

CPSC 332 File Structure and Database System

Database Project

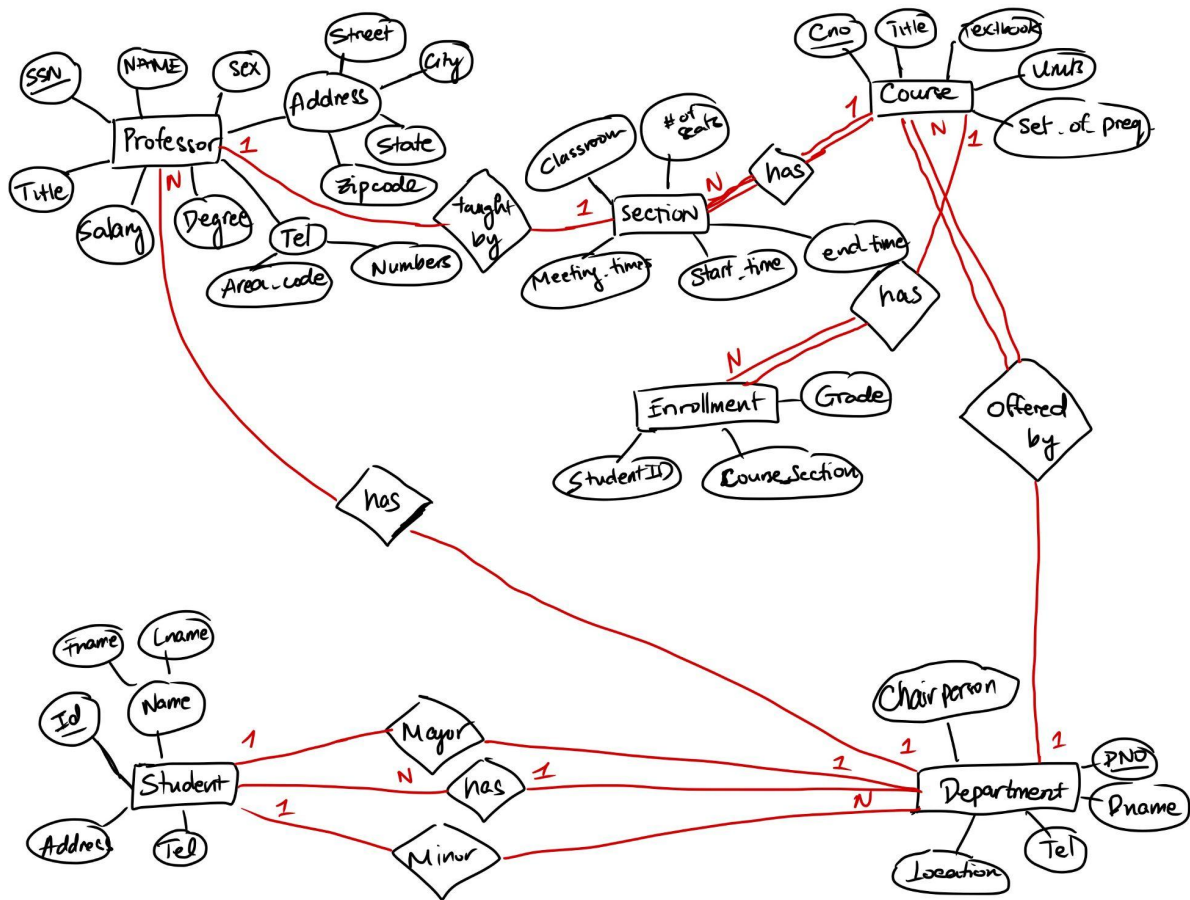
Duy Nguyen

CWID: 9331

Account: cs332g22

Link: <http://ecs.fullerton.edu/~cs332g22/>

ER Diagram



Relation Model

Professor

<u>SSN</u>	NAME	SEX	TITLE	SALARY	DEGREES
------------	------	-----	-------	--------	---------

Professor Address

<u>SSN</u>	Street	City	STATE	zipcode
------------	--------	------	-------	---------

FK: SSN (Professor)

Professor Telephone

<u>SSN</u>	Area_code	Numbers
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FK: SSN (Professor)

