Waiting List Database Project 2

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I.ER Diagram
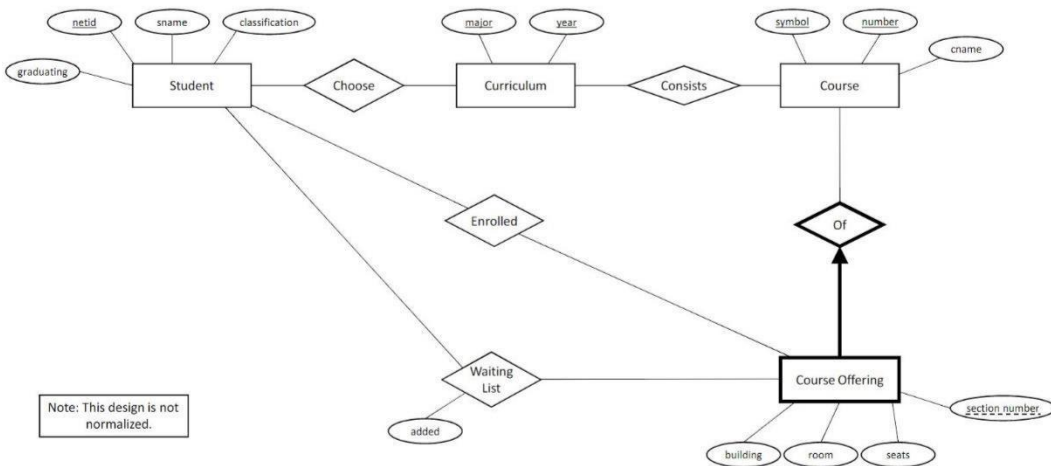
II. Relational Schema

student(netid: string, sname:string)

student_classification (netid: String , classification: string, graduating : Boolean)

　　　　netid: Foreign key to student

choose (netid: string, major: string , year: Date)

　　　　netid: Foreign key to student

　　　　major : Foreign key to curriculum

　　　　year: Foreign key to Curriculum

curriculum (major: string , year: Date)

consists (major: string , year: Date , symbol: string, number: integer)

　　　　major: Foreign key to curriculum

　　　　year: Foreign key to curriculum

　　　　symbol: Foreign key to course

　　　　number: Foreign key to course

course (symbol: string , number: integer, cname: string)

courseoffering_of (symbol: string , number: integer, sectionnumber: integer ,building: string)

　　　　symbol : Foreign key to course

　　　　number : Foreign key to course

courseoffered_at (<u>building</u>: string , <u>room</u> : integer, seats: integer)

enrolled (<u>netid</u>:string, <u>symbol</u>: string, <u>number:</u> integer, <u>sectionnumber</u>: Integer)

      netid: Foreign key to student

      symbol : Foreign key to course

      number: Foreign key to course

      section number: Foreign key to courseoffering_of

waitinglist (<u>netid</u>: string, <u>symbol</u>: string, <u>number</u>:integer, <u>sectionnumber</u>: integer, added: timestamp)

      netid: Foreign key to student

      symbol : Foreign key to course

      number: Foreign key to course

      sectionnumber: Foreign key to courseoffering_of

III. SQL Create Statements

Create Table student(

        netid VARCHAR (10),

        Sname VARCHAR (100),

        Primary key (netid));

Create Table student_Classification (

        classification VARCHAR (50),

        netid VARCHAR (10) Not Null,

        graduating Bool,

        Primary key (classification),

        Foreign key (netid) REFERENCES Student (netid));

Create Table choose (

        netid VARCHAR (15),

        major VARCHAR (30),

        Year Date,

        Primary Key (netid , major, year),

        Foreign key (netid) REFERENCES Student (netid),

        Foreign key (major) REFERENCES Curriculum (major),

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                    Foreign key (year) REFERENCES
Curriculum (year)); CREATE TABLE curriculum (

                    major VARCHAR (30),

                    year Date,

                    Primary Key (major, year));

CREATE TABLE consists (

                    major VARCHAR (30), Year, Date

                    symbol VARCHAR (15), number Integer,

                    Primary key (major, year, symbol, number),

                    Foreign key (major) REFERENCES curriculum (major),

                    Foreign key (year) REFERENCES curriculum (year),

                    Foreign key (symbol) REFERENCES course (symbol),

                    Foreign key (number) REFERENCES Course (number));

CREATE TABLE course (

                    Symbol VARCHAR (15),

                    Number Integer

                    Cname VARCHAR (50));

Create Table courseoffering_of (

                    Symbol VARCHAR (15), number Integer,

                    sectionnumber Integer,

                    Building VARCHAR(50),

                    Primary Key ( symbol, number, sectionnumber)

                    Foreign key (symbol) REFERENCES course(symbol),

                    Foreign key (number) REFERENCES course (number));


CREATE TABLE courseoffered_at(

                    building VARCHAR(50),

                    room Integer,

                    seats Integer,
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Primary Key (building , room));

CREATE TABLE enrolled (

netid VARCHAR(10),

symbol VARCHAR(15)

number Integer,

sectionnumber Integer,

Primary key (netid, symbol, number, sectionnumber),

Foreign key (netid) REFERENCES Student (netid),

Foreign key (symbol) REFERENCES course (symbol),

Foreign key (number), REFERENCES course(number),

Foreign key (sectionnumber) REFERENCES courseoffering_of (sectionnumber));

CREATE TABLE waitinglist (

netid VARCHAR (10),

symbol VARCHAR(15),

number Integer,

sectionnumber Integer,

added timestamp

Primary key (netid, symbol, number, sectionnumber),

Foreign key (netid) REFERENCES Student (netid),

Foreign key (symbol) REFERENCES Course (symbol),

Foreign key (number) REFERENCES Course(number),

Foreign key (sectionnumber) REFERENCES Courseoffering_of (sectionnumber));

References: No references were used.