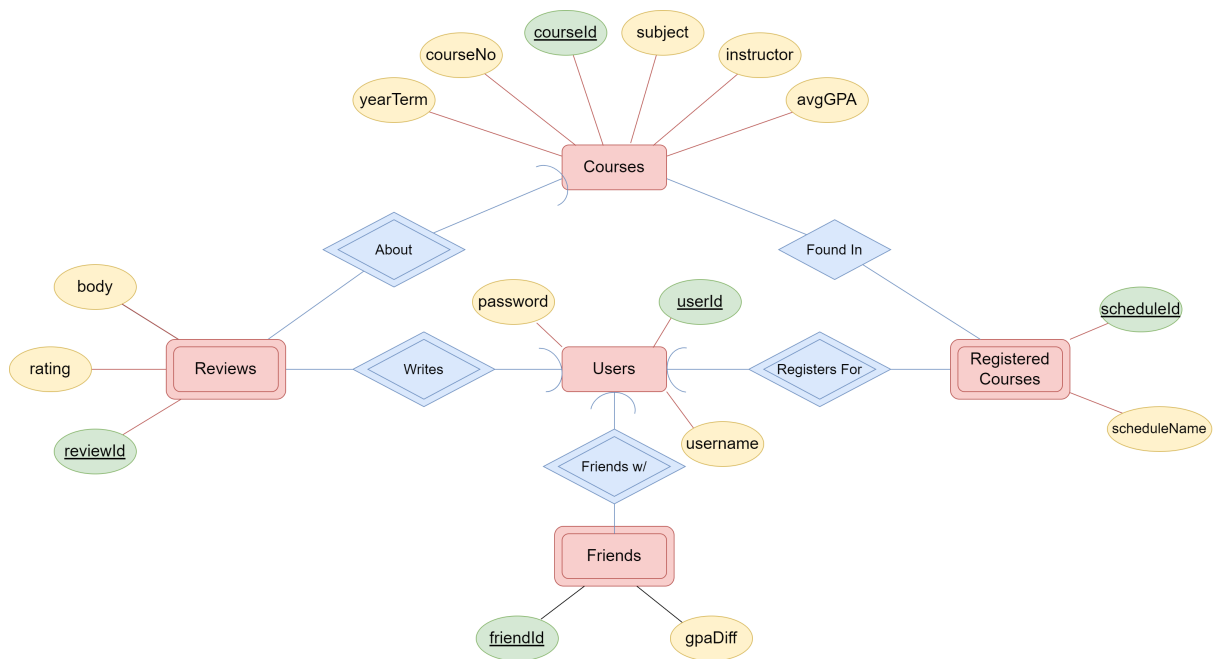
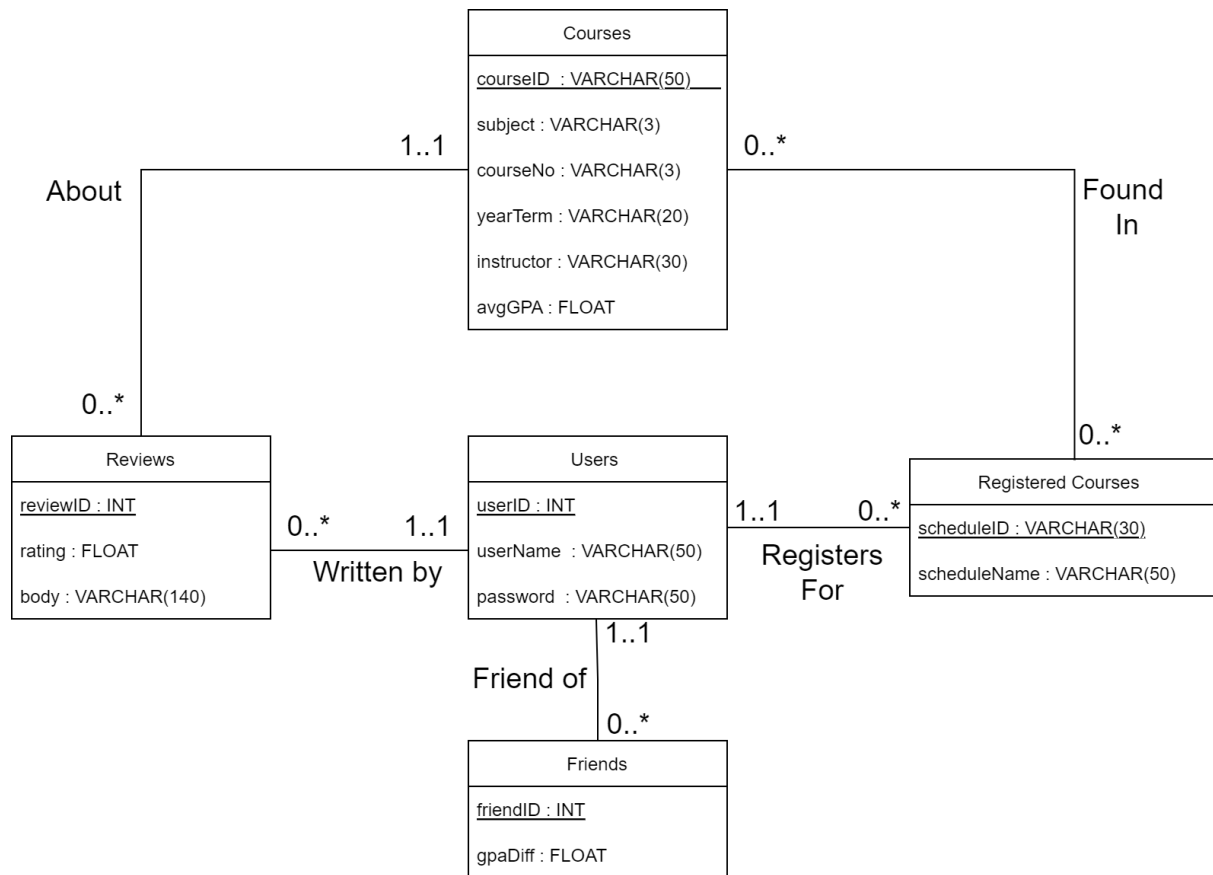