Department

<u>Dno</u>	Dname	Tel	Location	Professor
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FK: SSN (Professor)

Course

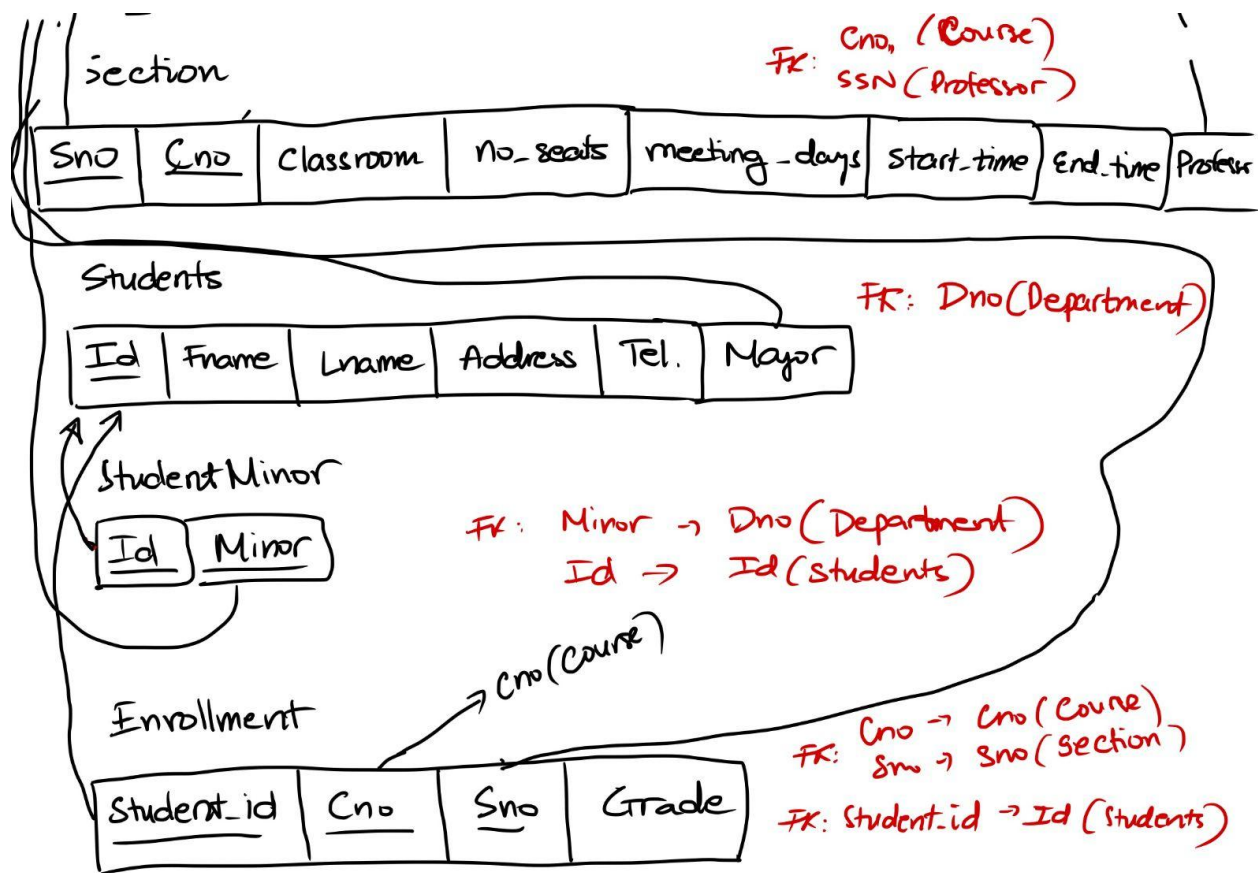
<u>Cno</u>	Title	Textbook	Units	Dno
------------	-------	----------	-------	-----

FK: Dno (Department)

Course Preq.

