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Description of our Website

We have designed and developed an online course registration website which is like the E-learning and Coursebook portals of our university.

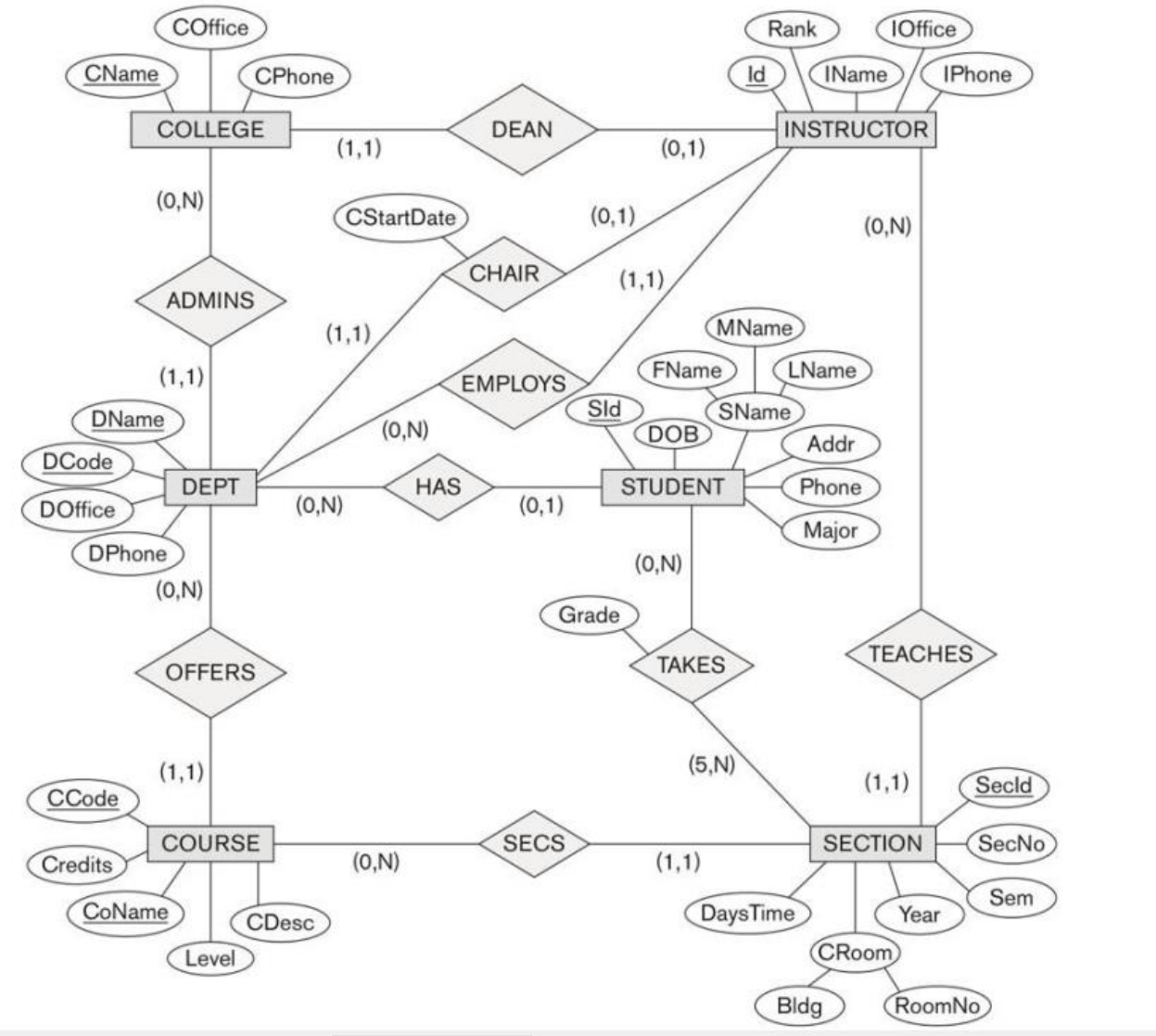
Our website provides the following functionalities:

- User can enroll for classes.
- User can drop/remove classes
- User can search for classes based on the variety of search filters like course name, college, department, course, section.
- The website also a provides the functionality for an admin to use the website.
- The admin can create new users (normal users or an admin), add a user to a class, update the information of different users like their grades, department etc.
- The User cannot login or register on the website without meeting some specific validation criteria.
- The website provides the functionality of a shopping cart so that users can add/drop courses from the cart.

