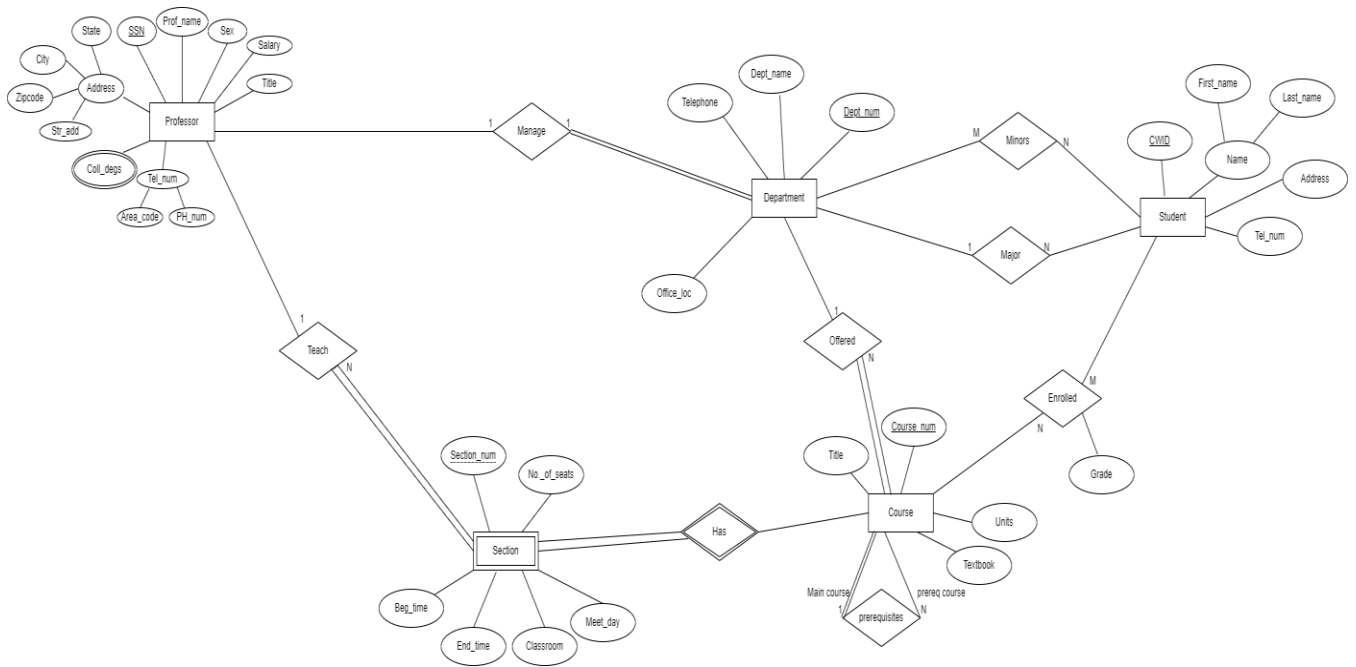


# CPSC 332 FINAL PROJECT

MARL KRISTOFFER RICO – CWID: 0526

ACCOUNT NO. CS332S30 ([HTTP://ECS.FULLERTON.EDU/~CS332S30/](http://ecs.fullerton.edu/~CS332S30/))

## ER DIAGRAM:



## RELATIONAL MODEL:

Professor

<u>SSN</u>	Prof_name	Sex	Salary	Title	Area_code	Ph_num	Coll_degs	Str_add	Zipcode	City	State
------------	-----------	-----	--------	-------	-----------	--------	-----------	---------	---------	------	-------

Department

<u>Dept_num</u>	Dept_name	Telephone	Office_loc	P_SSN
-----------------	-----------	-----------	------------	-------

Course

<u>Course_num</u>	Title	Units	Textbook	prereq_course_num	Dept_num
-------------------	-------	-------	----------	-------------------	----------

Student

<u>CWID</u>	First_name	Last_name	Address	Tel_num	Dept_num
-------------	------------	-----------	---------	---------	----------