<u>Cno</u>	Pre_req
------------	---------

FK: Cno (Course)



USER INTERFACE

Pick the title of the user, which can be either professor or a student

University Database

Please choose your title:

Professor

Student

Professor can either check their class,meeting_days,time by input their SSN
Available SSN = '123456789'

Enter the social security number:

123456789

Search

OR

Enter the course number and section number:

Course number:

Section number:

Search

Connected sucessfully

Classroom: E303
SSN : 123456789
Title: EGCP
Meeting_days: M W F
Start: 08 30
End: 09 45

Classroom: E303
SSN : 123456789
Title: EGCP
Meeting_days: M W F
Start: 10 00
End: 11 15

Or professor can use course and section number to count for how many students got (A,B,C,D +/- grade) in the class. This function is incomplete since only Course number= '450' and section number '01' is working even though I have data ('450','332','381') for course number and ('01', '02', '03') for section number.

OR

Enter the course number and section number:

Course number:

Section number:

Connected sucessfully

Grade: A+

Count: 1

Grade: A-

Count: 1

Grade: B

Count: 1

Grade: C+

Count: 2

Student can enter course number to check out for how many sections each course have included meeting days, time, and classroom

Enter the course number:

OR

Enter the student CWID:

Section: 1

Classroom: E303

Meeting Days : M W F

Start: 08 30

End: 09 45

Number of seats: 50

Section: 3

Classroom: E303

Meeting Days : M W F

Start: 10 00

End: 11 15

Number of seats: 50

Or student can use their CWID to check for their course grade
Sample working CWID = “987654321” and “876543219”

Enter the student CWID:

Course: 332

Title : CPSC

Grade : A+

Course: 381

Title : EGCP

Grade : B

Course: 450

Title : EGCP

Grade : A-

SOURCE CODE:

Index.html

```
<!DOCTYPE html>
<html>
<body>

<h2>University Database</h2>
<p>Please choose your title:</p>

<form action="professorInput.php" method="POST">
<input type="submit" id="professor_press" value="Professor">
</form>
<form action="studentInput.php" method="POST">
<input type="submit" id="student_press" value="Student">
</form>

</body>
</html>
```

professorInput.php

```
<html>
<body>

<form action="professorInfo.php" method="POST">
<p>Enter the social security number:</p>
<input type="text" name="sno"/>

<p><input type="submit" value="Search"/></p>
</form>

<p>OR</p>

<form action="professorInfo2.php" method="POST">
<p>Enter the course number and section number:</p>
<p>Course number: <input type="text" name="icn"/></p>
<p>Section number: <input type="text" name="isn"/></p>
<p><input type="submit" value="Search"/></p>

</form>

</body>
</html>
```

professorInfo.php

```
<html>
<body>
<?php
$link=mysqli_connect('mariadb','cs332g22','uDM5jjoW','cs332g22');
if(!$link) {
die('Could not connect: '.mysql_error()); }
echo 'Connected successfully<p>';

$query = 'SELECT ssn,c_title, classroom, meeting_days, start_time, end_time
FROM Professor P, Section S, Course C
WHERE P.ssn = "'.$_POST['sno'].'" AND P.ssn = S.professor_ssn AND S.cno =
C.cno';
$result = $link->query($query);
$nor=$result->num_rows;

for($i=0;$i<$nor;$i++) {
$row=$result->fetch_assoc();
echo "Classroom: ",$row['classroom'],"<br>";
printf("SSN : %s<br>\n", $row['ssn']);
printf("Title: %s<br>\n", $row['c_title']);
echo "Meeting_days: ", $row['meeting_days'],"<br>";
echo "Start: ",$row['start_time'],"<br>";
echo "End: ",$row['end_time'],"<br>";
echo "-----", "<br>"; }
$result->free_result();

$link->close();
?>
</body>
</html>
```

professorInfo2.php

```
<html>
<body>
<?php
$link=mysqli_connect('mariadb','cs332g22','uDM5jjoW','cs332g22');
if(!$link) {
die('Could not connect: '.mysql_error()); }
echo 'Connected successfully<p>';

$query = 'SELECT grade, COUNT(*) as count FROM Enrollment E INNER JOIN Section S
ON E.sno = S.sno WHERE S.cno="'.$_POST['icn'].'" AND S.sno="'.$_POST['isn'].'" GROUP
BY grade';
$result = $link->query($query);

$nor=$result->num_rows;

for($i=0;$i<$nor;$i++) {
$row1=$result->fetch_assoc();
echo "Grade: ",$row1["grade"],"<br>";
echo "Count: ",$row1["count"],"<br>";
echo "-----", "<br>";
}
$result->free_result();

$link->close();
?>
</body>
</html>
```