Assumptions

- The user cannot register for the course is already enrolled.
- The user can only register for classes which offered in that semester.
- A course can be offered under different sections by the same professor.
- One course can be offered by multiple professors in the same semester.

ER Diagram



SQL Statements to create Relations in DB and Add Constraints

```
CREATE TABLE IF NOT EXISTS `cart` (
  `SID` varchar(11) NOT NULL,
  `SecId` varchar(11) NOT NULL,
  `Deleted` char(1) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

CREATE TABLE IF NOT EXISTS `college` (
  `CName` varchar(20) NOT NULL,
  `COffice` varchar(20) NOT NULL,
  `DeanId` varchar(20) DEFAULT NULL,
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

CREATE TABLE IF NOT EXISTS `collegephone` (
  `CName` varchar(20) NOT NULL DEFAULT '',
  `CPhone` varchar(20) NOT NULL DEFAULT '',
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

CREATE TABLE IF NOT EXISTS `course` (
  `CoCode` int(5) NOT NULL DEFAULT '0',
  `CoName` varchar(20) DEFAULT NULL,
  `Credits` int(2) NOT NULL,
  `Level` varchar(20) NOT NULL,
  `CoDescription` varchar(30) NOT NULL,
  `CoDCode` int(5) DEFAULT NULL,
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
CREATE TABLE IF NOT EXISTS `department` (
  `DCode` int(5) NOT NULL DEFAULT '0',
  `DName` varchar(20) DEFAULT NULL,
  `DOffice` varchar(20) NOT NULL,
  `DeptChairID` varchar(20) DEFAULT NULL,
  `CName` varchar(20) DEFAULT NULL,
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;


CREATE TABLE IF NOT EXISTS `deptphone` (
  `DCode` int(5) NOT NULL DEFAULT '0',
  `DeptPhone` varchar(20) NOT NULL DEFAULT '',
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

CREATE TABLE IF NOT EXISTS `instrphone` (
  `ID` varchar(20) NOT NULL DEFAULT '',
  `IPhone` varchar(20) NOT NULL DEFAULT '',
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

CREATE TABLE IF NOT EXISTS `instructor` (
  `ID` varchar(20) NOT NULL DEFAULT '',
  `Rank` varchar(20) NOT NULL,
  `IName` varchar(20) DEFAULT NULL,
  `IOffice` varchar(20) NOT NULL,
  `DCode` int(5) DEFAULT NULL,
  `Deleted` char(1) DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
CREATE TABLE IF NOT EXISTS `logindetail` (
  `username` varchar(100) NOT NULL,
  `email` varchar(100) NOT NULL,
  `user_type` varchar(100) NOT NULL,
  `password` varchar(100) NOT NULL,
  `SID` varchar(20) DEFAULT NULL,
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;


CREATE TABLE IF NOT EXISTS `section` (
  `SecId` varchar(20) NOT NULL DEFAULT '',
  `SecNo` varchar(3) DEFAULT NULL,
  `Sem` int(2) NOT NULL,
  `OpenClosed` char(1) DEFAULT 'N',
  `Year` year(4) NOT NULL,
  `RoomNo` varchar(10) NOT NULL,
  `Building` varchar(20) NOT NULL,
  `DaysTime` varchar(20) NOT NULL,
  `InstructorID` varchar(20) DEFAULT NULL,
  `CoCode` int(5) DEFAULT NULL,
  `SectionLimit` int(3) DEFAULT NULL,
  `MaxCapacity` int(3) NOT NULL,
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;


CREATE TABLE IF NOT EXISTS `student` (
  `SID` varchar(20) NOT NULL DEFAULT '',
  `DOB` date NOT NULL,
```

```
  `SFname` varchar(20) DEFAULT NULL,
  `SMname` varchar(20) NOT NULL,
  `SLname` varchar(20) DEFAULT NULL,
  `Address` varchar(30) NOT NULL,
  `Major` varchar(20) DEFAULT NULL,
  `DCode` int(5) DEFAULT NULL,
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

CREATE TABLE IF NOT EXISTS `studentphone` (
  `SID` varchar(20) NOT NULL DEFAULT '',
  `SPhone` varchar(20) NOT NULL DEFAULT '',
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

CREATE TABLE IF NOT EXISTS `takes` (
  `SID` varchar(20) NOT NULL DEFAULT '',
