CPSC 332 Spring 2019 Term Project

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**DDL:**

CREATE TABLE PROFESSOR(SSN numeric(9) primary key NOT NULL, NAME varchar(50) NOT NULL, TELEPHONE numeric(10) NOT NULL, SEX enum('M', 'F') NOT NULL, TITLE varchar(20) NOT NULL, SALARY numeric(9) NOT NULL, ADDRESS varchar(255) NOT NULL);

CREATE TABLE PROFESSOR\_DEGREES(PROF\_SSN numeric(9) NOT NULL, DEGREENAME varchar(40) NOT NULL, primary key (PROF\_SSN, DEGREENAME), foreign key (PROF\_SSN) references PROFESSOR(SSN));

CREATE TABLE DEPARTMENT(DEPT\_NO numeric(3) primary key NOT NULL, DEPT\_NAME varchar(40) NOT NULL, DEPT\_PHONE\_NO numeric(10) NOT NULL, LOCATION varchar(40) NOT NULL, CHAIRPERSON\_SSN numeric(9) NOT NULL UNIQUE, foreign key (CHAIRPERSON\_SSN) references PROFESSOR(SSN));

CREATE TABLE COURSE(COURSE\_NO numeric(3) primary key NOT NULL, COURSE\_TITLE varchar(40) NOT NULL, TEXTBOOK varchar(100) NOT NULL, UNITS numeric(1) NOT NULL, DEPT\_NUM numeric(3) NOT NULL, foreign key (DEPT\_NUM) references DEPARTMENT(DEPT\_NO));

CREATE TABLE SECTION(COURSE\_NUM numeric(3) NOT NULL, SECTION\_NO numeric(2) NOT NULL, CLASSROOM varchar(10) NOT NULL, NUMBER\_OF\_SEATS numeric(3) NOT NULL, MEETINGDAYS varchar(7) NOT NULL, BEGINTIME varchar(5) NOT NULL, ENDTIME varchar(5) NOT NULL, PROFESSOR\_SSN numeric(9) NOT NULL, primary key (COURSE\_NUM, SECTION\_NO), foreign key (COURSE\_NUM) references COURSE(COURSE\_NO), foreign key (PROFESSOR\_SSN) references PROFESSOR(SSN));

CREATE TABLE STUDENT(CWID numeric(9) NOT NULL, STUDENT\_NAME varchar(50) NOT NULL, STUDENT\_ADDRESS varchar(255) NOT NULL, STUDENT\_PHONE numeric(10) NOT NULL, MAJOR numeric(3) NOT NULL, MINOR numeric(3), foreign key (MAJOR) references DEPARTMENT(DEPT\_NO), foreign key (MINOR) references DEPARTMENT(DEPT\_NO));

CREATE TABLE ENROLL(COURSE\_NUMBER numeric(3) NOT NULL, SECTION\_NUMBER numeric(2) NOT NULL, CAMPUSWIDEID numeric(9) NOT NULL, GRADE enum('A+', 'A', 'A-', 'B+', 'B', 'B-', 'C+', 'C', 'C-', 'D+', 'D', 'D-', 'F'), primary key (COURSE\_NUMBER, SECTION\_NUMBER, CAMPUSWIDEID), foreign key (COURSE\_NUMBER, SECTION\_NUMBER) references SECTION(COURSE\_NUM, SECTION\_NO));

CREATE TABLE PREREQ(CNUM numeric(3) NOT NULL, PREREQCNUM numeric(3) NOT NULL, primary key (CNUM, PREREQCNUM), foreign key (CNUM) references COURSE(COURSE\_NO), foreign key (PREREQCNUM) references COURSE(COURSE\_NO));

**SQL:**

Professors:

a. "SELECT COURSE\_TITLE, CLASSROOM, MEETINGDAYS, BEGINTIME, ENDTIME FROM COURSE, SECTION, PROFESSOR WHERE PROFESSOR\_SSN = SSN AND COURSE\_NO = COURSE\_NUM AND PROFESSOR\_SSN = '".$\_POST["ssn"]."';"

b. "SELECT GRADE, COUNT(\*) FROM SECTION, ENROLL WHERE COURSE\_NUM = COURSE\_NUMBER AND SECTION\_NO = SECTION\_NUMBER AND COURSE\_NUM = '".$\_POST["course\_num"]."' AND SECTION\_NO ='".$\_POST["section\_no"]."' GROUP BY GRADE;"

Students:

a. "SELECT SECTION\_NO, CLASSROOM, MEETINGDAYS, BEGINTIME, ENDTIME, COUNT(\*) FROM SECTION, ENROLL WHERE COURSE\_NUM = COURSE\_NUMBER AND SECTION\_NO = SECTION\_NUMBER AND COURSE\_NUM = '".$\_POST["course\_num"]."' GROUP BY SECTION\_NO;"

b. "SELECT COURSE\_NO, COURSE\_TITLE, GRADE FROM COURSE, ENROLL WHERE COURSE\_NO = COURSE\_NUMBER AND CAMPUSWIDEID = '".$\_POST["campuswideid"]."';"