studentInput.php

```
<html>
<body>
<form action="studentInfo.php" method="POST">
<p>Enter the course number:</p>
<input type="text" name="icn"/>
<input type="submit" value="Search"/></p>
</form>

<p>OR</p>

<form action="studentInfo2.php" method="POST">
<p>Enter the student CWID:</p>
<input type="text" name="sid"/>
<input type="submit" value="Search"/></p>
</form>
</body>
</html>
```

studentInfo.php

```
<html>
<body>
<?php
$link=mysqli_connect('mariadb','cs332g22','uDM5jjoW','cs332g22');
if(!$link) {
die('Could not connect: '.mysql_error()); }
echo 'Connected successfully<p>';

$query ='SELECT S.sno,classroom,meeting_days,start_time,end_time,no_seats FROM
Section S, Course C, Enrollment E WHERE C.cno="'.$_POST['icn'].'" AND C.cno=S.cno AND
C.cno=E.cno';
$result = $link->query($query);
$nor=$result->num_rows;

for($i=0;$i<$nor;$i++){

$row=$result->fetch_assoc();
echo "Section: ",$row['sno'],"<br>";
echo "Classroom: ",$row['classroom'],"<br>";
printf("Meeting Days : %s<br>\n", $row['meeting_days']);
printf("Start: %s<br>\n", $row['start_time']);
echo "End: ",$row['end_time'],"<br>";
echo "Number of seats: ",$row['no_seats'],"<br>";
echo "-----", "<br>"; }
$result->free_result();

$link->close();
?>
</body>
</html>
```

studentInfo2.php

```
<html>
<body>
<?php
$link=mysqli_connect('mariadb','cs332g22','uDM5jjoW','cs332g22');
if(!$link) {
die('Could not connect: '.mysql_error()); }
echo 'Connected successfully<p>';

    $query = 'SELECT C.cno,c_title,grade FROM Course C, Students S, Enrollment E WHERE
S.id="'.$_POST['sid'].'" AND S.id=E.student_id AND C.cno=E.cno';
    $result = $link->query($query);
    $nor=$result->num_rows;
    for($i=0;$i<$nor;$i++) {
    $row=$result->fetch_assoc();
    echo "Course: ",$row["cno"],"<br>";
    echo "Title : ",$row["c_title"],"<br>";
    echo "Grade : ",$row["grade"],"<br>";
    echo "-----","<br>";
    }
    $result->free_result();
$link->close();
?>
</body>
</html>
```

Table.ddl

<html>

<body>

<?php

```
CREATE TABLE `Professor` (  
  `ssn` int(11) NOT NULL,  
  `name` varchar(50) DEFAULT NULL,  
  `sex` varchar(50) DEFAULT NULL,  
  `title` varchar(50) DEFAULT NULL,  
  `salary` float DEFAULT NULL,  
  `degrees` varchar(50) DEFAULT NULL,  
  PRIMARY KEY (`ssn`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci
```

```
CREATE TABLE `ProfessorAddress` (  
  `ssn` int(11) DEFAULT NULL,  
  `street` varchar(50) DEFAULT NULL,  
  `city` varchar(50) DEFAULT NULL,  
  `state` varchar(50) DEFAULT NULL,  
  `zipcode` int(11) DEFAULT NULL,  
  KEY `ssn` (`ssn`),  
  CONSTRAINT `ProfessorAddress_ibfk_1` FOREIGN KEY (`ssn`) REFERENCES `Professor`  
  (`ssn`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci
```

```
CREATE TABLE `ProfessorTelephone` (  
  `ssn` int(11) DEFAULT NULL,  
  `areacode` int(11) DEFAULT NULL,  
  `number` int(11) DEFAULT NULL,  
  KEY `ssn` (`ssn`),  
  CONSTRAINT `ProfessorTelephone_ibfk_1` FOREIGN KEY (`ssn`) REFERENCES  
  `Professor` (`ssn`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci
```

```
CREATE TABLE `Department` (  
  `dno` int(11) NOT NULL,  
  `dname` varchar(50) DEFAULT NULL,
```



```

`telephone` int(15) DEFAULT NULL,
`professor_ssn` int(11) DEFAULT NULL,
`location` varchar(50) DEFAULT NULL,
PRIMARY KEY (`dno`),
KEY `professor_ssn` (`professor_ssn`),
CONSTRAINT `Department_ibfk_1` FOREIGN KEY (`professor_ssn`) REFERENCES
`Professor` (`ssn`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci

```

```

CREATE TABLE `Course` (
  `cno` int(11) NOT NULL AUTO_INCREMENT,
  `c_title` varchar(50) DEFAULT NULL,
  `textbook` varchar(50) DEFAULT NULL,
  `units` int(11) DEFAULT NULL,
  `dno` int(11) DEFAULT NULL,
  PRIMARY KEY (`cno`),
  KEY `dno` (`dno`),
  CONSTRAINT `Course_ibfk_1` FOREIGN KEY (`dno`) REFERENCES `Department` (`dno`)
) ENGINE=InnoDB AUTO_INCREMENT=451 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_general_ci

```

```

CREATE TABLE `CoursePreq` (
  `cno` int(11) DEFAULT NULL,
  `pre_req` varchar(20) DEFAULT NULL,
  KEY `cno` (`cno`),
  CONSTRAINT `CoursePreq_ibfk_1` FOREIGN KEY (`cno`) REFERENCES `Course` (`cno`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci

```

```

CREATE TABLE `Section` (
  `sno` int(11) NOT NULL AUTO_INCREMENT,
  `cno` int(11) DEFAULT NULL,
  `classroom` varchar(50) DEFAULT NULL,
  `no_seats` int(100) DEFAULT NULL,
  `meeting_days` varchar(50) DEFAULT NULL,
  `start_time` varchar(5) DEFAULT NULL,
  `end_time` varchar(5) DEFAULT NULL,
  `professor_ssn` int(11) DEFAULT NULL,
  PRIMARY KEY (`sno`),
  KEY `professor_ssn` (`professor_ssn`),
  KEY `cno` (`cno`),

```

```

    CONSTRAINT `Section_ibfk_2` FOREIGN KEY (`professor_ssn`) REFERENCES
`Professor` (`ssn`),
    CONSTRAINT `Section_ibfk_3` FOREIGN KEY (`cno`) REFERENCES `Course` (`cno`)
) ENGINE=InnoDB AUTO_INCREMENT=4 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_general_ci

```

```

CREATE TABLE `Students` (
  `id` int(11) NOT NULL,
  `fname` varchar(50) DEFAULT NULL,
  `lname` varchar(50) DEFAULT NULL,
  `address` varchar(50) DEFAULT NULL,
  `telephone` int(11) DEFAULT NULL,
  `major` varchar(50) DEFAULT NULL,
  PRIMARY KEY (`id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci

```

```

CREATE TABLE `StudentMinor` (
  `id` int(11) DEFAULT NULL,
  `minor` varchar(20) DEFAULT NULL,
  KEY `id` (`id`),
  CONSTRAINT `StudentMinor_ibfk_1` FOREIGN KEY (`id`) REFERENCES `Students` (`id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci

```

```

CREATE TABLE `Enrollment` (
  `student_id` int(11) DEFAULT NULL,
  `cno` int(11) DEFAULT NULL,
  `sno` int(11) DEFAULT NULL,
  `grade` varchar(2) DEFAULT NULL,
  KEY `student_id` (`student_id`),
  KEY `cno` (`cno`),
  KEY `sno` (`sno`),
  CONSTRAINT `Enrollment_ibfk_1` FOREIGN KEY (`student_id`) REFERENCES `Students`
(`id`),
  CONSTRAINT `Enrollment_ibfk_2` FOREIGN KEY (`cno`) REFERENCES `Course` (`cno`),
  CONSTRAINT `Enrollment_ibfk_3` FOREIGN KEY (`sno`) REFERENCES `Section` (`sno`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_general_ci

```

?>

</body>
</html>