  `SecID` varchar(20) NOT NULL DEFAULT '',
  `Grade` varchar(2) DEFAULT NULL,
  `Deleted` char(1) NOT NULL DEFAULT 'N'
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

ALTER TABLE `cart`
  ADD PRIMARY KEY (`SID`,`SecId`),
  ADD KEY `SID_FK` (`SID`),
  ADD KEY `SecId_FK` (`SecId`);

ALTER TABLE `college`
  ADD PRIMARY KEY (`CName`),
  ADD KEY `DeanId` (`DeanId`);
```

```
ALTER TABLE `collegephone`
  ADD PRIMARY KEY (`CName`,`CPhone`);

ALTER TABLE `course`
  ADD PRIMARY KEY (`CoCode`),
  ADD KEY `CoDCode` (`CoDCode`);

ALTER TABLE `department`
  ADD PRIMARY KEY (`DCode`),
  ADD UNIQUE KEY `DName` (`DName`),
  ADD KEY `DeptChairID` (`DeptChairID`,`CName`),
  ADD KEY `FK_CName` (`CName`);

ALTER TABLE `deptphone`
  ADD PRIMARY KEY (`DCode`,`DeptPhone`);

ALTER TABLE `instrphone`
  ADD PRIMARY KEY (`ID`,`IPhone`);

ALTER TABLE `instructor`
  ADD PRIMARY KEY (`ID`),
  ADD KEY `DCode` (`DCode`);

ALTER TABLE `logindetail`
  ADD PRIMARY KEY (`username`),
  ADD UNIQUE KEY `email` (`email`),
  ADD KEY `FK_SID_login` (`SID`);

ALTER TABLE `section`
  ADD PRIMARY KEY (`SecId`),
  ADD KEY `InstructorID` (`InstructorID`,`CoCode`),
```

```
  ADD KEY `FK_CoCode` (`CoCode`);

ALTER TABLE `student`
  ADD PRIMARY KEY (`SID`),
  ADD KEY `DCode` (`DCode`);

ALTER TABLE `studentphone`
  ADD PRIMARY KEY (`SID`,`SPhone`);

ALTER TABLE `takes`
  ADD PRIMARY KEY (`SID`,`SecID`),
  ADD KEY `FK_SecID` (`SecID`);


ALTER TABLE `cart`
  ADD CONSTRAINT `SID_FK` FOREIGN KEY (`SID`) REFERENCES `student` (`SID`) ON UPDATE CASCADE,
  ADD CONSTRAINT `SecId_FK` FOREIGN KEY (`SecId`) REFERENCES `section` (`SecId`) ON UPDATE CASCADE;

ALTER TABLE `college`
  ADD CONSTRAINT `FK_DeanID` FOREIGN KEY (`DeanId`) REFERENCES `instructor` (`ID`) ON UPDATE CASCADE;

ALTER TABLE `collegephone`
  ADD CONSTRAINT `FK_CollegePhone` FOREIGN KEY (`CName`) REFERENCES `college` (`CName`) ON UPDATE CASCADE;

ALTER TABLE `course`
  ADD CONSTRAINT `FK_CoDeptCode` FOREIGN KEY (`CoDCode`) REFERENCES `department` (`DCode`) ON DELETE SET NULL ON UPDATE CASCADE;

ALTER TABLE `department`
```

```
  ADD CONSTRAINT `FK_CName` FOREIGN KEY (`CName`) REFERENCES `college` (`CName`) ON UPDATE CASCADE,

  ADD CONSTRAINT `FK_DeptChairID` FOREIGN KEY (`DeptChairID`) REFERENCES `instructor` (`ID`) ON UPDATE CASCADE;


ALTER TABLE `deptphone`

  ADD CONSTRAINT `FK_DeptPhone` FOREIGN KEY (`DCode`) REFERENCES `department` (`DCode`) ON UPDATE CASCADE;


ALTER TABLE `instrphone`

  ADD CONSTRAINT `FK_InstrPhone` FOREIGN KEY (`ID`) REFERENCES `instructor` (`ID`) ON UPDATE CASCADE;


ALTER TABLE `instructor`

  ADD CONSTRAINT `FK_IDCode` FOREIGN KEY (`DCode`) REFERENCES `department` (`DCode`) ON UPDATE CASCADE;


ALTER TABLE `logindetail`

  ADD CONSTRAINT `FK_SID_login` FOREIGN KEY (`SID`) REFERENCES `student` (`SID`) ON UPDATE CASCADE;


ALTER TABLE `section`

  ADD CONSTRAINT `FK_CoCode` FOREIGN KEY (`CoCode`) REFERENCES `course` (`CoCode`) ON UPDATE CASCADE,

  ADD CONSTRAINT `FK_InstrID` FOREIGN KEY (`InstructorID`) REFERENCES `instructor` (`ID`) ON DELETE SET NULL ON UPDATE CASCADE;


ALTER TABLE `student`

  ADD CONSTRAINT `FK_DeptCode` FOREIGN KEY (`DCode`) REFERENCES `department` (`DCode`) ON DELETE SET NULL ON UPDATE CASCADE;


ALTER TABLE `studentphone`

  ADD CONSTRAINT `FK_StudentPhone` FOREIGN KEY (`SID`) REFERENCES `student` (`SID`) ON UPDATE CASCADE;
```

```
ALTER TABLE `takes`
  ADD CONSTRAINT `FK_SID` FOREIGN KEY (`SID`) REFERENCES `student` (`SID`) ON UPDATE CASCADE,
  ADD CONSTRAINT `FK_SecID` FOREIGN KEY (`SecID`) REFERENCES `section` (`SecId`) ON UPDATE CASCADE;
```