Section

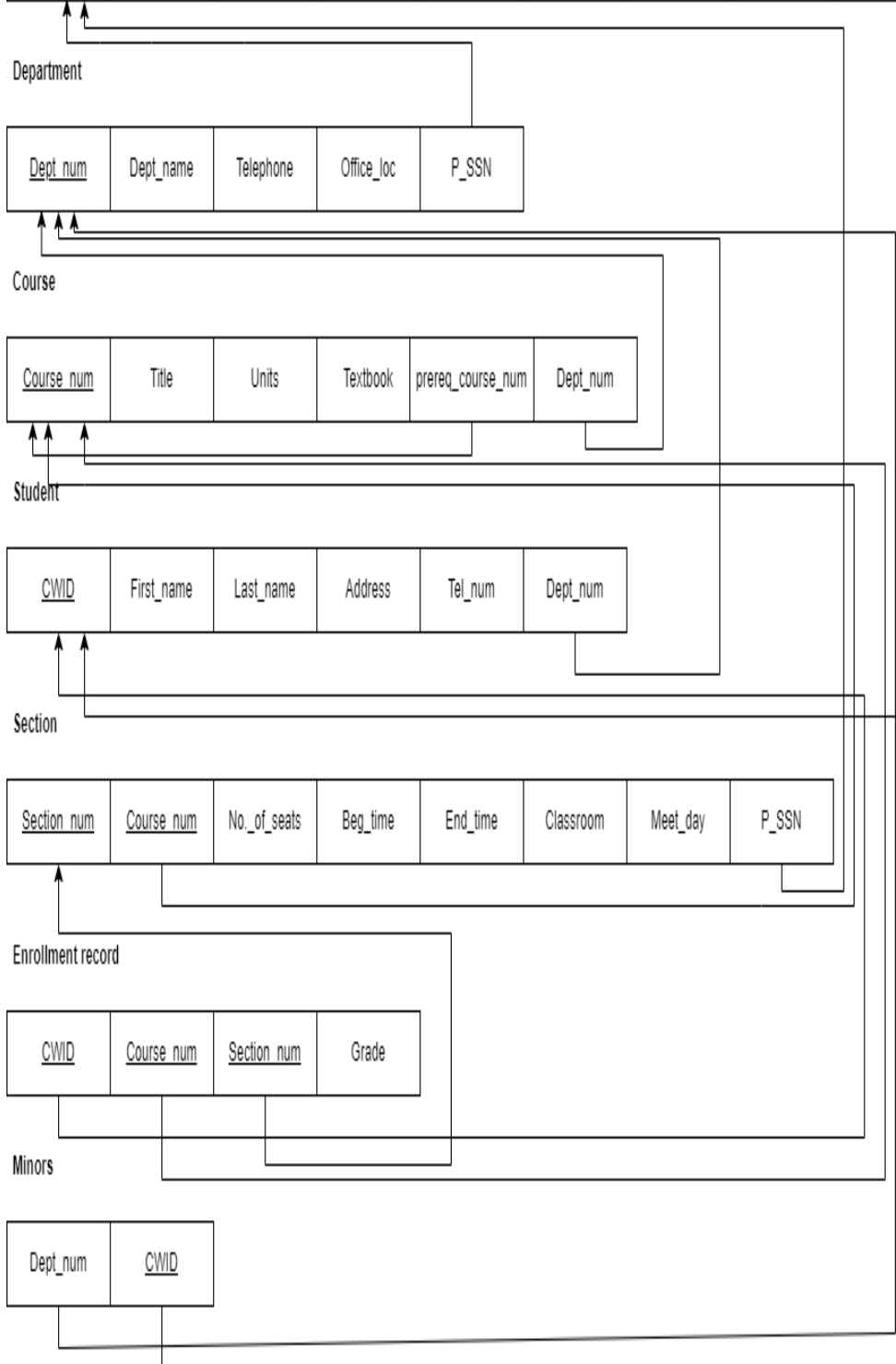
<u>Section_num</u>	<u>Course_num</u>	No_of_seats	Beg_time	End_time	Classroom	Meet_day	P_SSN
--------------------	-------------------	-------------	----------	----------	-----------	----------	-------

