Modifying a Database Design

Lab 2 Submission

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This database design that will be utilized by the universities and colleges will have different sets and relationship entities that are inside the entity sets. There are three key sets, the first one is Student, the second one is Course and the third one is Instructor. All of these entities have their own attributes that describe different entity sets. Firstly Phone Number and Email are entities that are Multivalued attributes for Student and Instructor sets, and this sepeartes them. The primary key for the Student and Instructor are as the primary key for the PhoneNumber and Email entity sets. The relationship between primary entity sets and the PhoneNumber and Email Entity sets are represented by foreign keys in the entity sets from the primary entity sets.

This is a relationship that is called StudenCourseInstructor and the design creates a representation for the students that are taking these course and under which Instructor is the course being take. The primary key is Student, Instructor and Course in a combination and it serves as primary key for this relationship set.

Business rules start with

Students are allowed to take one or more than one courses

Courses can be offered more than once per year, by a different instructor

Student grades will be for each course

Students and Instructors will have more than one email and phone number for contacts.