Languages/Frameworks

Frontend

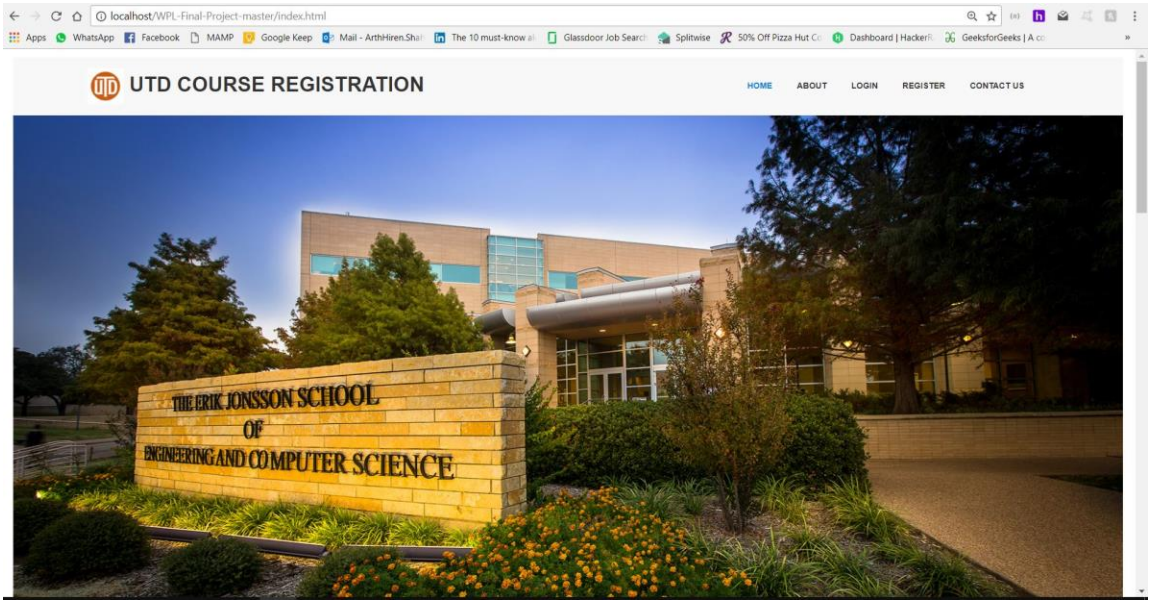
- Language: HTML5, CSS3, JQUERY, JAVASCRIPT
- Framework: Bootstrap
- Editor: Visual Studio Code

