DEBRE BERHAN UNIVERSITY

COLLEGE OF ENGINEERING

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

DATABASE SYSTEMS GROUP ASSIGNMENT ON

ER DIAGRAM AND RELATIONAL SCHEMA

COURSE TITLE: - Database Systems

COURSE CODE: - ECEg4172

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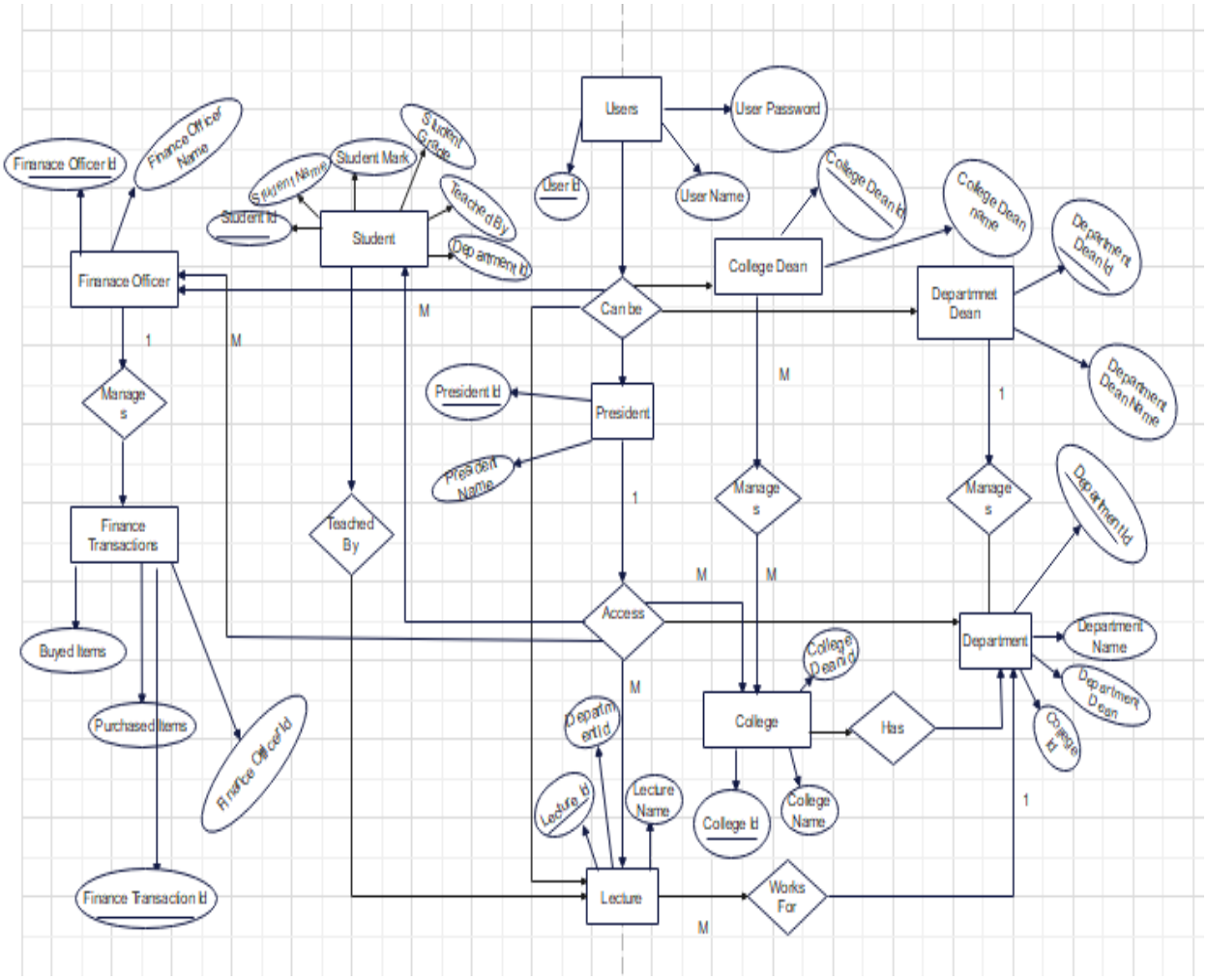
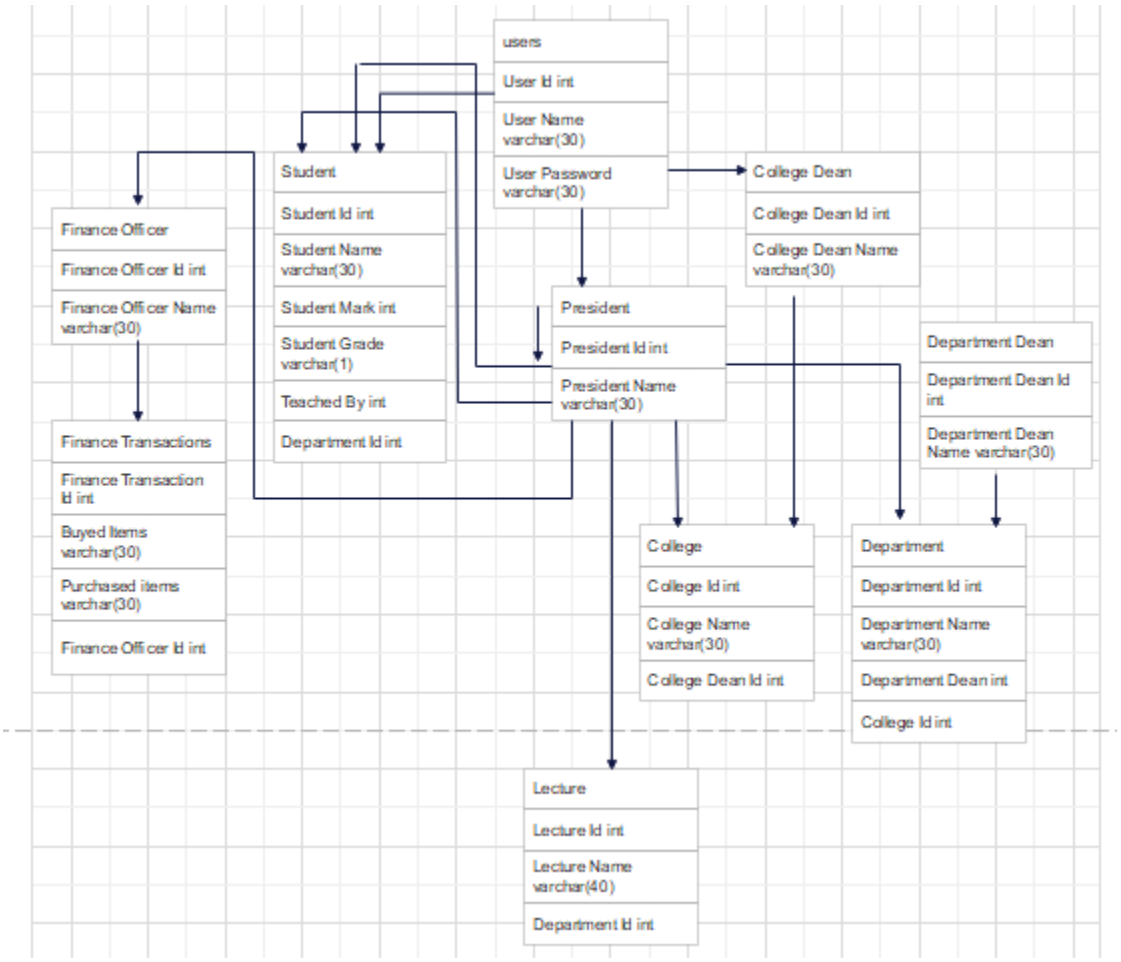
ER Diagram for University Management System