Enrollment record

<u>CWID</u>	<u>Course_num</u>	<u>Section_num</u>	Grade
-------------	-------------------	--------------------	-------

Minors

Dept_num	<u>CWID</u>
----------	-------------



## DDL: data.sql

```
CREATE TABLE Professor (  
    SSN int(9) PRIMARY KEY,  
    Prof_name varchar(50) not null,  
    Title varchar(10) not null,  
    Sex varchar(1) not null,  
    Area_code int(3) not null,  
    PH_num int(7) not null,  
    Salary real(10,2) not null,  
    Coll_degs varchar(20) not null,  
    St_add varchar(50) not null,  
    Zipcode int(5) not null,  
    City varchar(15) not null,  
    State varchar(2) not null  
);  
  
CREATE TABLE Department (  
    Dept_num int(7) PRIMARY KEY,  
    Dept_name varchar(50) not null,  
    Telephone varchar(11) not null,  
    Office_loc varchar(50) not null,  
    P_SSN int not null,  
    FOREIGN KEY(P_SSN) REFERENCES Professor(SSN)  
    ON DELETE CASCADE ON UPDATE CASCADE  
);  
  
CREATE TABLE Course (  
    Course_num varchar(30) PRIMARY KEY,  
    Title varchar(50) not null,  
    Units int(4) not null,  
    Textbook varchar(50) not null,  
    Dept_num int not null,  
    Prereq_CNum varchar(30),  
    FOREIGN KEY(Dept_num) REFERENCES Department(Dept_num),  
    FOREIGN KEY(Prereq_CNum) REFERENCES Course(Course_num)  
);  
  
CREATE TABLE Section (  
    Section_num int(2),  
    No_of_seats int(3) not null,  
    Beg_time TIME not null,  
    End_time TIME not null,  
    Classroom varchar(20) not null,  
    Meet_day varchar(50) not null,
```

```

    Course_num varchar(30) not null,
    P_SSN int not null,
    PRIMARY KEY(Section_num, Course_num),
    FOREIGN KEY(Course_num) REFERENCES Course(Course_num),
    FOREIGN KEY(P_SSN) REFERENCES Professor(SSN)
    ON DELETE CASCADE
);

CREATE TABLE Student (
    CWID int(9) PRIMARY KEY,
    First_name varchar(30) not null,
    Last_name varchar(30) not null,
    Address varchar(100) not null,
    Tel_num varchar(10) not null,
    Dept_num int not null,
    FOREIGN KEY(Dept_num) REFERENCES Department(Dept_num) /*major*/
    ON DELETE NO ACTION ON UPDATE CASCADE
);

CREATE TABLE Enrollment_rec (
    CWID int,
    Course_num varchar(30),
    Section_num int,
    Grade varchar(3) not null,
    PRIMARY KEY(CWID, Course_num, Section_num),
    FOREIGN KEY(CWID) REFERENCES Student (CWID),
    FOREIGN KEY(Course_num, Section_num) REFERENCES Section(Course_num,
Section_num)
);

CREATE TABLE Minors (
    CWID int,
    Dept_num int,
    PRIMARY KEY(CWID),
    FOREIGN KEY(CWID) REFERENCES Student(CWID),
    FOREIGN KEY(Dept_num) REFERENCES Department(Dept_num)
);