**index.html:**

<!DOCTYPE html>

<html>

<head>

<link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.7.0/css/all.css" integrity="sha384-lZN37f5QGtY3VHgisS14W3ExzMWZxybE1SJSEsQp9S+oqd12jhcu+A56Ebc1zFSJ" crossorigin="anonymous">

<link rel="stylesheet" href="include/styles.css">

<title>Home</title>

<style>

.buttonT {

background-color: #91A8d0;

border: none;

color: black;

padding: 18px 40px;

text-align: center;

text-decoration: none;

display: inline-block;

font-size: 16px;

margin: 4px 2px;

cursor: pointer;

box-shadow: 0 8px 16px 0 rgba(0,0,0,0.2), 0 6px 20px 0 rgba(0,0,0,0.19);

justify-content:center;

}

.buttonS {

background-color: #f7cac9;

border: none;

color: black;

padding: 18px 40px;

text-align: center;

text-decoration: none;

display: inline-block;

font-size: 16px;

margin: 4px 2px;

cursor: pointer;

box-shadow: 0 8px 16px 0 rgba(0,0,0,0.2), 0 6px 20px 0 rgba(0,0,0,0.19);

justify-content:center;

}

.center {

margin: auto;

width: 25%;

padding: 35px;

}

#h1{

text-align: center;

font-family:Lucida Console;

}

.button:hover {background-color: #3e8e41}

.button:active {

background-color: ;

box-shadow: 0 5px #666;

transform: translateY(4px);

</style>

</head>

<body>

<h1 id="h1" >

<i class="fas fa-cloud"></i>

Welcome to CSUF Database

<i class="fas fa-cloud"></i></h1>

<div class="center">

<a href="teachers.php" class="buttonT">Teacher Portal</a>

<br>

<br>

<a href="students.php" class="buttonS">Student Portal</a>

</div>

</body>

</html>

**styles.css:**

table, th, td {

border: 1px solid black;

border-collapse: collapse;

}

label {

float: left;

width: 120px;

}

#secret\_menu {

height: 200px;

}

**teachers.php:**

<!DOCTYPE html>

<html>

<head>

<title>Teachers</title>

<link rel="stylesheet" href="include/styles.css">

<?php

$username = 'cs332s17';

$link = mysql\_connect('mariadb', $username, 'atheiV0b');

if(!$link)

{

die("<!--Could not connect: ".mysql\_error()."-->");

}

echo "<!--Connected successfully.-->";

mysql\_select\_db($username, $link);

?>

</head>

<body>

<a href="index.html">Home</a>

<h1>Teacher Portal</h1>

<br>

<h2>Entering a professor's social security number below will list the titles, classrooms, meeting days and time of his/her classes.</h2>

<form action="teachers.php" method="POST">

<label>Professor SSN:</label><input type="text" name="ssn" required/><br>

<input type="submit" />

</form>

<br>

<?php

if ($\_POST["ssn"] != "")

{

$result = mysql\_query("SELECT COURSE\_TITLE, CLASSROOM, MEETINGDAYS, BEGINTIME, ENDTIME FROM COURSE, SECTION, PROFESSOR WHERE PROFESSOR\_SSN = SSN AND COURSE\_NO = COURSE\_NUM AND PROFESSOR\_SSN = '".$\_POST["ssn"]."';", $link);

if(mysql\_numrows($result) == 0)

{

echo "No results for SSN '".$\_POST["ssn"]."' found in database.";

}

else

{

echo "<h4>Results for professor SSN: ".$\_POST["ssn"]."</h4>";

echo "<table>";

echo "<tr>";

echo "<th>Course Title</th>";

echo "<th>Classroom</th>";

echo "<th>Meeting Days</th>";

echo "<th>Begin Time</th>";

echo "<th>End Time</th>";

echo "</tr>";

for($i = 0; $i < mysql\_numrows($result); $i++)

{

echo "<tr>";

echo "<td>".mysql\_result($result, $i, "COURSE\_TITLE")."</td>";

echo "<td>".mysql\_result($result, $i, "CLASSROOM")."</td>";

echo "<td>".mysql\_result($result, $i, "MEETINGDAYS")."</td>";

echo "<td>".mysql\_result($result, $i, "BEGINTIME")."</td>";

echo "<td>".mysql\_result($result, $i, "ENDTIME")."</td>";

echo "</tr>";

}

echo "</table>";

}

}

?>

<h2>Entering a course # and a section # below will return a count of how many students received each distinct grade.</h2>

<form action="teachers.php" method="POST">

<label>Course #:</label><input type="text" name="course\_num" required/><br>

<label>Section #:</label><input type="text" name="section\_no" required/><br>

<input type="submit" />

</form>

<br>

<?php

if ($\_POST["course\_num"] != "")