Backend

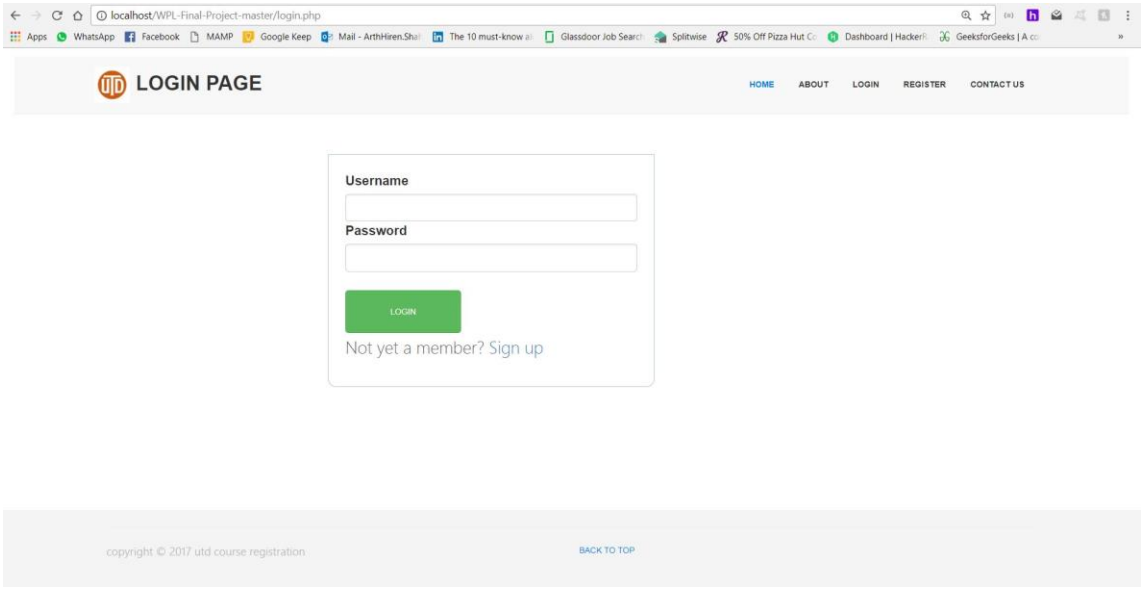
- Language: PHP, MYSQL, AJAX
- Framework: MAMP-PHPMYADMIN
- Editor: Visual Studio Code