```

## SQL FOR QUERIES: insert.sql

```
insert into Professor(SSN, Prof_name, Title, Sex, Area_code, PH_num, Salary,
                    Coll_degs, St_add, Zipcode, City, State )
                    VALUES("123456789", 'David Heckathorn', 'Lecturer', 'M',
'657', '4325324', '80000.00', 'MS, BA', '312 La Loma Dr.', '92704', 'Brea',
'CA');

insert into Department(Dept_num, Dept_name, Telephone, Office_loc, P_SSN)
                    VALUES('7843923', 'Department of Mathematics',
'6572783631', 'MH-154', (SELECT SSN from Professor where Title = 'Chair' and
Prof_name = 'Alfonso Agnew')));

insert into Course(Course_num, Title, Units, Textbook, Dept_num, Prereq_CNum)
VALUES('CPSC353', 'INTRO TO COMPUTER SECURITY', '3', 'N/A', (SELECT Dept_num FROM
Department WHERE Dept_name = 'Computer Science'), (SELECT Course_num from Course
as c WHERE c.Course_num = ''));

insert into Section(Section_num, No_of_seats, Beg_time, End_time, Classroom,
Meet_day, Course_num, P_SSN) VALUES('04', '25', '18:00:00', '19:30:00', 'CS-112',
'TTh', (SELECT Course_num from Course WHERE Course_num = 'CPSC240'), (SELECT SSN
from Professor WHERE Prof_name = 'David Heckathorn')));

insert into Student(CWID, First_name, Last_name, Address, Tel_num, Dept_num)
VALUES('873893884', 'Allen', 'Ringo', '591 Commonwealth Ave., Sylmar, CA',
'3239029384', (SELECT Dept_num FROM Department WHERE Dept_name = 'Computer
Science')));

insert into Enrollment_rec(CWID, Course_num, Section_num, Grade) VALUES((SELECT
CWID from Student WHERE First_name = 'Allen'), (SELECT Course_num from Section
WHERE Course_num = 'CPSC240' and Section_num = '3'), (SELECT Section_num from
Section WHERE Course_num = 'CPSC240' and Section_num = '3'), 'A- ');

insert into Minors(CWID, Dept_num) VALUES();

/*USE TO UPDATE THE FIRST SET NULL FOR PREREQ*/
UPDATE Course SET Prereq_CNum = (SELECT Course_num from Course WHERE Course_num =
'CPSC120') WHERE Course_num = ('CPSC121');
/*
TO SHOW HOW MANY SEATS ARE AVAILABLE IN A SECTION
Ex. need to check how many seats left check if what section is the student in and
subtract the no. of seats in order to give the seats left
SELECT No_of_seats - COUNT(CWID)
FROM Enrollment_rec as er, Section as s
WHERE er.Course_num = s.Course_num and er.Section_num = s.Section_num;
```

```

*/

/* For the professor
A)SELECT Title, Classroom, Meet_day, Beg_time, End_time
FROM Section as s, Course as c
WHERE s.P_SSN = '123456789' and s.Course_num = c.Course_num;

B)SELECT Grade, COUNT(Grade)
FROM Enrollment_rec as ec
WHERE ec.Course_num = 'CPSC131' and ec.Section_num = '1'
GROUP BY Grade
ORDER BY Grade ASC;
*/

/* For the students
A)SELECT s.Course_num, s.Section_num, Classroom, Meet_day, Beg_time, End_time,
COUNT(er.CWID)
FROM Section as s, Enrollment_rec as er
WHERE s.Course_num = 'CPSC240' and s.Course_num = er.Course_num and
er.Section_num = s.Section_num
GROUP BY Section_num;

B) SELECT CWID, ec.Course_num, Title, Grade
FROM Enrollment_rec as ec, Course as cr
WHERE ec.CWID = '887940526' and ec.Course_num = cr.Course_num;
*/

```

## MAIN PAGE:

index.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>CPSC332 Project</title>
  </head>

  <body>
    <h1> Welcome To Our Project!</h1>
    <h2> Please select the appropriate button</h2>

    <a href="professor.html">
      <button style="width:200px; height:50px; border-radius:20px;font-size:larger;">Click for Professor</button>
    </a>

    <br><br>

    <a href="student.html">
      <button style="width:200px; height:50px; border-radius:20px; font-size:larger;">Click for Student</button>
    </a>
  </body>
</html>
```



## PROFESSOR INTERFACE:

professor.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>CPSC332 Project</title>
  </head>
<body>
  <form method="POST" action="professora.php">
    <div>
      <text> Please enter your SSN</text>
    </div>
    <input type="text" name="SSN">
    <input type="submit"/>
  </form>

  <br>

  <form method="POST" action="professorb.php">
    <div>
      <text> Please enter a Course Number and Section Number</text>
    </div>
    <input type="text" name="cno">
    <input type="text" name="secno">
    <input type="submit"/>
  </form>
  <form>
    <input type="button" value="Go back!" onclick="history.back()"/>
  </form>
</body>
</html>
```