CS 411 Stage 2

ER DIAGRAM



UML DIAGRAM



RELATIONAL SCHEMA

```

CREATE TABLE Courses (
    courseId VARCHAR(50) NOT NULL,
    subject VARCHAR(3),
    courseNo VARCHAR(3),
    yearTerm VARCHAR(20),
    instructor VARCHAR(30),
    avgGPA FLOAT,

    PRIMARY KEY(courseId)
);

CREATE TABLE Users (
    userId INT NOT NULL,
    username VARCHAR(50),
    password VARCHAR(50),

    PRIMARY KEY(userId)
);
  
```

```

CREATE TABLE Reviews (
    reviewId INT NOT NULL,
    rating FLOAT,
    body VARCHAR(140),
    courseId VARCHAR(50),

    PRIMARY KEY(reviewId),
    FOREIGN KEY(courseId) REFERENCES Courses(courseId) ON DELETE CASCADE
);

CREATE TABLE RegisteredCourses (
    scheduleId VARCHAR(30) NOT NULL,
    scheduleIdName VARCHAR(50),
    courseId VARCHAR(50),

    PRIMARY KEY(scheduleId),
    FOREIGN KEY(courseId) REFERENCES Courses(courseId) ON DELETE CASCADE
);

CREATE TABLE FoundIn (
    courseId VARCHAR(50) NOT NULL,
    scheduleId VARCHAR(30) NOT NULL,

    PRIMARY KEY(courseId, scheduleId),
    FOREIGN KEY(courseId) REFERENCES Courses(courseId) ON DELETE CASCADE,
    FOREIGN KEY(scheduleId) REFERENCES RegisteredCourses(scheduleId) ON DELETE CASCADE
);

CREATE TABLE Friends (
    friendId INT NOT NULL,
    gpaDiff FLOAT,
    userId INT,

    PRIMARY KEY(friendId),
    FOREIGN KEY(userId) REFERENCES Users(userId) ON DELETE CASCADE
);

```