Screenshots of the website

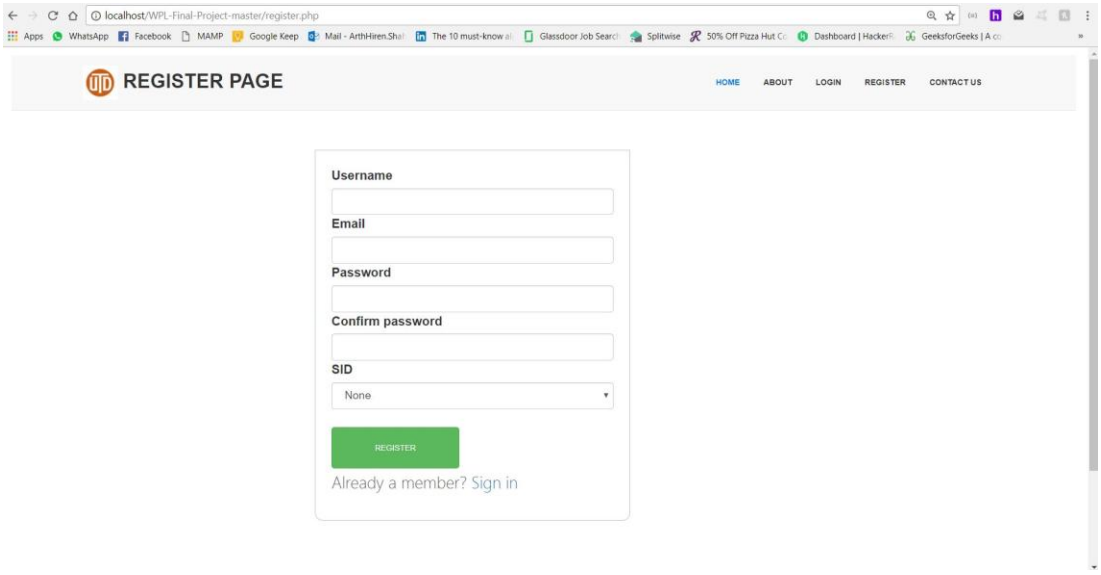
1. Homepage



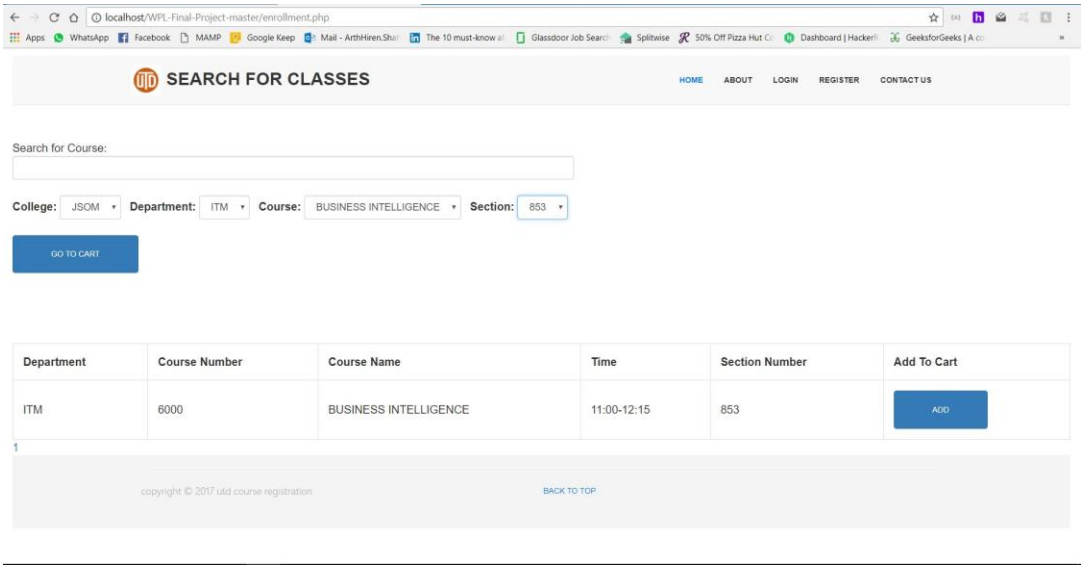
2. Login Page



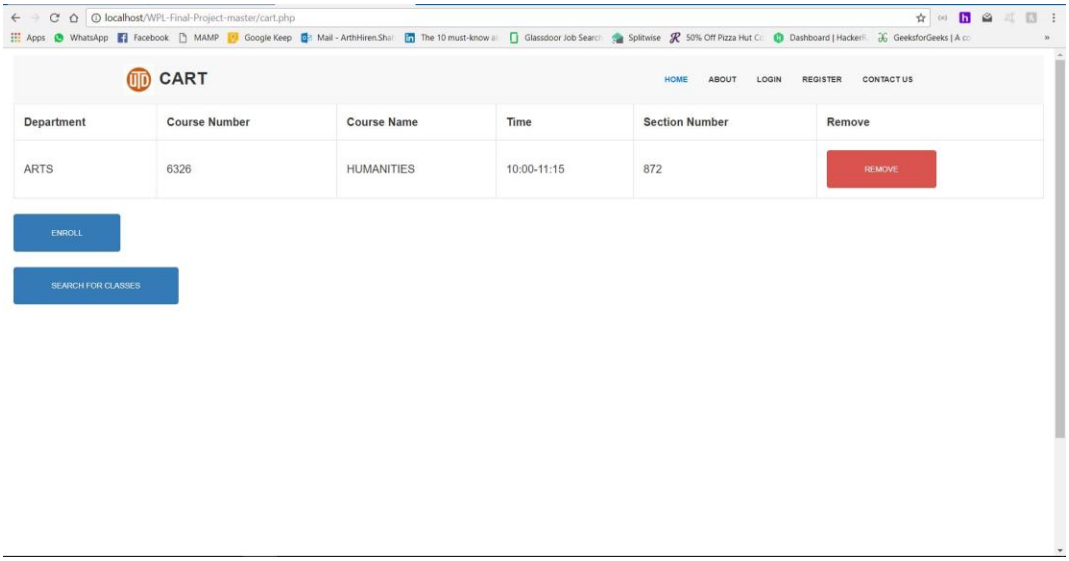
3. Register Page



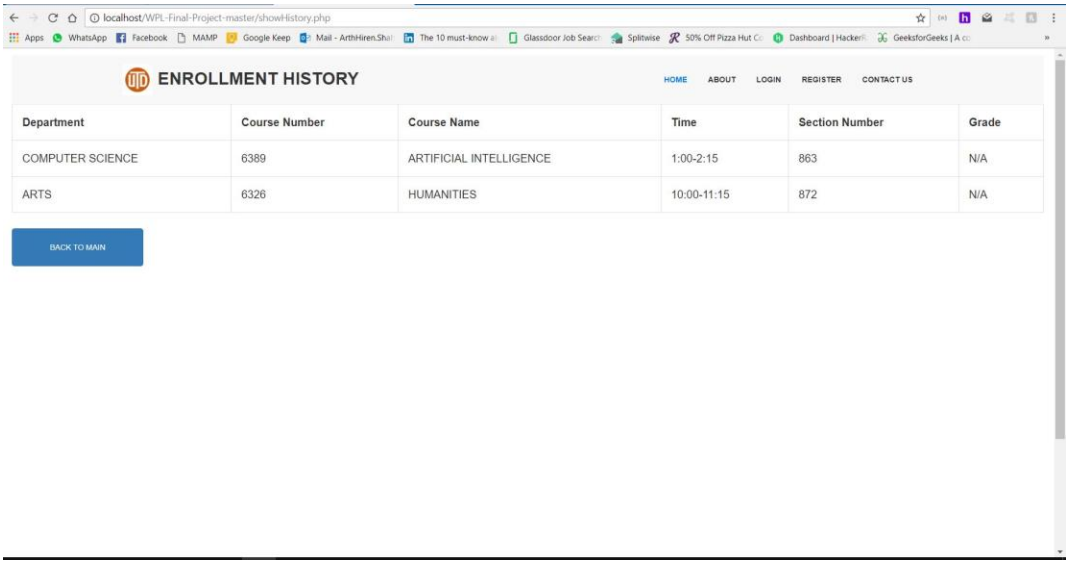
4. Search Page



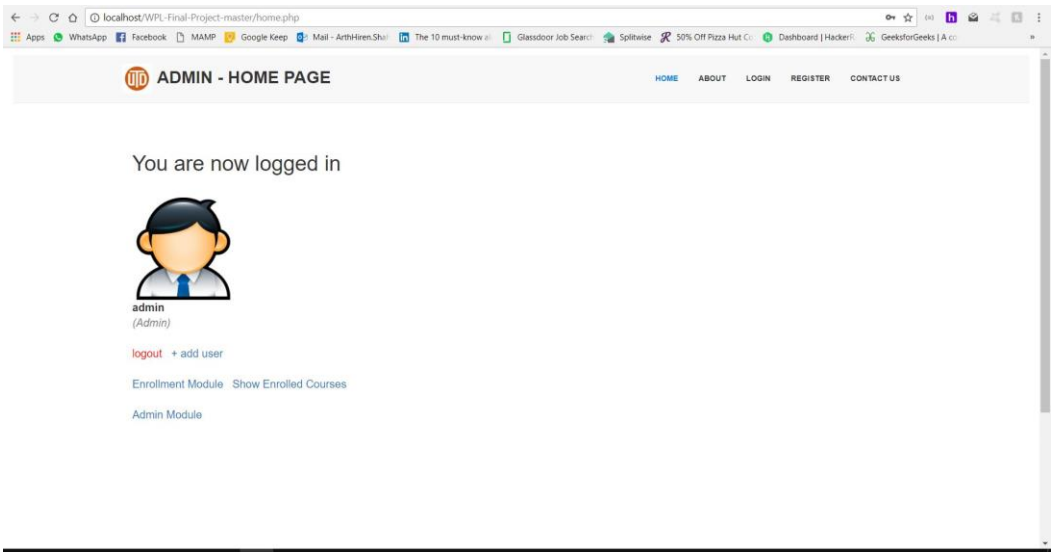
