

Relational schema

1. User(UID, E-mail, Password, FirstName, LastName, Gender, Address)

2. UserMobileNumber(UID, MobileNumber)

UserMobileNumber.UID references User.UID

3. Admin(UID)

Admin.UID references User.UID

4. Instructor(UID, Rate)

Instructor.UID references User.UID

Where: Rate= Average of ratings given by students

5. Student(UID, GPA)

Student.UID references User.UID

Where: GPA= Average of grades in all courses finished

6. Credit_Card(Number, Expiry_date, CVV, HolderName)

7. PromoCode(Code, Issue_Date, Expiry_Date, Discount_Amount, Issued_by)

PromoCode.Issued_by references Admin.UID

8. Course(Course_ID, Name, Credit_Hours, Description, Content, Price,
Added_by, Accepted_by)

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Course.Added_by references Instructor.UID

Course.Accepted_by references Admin.UID

9. Assignment(Course_ID, Number, Defined_by, Full_Grade, Weight,

Deadline, Content)

Assignment.Course_ID references Course.Course_ID

Assignment.Defined_by references Instructor.UID

10.Exam(Course_ID, Number)

Exam.Course_ID references Assignment.Course_ID

Exam.Number references Assignment.Number

11.Quiz(Course_ID, Number)

Quiz.Course_ID references Assignment.Course_ID

Quiz.Number references Assignment.Number

12.Project(Course_ID, Number)

Project.Course_ID references Assignment.Course_ID

Project.Number references Assignment.Number

13.Feedback(Course_ID, FeedbackNumber, Given_by, Comment, Like)

Feedback.Course_ID references Course.Course_ID

Feedback.Given_by references Student.UID

14.Certificate(Course_ID, Student_UID, Issue_Date)

Certificate.Course_ID references Course.Course_ID

Certificate.Student_UID references Student.UID

15.StudentUsesPromocode(Code, Student_UID)

StudentUsesPromocode.Code references PromoCode.Code

StudentUsesPromocode.Student_UID references Student.UID

16. StudentRatesInstructor(Student_UID, Instructor_UID, Rating)

StudentRatesInstructor.Student_UID references Student.UID
StudentRatesInstructor.Instructor_UID references Instructor.UID

17. StudentUsesCreditCard(Student_UID, Number)

StudentRatesInstructor.Student_UID references Student.UID
StudentRatesInstructor.Number references Credit_Card.Number

18. CoursePrerequisites(Course_ID, Requires)

CoursePrerequisites.Course_ID references Course.Course_ID
CoursePrerequisites.Requires references Course.Course_ID

19. InstructorAddsInstructors(Instructor_UID, Course_ID, Instructor Added)

InstructorAddsInstructors.Instructor_UID references Instructor.UID
InstructorAddsInstructors.Course_ID references Course.Course_ID
InstructorAddsInstructors.Instructor_Added references Instructor.UID

20. StudentEnrollsInCourse(Instructor_UID, Course_ID, Student_UID)

StudentEnrollsInCourse.Instructor_UID references Instructor.UID
StudentEnrollsInCourse.Course_ID references Course.Course_ID
StudentEnrollsInCourse.Student_UID references Student.UID

21. StudentTakesAndInstructorGrades(Instructor_UID, Student_UID, Course_ID, Number, Grade)

StudentTakesAndInstructorGrades.Instructor_UID references Instructor.UID
StudentTakesAndInstructorGrades.Student_UID references Student.UID
StudentTakesAndInstructorGrades.Course_ID references Assignment.Course_ID
StudentTakesAndInstructorGrades.Number references Assignment.Number