Relational Schema University Management System



Description for the ER Diagram for University Management System

- The users entity has three attributes. These are user id, user name and user password. The attribute user id is the primary key.
- The president entity has two attributes. These are president id and president name. The president id is the primary key.
- The college dean entity has two attributes. These are college dean id and college dean name. The college dean id is the primary key.
- The college has three attributes. These are college id, college name and college dean id. The college id is the primary key. The college dean id is the foreign key, which is used to refer who is the dean of the college.
- The department dean entity has two attributes. These are department dean id and department dean name. The department dean id is the primary key.
- The department has four attributes. These are department id, department name, department dean and college dean id. The department id is the primary key. The college dean id is the foreign key, which is used to know in which college these department is found.
- The Lecture entity has three attributes. These are Lecture id, Lecture name and Department id. The Lecture id is the primary key. The department id is the foreign key, which is used to know in which department that this lecture teaches.
- The Student entity has six attributes. These are Student Id, Student Name, student Mark, Student Grade, Teached By and Department Id. The Student Id is the primary key and the Lectured By and the Department Id are the foreign keys. The Teached By attribute is used to know the student by which lecture that he/she is teached and the department id is used to know the department where the student is being learned.
- The Finance Officer has two attributes. These are Finance Officer Id and Finance Officer Name. The Finance Officer Id is the primary key.
- The Finance Transaction entity has three attributes. These are Buyyed Items,Purchased Items and Finance Officer Id. The Finance Officer Id is the foreign key which is used to know which finance officer performs the financial transactions.

Description of the Relationships University Management System

- The can be relationship is used to know who is the user of the system from our users. Our users can be president, college dean, department dean, lecture, student, lecture and finance officer.
- The Manages relationship between college dean and college is used to show the college dean manages the college.
- The Manages relationship between department dean and department is used to show the department dean manages the department.
- The works for relationship between lecture and department which, is used to show the lecture woks for department.
- The has relationship between college and department is used to show that a college has a department.
- The teached by relation between student and lecture is used to show that a student is teached by a lecture.
- The Manages relationship between finance officer and financed transactions is used to show the finance officer manages the finance transactions.