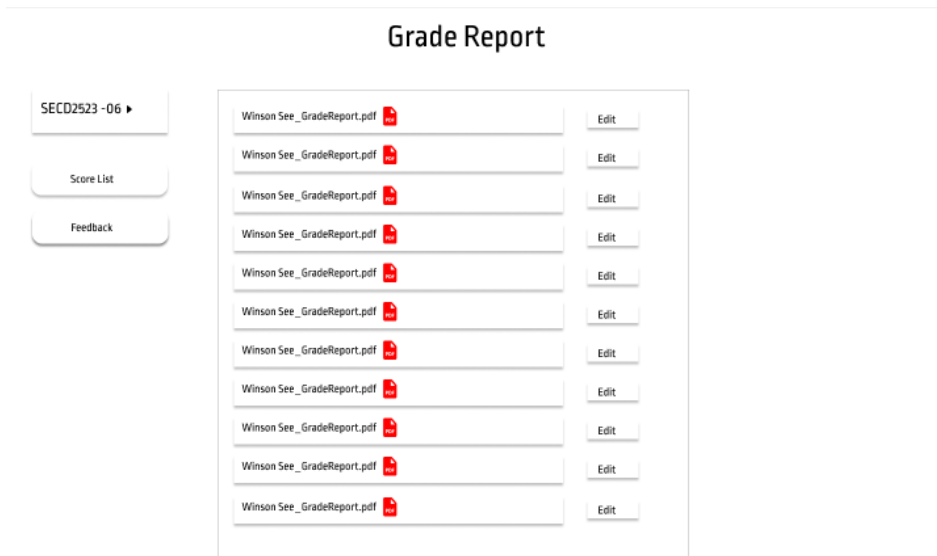
STEP 2: Type in RubricID to search related rubrics.



STEP 3: From the search results, choose one and download.

STEP 4: Download to computer and continue to edit rubric.

STEP 5: Click share if want to upload the rubric made to rubric bank.



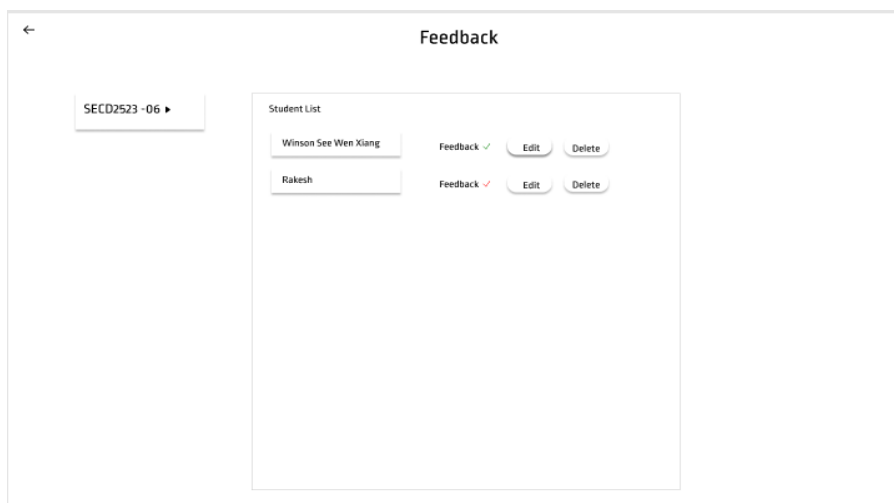
### View Grade Report

STEP 1. Choose the section.

STEP 2. List of grade report uploaded is displayed.

STEP 3. Click edit if want to edit grade report.

STEP 4. Click feedback if want to add or delete feedback.