professora.php (note: used when SSN is provided)

```
<html>
  <body>
    <?php
      $link = mysqli_connect('mariadb', 'cs332s30', 'iDl06Vq9','cs332s30');
      if (!$link) {
        die('Could not connect: ' . mysql_error());
      }

      $SSN = $_POST["SSN"];

      $query = "SELECT Title, Classroom, Meet_day, Beg_time, End_time
                FROM Section as s, Course as c
                WHERE s.P_SSN = '". $SSN. "' and s.Course_num = c.Course_num;";

      $result = $link->query($query);

      if ($result->num_rows > 0) {
        // output data of each row
        echo "SSN - " . $SSN. "<br><br>";
        echo "CLASS SCHEDULE: <br>";
        while($row = $result->fetch_assoc()) {
          echo "Title: " . $row["Title"]. " - Classroom: "
            . $row["Classroom"]. " - Meeting days: " . $row["Meet_day"]. " - Start time: " .
            $row["Beg_time"]. " - End time: " . $row["End_time"]. " <br>";
        }
        echo "<br>";
      }
      else {
        echo "No results found! <br><br>";
      }

      $result->free_result();
      $link->close();

    ?>
    <form>
      <input type="button" value="Go back!" onclick="history.back()">
    </form>
  </body>
</html>
```

professorb.php (note: used when Course number and Section number is provided)

```
<html>
  <body>
    <?php
      $link = mysqli_connect('mariadb', 'cs332s30', 'iDl06Vq9','cs332s30');
      if (!$link) {
        die('Could not connect: ' . mysql_error());
      }

      $CNO = $_POST['cno'];
      $SECNO = $_POST['secno'];

      $query = "SELECT Grade, COUNT(Grade)
                FROM Enrollment_rec as ec
                WHERE ec.Course_num = '". $CNO. "' and ec.Section_num =
                '". $SECNO. "'
                GROUP BY Grade
                ORDER BY Grade ASC;";

      $result = $link->query($query);

      if ($result->num_rows > 0) {
        // output data of each row
        echo "Course Number: " . $CNO. " Section Number: "
        . $SECNO. " <br><br>";
        while($row = $result->fetch_assoc()) {
          echo "Grade: " . $row["Grade"]. " - No. of students: "
          . $row["COUNT(Grade)"]. " <br>";
        }
        echo "<br>";
      }
      else {
        echo "No results found! <br><br>";
      }

      $result->free_result();
      $link->close();

    ?>
    <form>
      <input type="button" value="Go back!" onclick="history.back()">
    </form>
  </body>
</html>
```

## STUDENT INTERFACE:

student.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>CPSC332 Project</title>
  </head>
  <body>
    <form method="POST" action="studenta.php">
      <div>
        <text> Student: Please enter a Course Number </text>
      </div>
      <input type="text" name="cnum">
      <input type="submit"/>
    </form>

    <br>

    <form method="POST" action="studentb.php">
      <div>
        <text> Student: Please enter your CWID</text>
      </div>
      <input type="text" name="cwid">
      <input type="submit"/>
    </form>
    <form>
      <input type="button" value="Go back!" onclick="history.back()">
    </form>
  </body>
</html>
```

studenta.php (note: used when Course number is provided)

```
<html>
  <body>
    <?php
      $link = mysqli_connect('mariadb', 'cs332s30', 'iDl06Vq9', 'cs332s30');
      if (!$link) {
        die('Could not connect: ' . mysql_error());
      }

      $CNUM = $_POST["cnum"];

      $query = "SELECT s.Course_num, s.Section_num, Classroom, Meet_day,
Beg_time, End_time, COUNT(er.CWID)
                FROM Section as s, Enrollment_rec as er
                WHERE s.Course_num = er.Course_num and er.Section_num =
s.Section_num and s.Course_num = '" . $CNUM . "'
                GROUP BY Section_num;";

