Logical Data Model

Course Evaluation System

Assignment 6

Version 1.6

Group 5

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Contents

1 Relational Data Model

1.1 Course Allocation

Course Allocation Table	
Column Name	**Data Type**
studentId	INT
courseId	INT

1.2 Major Instrument

Major Instrument Table	
Column Name	**Data Type**
majorId	INT PRIMARY KEY AUTO_INCREMENT
name	VARCHAR(50)
courseId	INT , FOREIGN KEY REFERENCES Course Allocation Table(courseId)
weightage	INT
marks	INT , Calcualted

1.3 Minor Intrument

Minor Instrument Table	
Column Name	**Data Type**
minorid	INT PRIMARY KEY AUTO_INCREMENT
name	VARCHAR(50)
majorId	INT , FOREIGN KEY REFERENCES Major Instrument Table(majorId)
weightage	INT
marks	INT

1.4 Obtain Marks

Obtain Marks Table	
Column Name	**Data Type**
minorId	INT , FOREIGN KEY REFERENCES Minor Instrument
studentId	INT , FOREIGN KEY REFERENCES Course Allocation Table(courseId)
obtainMarks	INT

1.5 Grades

Grade Table	
Column Name	**Data Type**
gradeid	INT PRIMARY KEY AUTO_INCREMENT
gradeName	VARCHAR(10) PRIMARY KEY
gradeRange	VARCHAR(20)
status	VARCHAR(20)

1.6 Major Total Marks

Major Total Marks Table	
Column Name	**Data Type**
majorId	INT , FOREIGN KEY REFERENCES Major Instrument Table(majorId)
minorsTotal	INT , Calculated

1.7 Result Table

Column Name	Data Type
	Result Table
resultId	INT PRIMARY KEY AUTO_INCREMENT
studentId	INT , FOREIGN KEY REFERENCES Course Allocation Table(courseId)
courseId	INT , FOREIGN KEY REFERENCES Course Allocation Table(courseId)
totalMarks	INT, Calculated
gradeId	VARCHAR(10), FOREIGN KEY REFERENCES Grade(gradeId)

2 Product Functions

1. **Instrument Definition:** Permits the creation and configuration of major and minor evaluation instruments.

2. **Mark Entry:** Enables entry of student marks, including support for both major and minor instruments.

3. **Grade Calculation:** Automatically computes student grades based on defined evaluation criteria.

4. **Pass/Fail Evaluation:** Evaluates student performance and marks students as pass or fail.

5. **Reporting:** Generates reports, including grade sheets, position lists, and overall course evaluations.