{

$result = mysql\_query("SELECT GRADE, COUNT(\*) FROM SECTION, ENROLL WHERE COURSE\_NUM = COURSE\_NUMBER AND SECTION\_NO = SECTION\_NUMBER AND COURSE\_NUM = '".$\_POST["course\_num"]."' AND SECTION\_NO ='".$\_POST["section\_no"]."' GROUP BY GRADE;", $link);

if(mysql\_numrows($result) == 0)

{

echo "No results for course #: '".$\_POST["course\_num"]."' and section #: '".$\_POST["section\_no"]."' found in database.";

}

else

{

echo "<h4>Results for course #: ".$\_POST["course\_num"]." and section #: ".$\_POST["section\_no"]."</h4>";

echo "<table>";

echo "<tr>";

echo "<th>Grade</th>";

echo "<th>Count</th>";

echo "</tr>";

for($i = 0; $i < mysql\_numrows($result); $i++)

{

echo "<tr>";

echo "<td>".mysql\_result($result, $i, "GRADE")."</td>";

echo "<td>".mysql\_result($result, $i, "COUNT(\*)")."</td>";

echo "</tr>";

}

echo "</table>";

}

}

mysql\_close($link);

?>

</body>

</html>

**students.php:**

<!DOCTYPE html>

<html>

<head>

<title>Students</title>

<link rel="stylesheet" href="include/styles.css">

<?php

$username = 'cs332s17';

$link = mysql\_connect('mariadb', $username, 'atheiV0b');

if(!$link)

{

die("<!--Could not connect: ".mysql\_error()."-->");

}

echo "<!--Connected successfully.-->";

mysql\_select\_db($username, $link);

?>

</head>

<body>

<a href="index.html">Home</a>

<h1>Student Portal</h1>

<br>

<h2>Entering a course number below will list the sections of the course including the classrooms, meeting days and time, and the number of students enrolled in each section.</h2>

<form action="students.php" method="POST">

<label>Course #:</label><input type="text" name="course\_num" required/><br>

<input type="submit" />

</form>

<br>

<?php

if ($\_POST["course\_num"] != "")

{

$result = mysql\_query("SELECT SECTION\_NO, CLASSROOM, MEETINGDAYS, BEGINTIME, ENDTIME, COUNT(\*) FROM SECTION, ENROLL WHERE COURSE\_NUM = COURSE\_NUMBER AND SECTION\_NO = SECTION\_NUMBER AND COURSE\_NUM = '".$\_POST["course\_num"]."' GROUP BY SECTION\_NO;", $link);

if(mysql\_numrows($result) == 0)

{

echo "No results for course #: '".$\_POST["course\_num"]."' found in database.";

}

else

{

echo "<h4>Results for course #: ".$\_POST["course\_num"]."</h4>";

echo "<table>";

echo "<tr>";

echo "<th>Section #</th>";

echo "<th>Classroom</th>";

echo "<th>Meeting Days</th>";

echo "<th>Begin Time</th>";

echo "<th>End Time</th>";

echo "<th># Students Enrolled</th>";

echo "</tr>";

for($i = 0; $i < mysql\_numrows($result); $i++)

{

echo "<tr>";

echo "<td>".mysql\_result($result, $i, "SECTION\_NO")."</td>";

echo "<td>".mysql\_result($result, $i, "CLASSROOM")."</td>";

echo "<td>".mysql\_result($result, $i, "MEETINGDAYS")."</td>";

echo "<td>".mysql\_result($result, $i, "BEGINTIME")."</td>";

echo "<td>".mysql\_result($result, $i, "ENDTIME")."</td>";

echo "<td>".mysql\_result($result, $i, "COUNT(\*)")."</td>";

echo "</tr>";

}

echo "</table>";

}

}

?>

<h2>Entering a CWID below will list all courses the student took and the grades for those courses.</h2>

<form action="students.php" method="POST">

<label>CWID:</label><input type="text" name="campuswideid" required/><br>

<input type="submit" />

</form>

<br>

<?php

if ($\_POST["campuswideid"] != "")

{

$result = mysql\_query("SELECT COURSE\_NO, COURSE\_TITLE, GRADE FROM COURSE, ENROLL WHERE COURSE\_NO = COURSE\_NUMBER AND CAMPUSWIDEID = '".$\_POST["campuswideid"]."';", $link);

if(mysql\_numrows($result) == 0)

{

echo "No results for CWID: '".$\_POST["campuswideid"]."' found in database.";

}

else

{

echo "<h4>Results for CWID: ".$\_POST["campuswideid"]."</h4>";

echo "<table>";

echo "<tr>";

echo "<th>Course #</th>";

echo "<th>Course Title</th>";

echo "<th>Grade</th>";

echo "</tr>";

for($i = 0; $i < mysql\_numrows($result); $i++)

{

echo "<tr>";

echo "<td>".mysql\_result($result, $i, "COURSE\_NO")."</td>";

echo "<td>".mysql\_result($result, $i, "COURSE\_TITLE")."</td>";

echo "<td>".mysql\_result($result, $i, "GRADE")."</td>";

echo "</tr>";

}

echo "</table>";

}

}

mysql\_close($link);

?>

</body>

</html>