      $result = $link->query($query);

      if ($result->num_rows > 0) {
        // output data of each row
        echo "Course Number: " . $CNUM. "<br><br>";
        while($row = $result->fetch_assoc()) {
          echo "Section number: " . $row["Section_num"]. " - Classroom: " .
$row["Classroom"]. " - Start: " . $row["Beg_time"].
          " - End: " . $row["End_time"]. " - Enrolled: "
.$row["COUNT(er.CWID)"]. "<br>";
        }
        echo "<br>";
      }
      else {
        echo "No results found! <br><br>";
      }

      $result->free_result();
      $link->close();

    ?>
    <form>
      <input type="button" value="Go back!" onclick="history.back()">
    </form>
  </body>
</html>
```

studentb.php (note: used when CWID is provided)

```
<html>
  <body>
    <?php
      $link = mysqli_connect('mariadb', 'cs332s30', 'iDl06Vq9', 'cs332s30');
      if (!$link) {
        die('Could not connect: ' . mysql_error());
      }

      $CWID = $_POST["cwid"];

      $query = "SELECT CWID, ec.Course_num, Title, Grade FROM Enrollment_rec as
ec, Course as cr
              WHERE ec.Course_num = cr.Course_num and ec.CWID = " . $CWID;

      $result = $link->query($query);

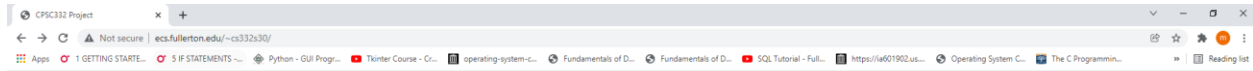
      if ($result->num_rows > 0) {
        // output data of each row
        echo "CWID - " . $CWID. "<br><br>";
        while($row = $result->fetch_assoc()) {
          echo "Course number: " . $row["Course_num"]. " - Title: "
.$row["Title"]. " - Grade: " . $row["Grade"]. "<br>";
        }
        echo "<br>";
      }
      else {
        echo "No results found! <br><br>";
      }

      $result->free_result();
      $link->close();