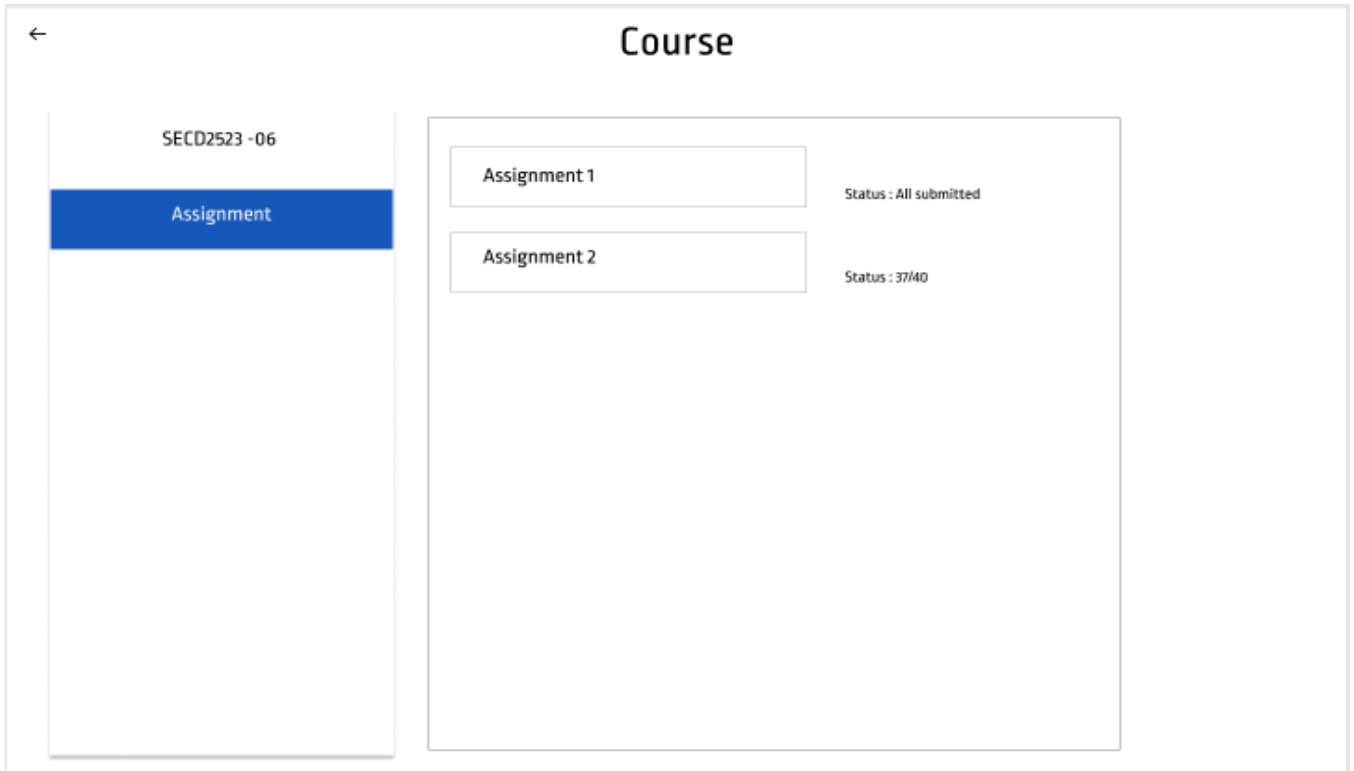
### Edit or Delete Feedback

STEP 1. The green tick show submission status is submitted while red tick is not submitted.

STEP 2. Click section to change other section ( if teach more than 1 course or section).

STEP 3: Click edit to edit feedback.

STEP 4: Click delete to delete feedback.



View assignment submission

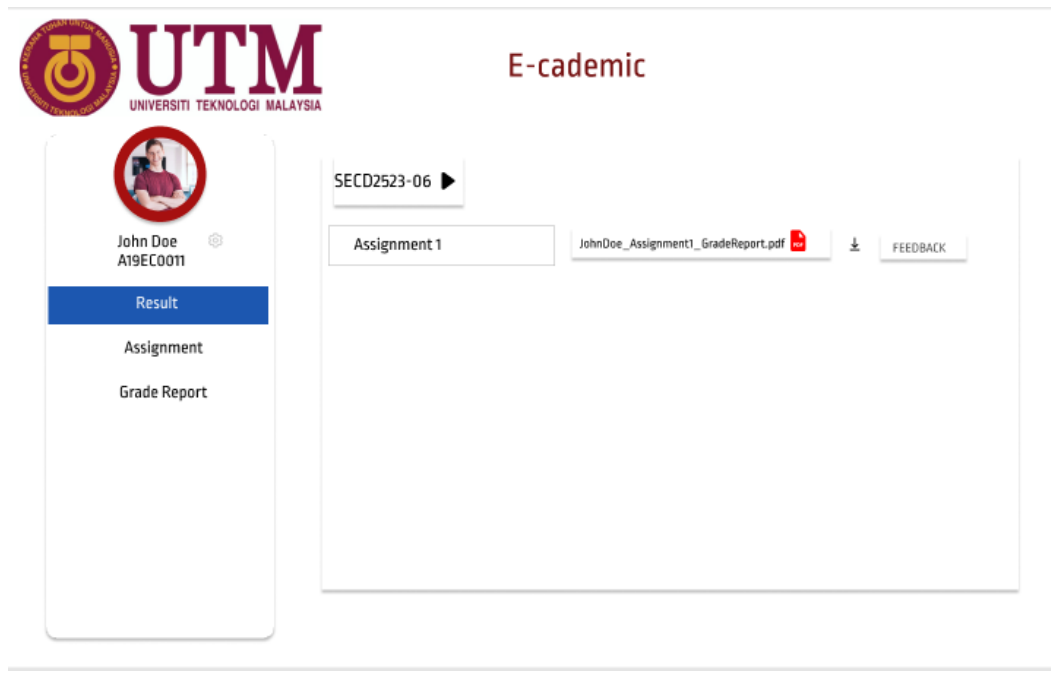
STEP 1: Click assignment.