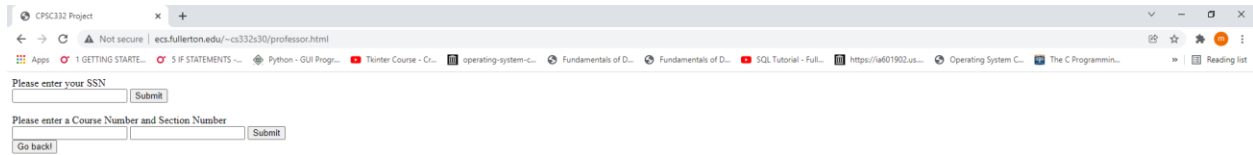
    ?>
    <form>
      <input type="button" value="Go back!" onclick="history.back()">
    </form>
  </body>
</html>
```

## SCREENSHOTS:

### MAIN PAGE (index.html):

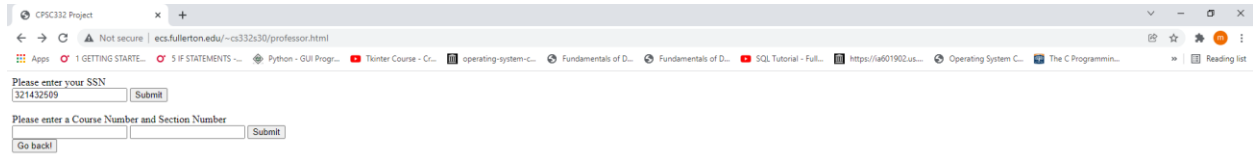


### Professor interface (professor.html):



## PART 1 (SSN IS PROVIDED):

## PROFESSOR INPUT & OUTPUT (WITH RESULT):



The screenshot shows a web browser window with the address bar displaying "ecs.fullerton.edu/~cs332x30/professor.html". The page contains two input sections. The first section is titled "Please enter your SSN" and has a text input field containing "321432509" and a "Submit" button. The second section is titled "Please enter a Course Number and Section Number" and has two text input fields, one of which contains "321432509", and a "Submit" button. A "Go back!" button is located at the bottom left of the form area.



The screenshot shows a web browser window with the address bar displaying "ecs.fullerton.edu/~cs332x30/professor.php". The page displays the output of the SSN input, showing "SSN - 321432509". Below this, the "CLASS SCHEDULE:" is listed with three entries, each showing the title, classroom, meeting days, start time, and end time. A "Go back!" button is located at the bottom left of the output area.

SSN - 321432509

CLASS SCHEDULE:  
Title: COMP ORG & ASSEMBLY LANG - Classroom: CS-112 - Meeting days: MW - Start time: 14:30:00 - End time: 16:00:00  
Title: COMP ORG & ASSEMBLY LANG - Classroom: CS-112 - Meeting days: TTh - Start time: 09:30:00 - End time: 11:00:00  
Title: COMP ORG & ASSEMBLY LANG - Classroom: CS-112 - Meeting days: TTh - Start time: 18:00:00 - End time: 19:30:00



## PROFESSOR INPUT & OUTPUT (WITHOUT RESULTS):

CPSC332 Project

ecs.fullerton.edu/~cs332s30/professor.html

Please enter your SSN

152075453 Submit

Please enter a Course Number and Section Number

Go back! Submit

ecs.fullerton.edu/~cs332s30/professor.php

No results found!

Go back!

## PART 2 (COURSE NUMBER AND SECTION NUMBER IS PROVIDED):

### PROFESSOR INPUT & OUTPUT (WITH RESULTS):

CPSC332 Project

← → Not secure ecs.fullerton.edu/~cs332s30/professor.html