STEP 2: View the status of assignment submission.

STEP 3: Click the status to view the student who submitted or not.



## Student View



The screenshot shows the UTM E-cademic student view interface. At the top left is the UTM logo (Universiti Teknologi Malaysia). To the right, the text "E-cademic" is displayed. Below the logo, a student profile card for "John Doe" (ID: A19EC001) is shown with a circular profile picture. A blue button labeled "Result" is highlighted. Below it are links for "Assignment" and "Grade Report". To the right of the profile card, a dropdown menu shows "SECD2523-06". Below this, a card for "Assignment 1" is visible, containing a PDF file named "JohnDoe\_Assignment1\_GradeReport.pdf" with a download icon and a "FEEDBACK" button.

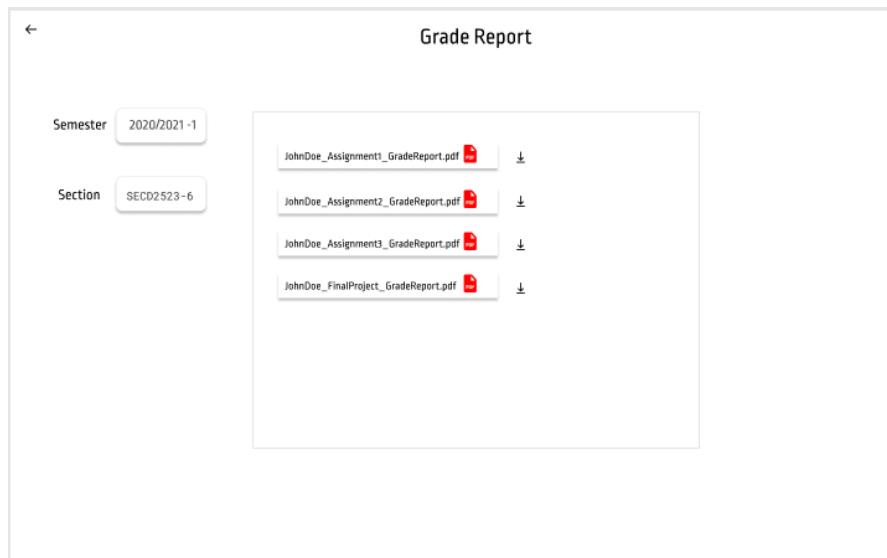
View result

STEP 1: Click result.

STEP 2: Select section.

STEP 3: Click the grade report to download.

STEP 4: View grade report.



The screenshot shows the "Grade Report" view in the UTM E-cademic system. On the left, there are filters for "Semester" (2020/2021 -1) and "Section" (SECD2523-6). The main area displays a list of four PDF files for download, each with a download icon and a "FEEDBACK" button:

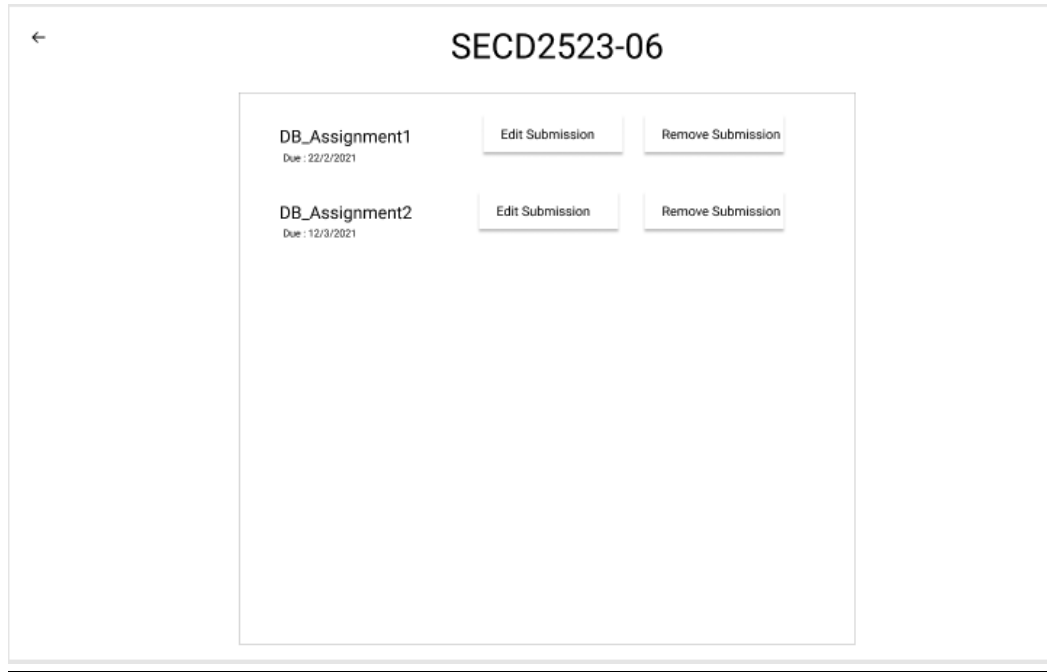
- JohnDoe\_Assignment1\_GradeReport.pdf
- JohnDoe\_Assignment2\_GradeReport.pdf
- JohnDoe\_Assignment3\_GradeReport.pdf
- JohnDoe\_FinalProject\_GradeReport.pdf

Student View Grade Report

STEP 1: Click semester to choose which semester to view.

STEP 2: Click section to choose which section.

STEP 3: Download the grade report to view.



### Edit or Delete Submission

STEP 1: Click edit assignment to resubmit edited assignment (if due date is still available)

STEP 2: Click remove submission to delete submitted assignment.

## Admin View

The screenshot displays the Admin Panel interface. On the left is a dark sidebar with 'Admin Panel' at the top, a user icon, 'ADMIN', 'Dashboard', and 'User' buttons. The main area has filters for 'FACULTY', 'SCHOOL', 'PROGRAM', 'LECTURER', and 'STUDENT'. Below these are fields for 'Faculty: Engineering', 'User: Student', and 'School: Computing'. An 'ADD USER' button is on the right. A table lists users with columns for Name, Matric ID, UTM Email, and Action (Edit/Delete).

Name	Matric ID	UTM Email	Action
Winson See Wen Xiang	A19EC0001	winsonsee@graduate.utm.my	<a href="#">Edit</a> <a href="#">Delete</a>
Winson See Wen Xiang	A19EC0001	winsonsee@graduate.utm.my	<a href="#">Edit</a> <a href="#">Delete</a>
Winson See Wen Xiang	A19EC0001	winsonsee@graduate.utm.my	<a href="#">Edit</a> <a href="#">Delete</a>
Winson See Wen Xiang	A19EC0001	winsonsee@graduate.utm.my	<a href="#">Edit</a> <a href="#">Delete</a>
Winson See Wen Xiang	A19EC0001	winsonsee@graduate.utm.my	<a href="#">Edit</a> <a href="#">Delete</a>
Winson See Wen Xiang	A19EC0001	winsonsee@graduate.utm.my	<a href="#">Edit</a> <a href="#">Delete</a>
Winson See Wen Xiang	A19EC0001	winsonsee@graduate.utm.my	<a href="#">Edit</a> <a href="#">Delete</a>
Winson See Wen Xiang	A19EC0001	winsonsee@graduate.utm.my	<a href="#">Edit</a> <a href="#">Delete</a>
Winson See Wen Xiang	A19EC0001	winsonsee@graduate.utm.my	<a href="#">Edit</a> <a href="#">Delete</a>

Admin insert new user

STEP 1: Click 'Add User' to insert new user account into the database.

STEP 2: Insert user information

Admin edit user data

STEP 1: Click edit to update user information.

STEP 2: Update user data.

Admin delete user data

STEP 1: Click delete to delete user account.

STEP 2: Delete user account permanently.

Admin query user data

STEP 1: Click 'user' on admin panel

STEP 2: Query user data based on user type (program coordinator, lecturer and student)

STEP 3: User data and information display in a list.