Apps 1 GETTING STARTED... 5 IF STATEMENTS Python - GUI Progr... Tinker Course - C... operating-system-c... Fundamentals of D... Fundamentals of D... SQL Tutorial - Full... https://ia601902.us... Operating System C... The C Programmin... Reading list

Please enter your SSN

Submit

Please enter a Course Number and Section Number

CPSC131 1 Submit

[Go back!](#)

ecs.fullerton.edu/~cs332s30/prof

← → Not secure ecs.fullerton.edu/~cs332s30/professorb.php

Apps 1 GETTING STARTED... 5 IF STATEMENTS Python - GUI Progr... Tinker Course - C... operating-system-c... Fundamentals of D... Fundamentals of D... SQL Tutorial - Full... https://ia601902.us... Operating System C... The C Programmin... Reading list

Course Number: CPSC131 Section Number: 1

Grade: A - No. of students: 1  
Grade: B - No. of students: 1  
Grade: B+ - No. of students: 1

[Go back!](#)

## PROFESSOR INPUT & OUTPUT (WITHOUT RESULTS):

CPSC332 Project

ecs.fullerton.edu/~cs332s30/professor.html

Please enter your SSN

Please enter a Course Number and Section Number

CPSC101

[Go back!](#)

ecs.fullerton.edu/~cs332s30/prof

ecs.fullerton.edu/~cs332s30/professorb.php

No results found!

[Go back!](#)

## Student interface (student.html):

Student: Please enter a Course Number

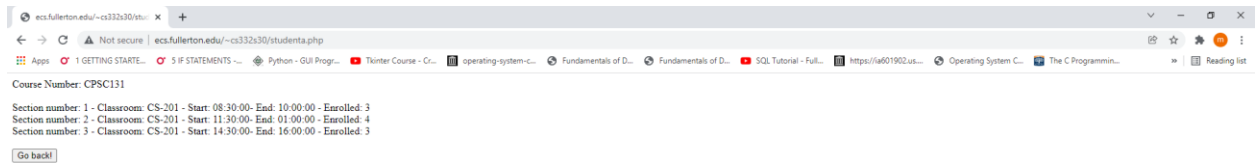
Student: Please enter your CWID

## PART 1 (COURSE NUMBER IS PROVIDED):

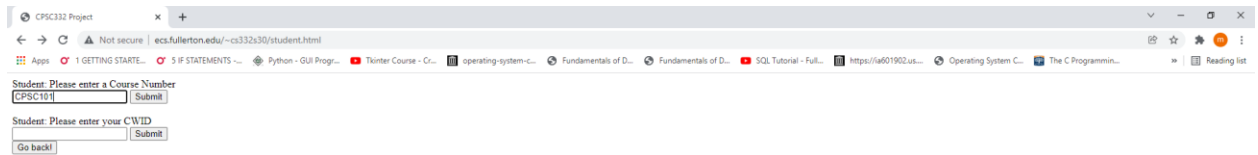
## STUDENT INPUT & OUTPUT (WITH RESULTS):

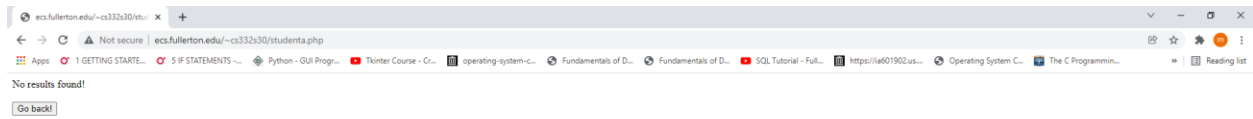
Student: Please enter a Course Number

Student: Please enter your CWID



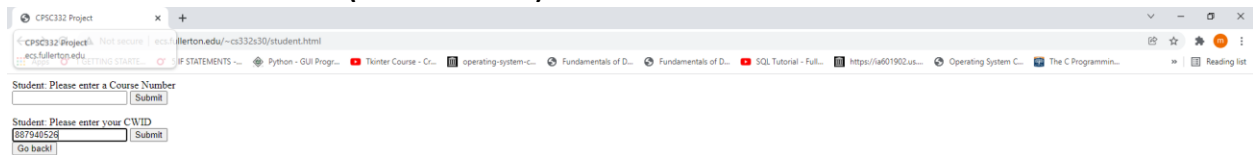
## STUDENT INPUT & OUTPUT (WITHOUT RESULTS):

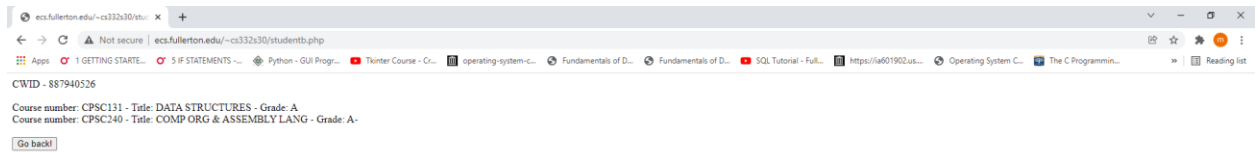




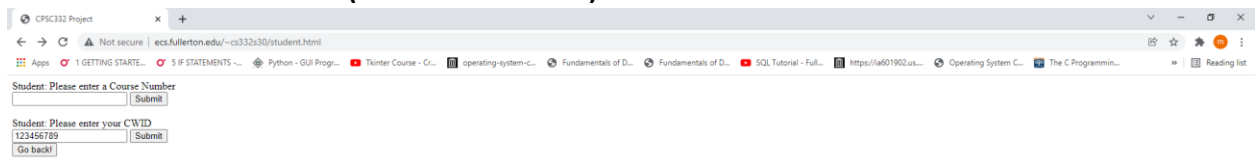
## PART 2 (CWID IS PROVIDED):

## STUDENT INPUT & OUTPUT (WITH RESULTS):





## STUDENT INPUT & OUTPUT (WITHOUT RESULTS):



ecs.fullerton.edu/~cs332x30/stu...

+

← → ↻

Not secure | ecs.fullerton.edu/~cs332x30/studentb.php

🔍 ⭐ 🏠 ⚙

Apps

1 GETTING STARTE...

5 IF STATEMENTS ~...

Python - GUI Progre...

✖ Tinker Course - Cr...

📄 operating-system-c...

📄 Fundamentals of D...

📄 Fundamentals of D...

📄 SQL Tutorial - Full...

📄 https://a601902.us...

📄 Operating System C...

📄 The C Programmin...

» 📄 Reading list

No results found!

Go back!