5. Cart

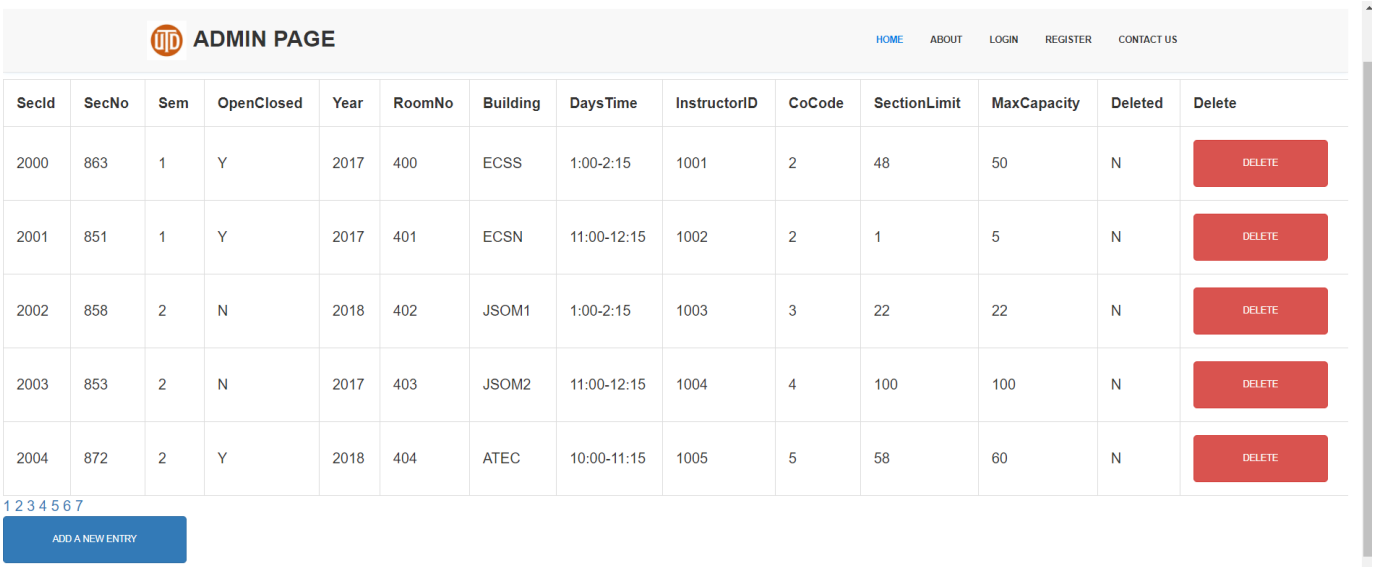


6. Enrolled Courses



7. Admin Page


localhost/WPL-Final-Project-master/home.php
ADMIN - HOME PAGE
HOME
ABOUT
LOGIN
REGISTER
CONTACT US
You are now logged in
admin
(Admin)
logout + add user
Enrollment Module Show Enrolled Courses
Admin Module


ADMIN PAGE
HOME
ABOUT
LOGIN
REGISTER
CONTACT US
SecId | SecNo | Sem | OpenClosed | Year | RoomNo | Building | DaysTime | InstructorID | CoCode | SectionLimit | MaxCapacity | Deleted | Delete
2000 | 863 | 1 | Y | 2017 | 400 | ECSS | 1:00-2:15 | 1001 | 2 | 48 | 50 | N | DELETE
2001 | 851 | 1 | Y | 2017 | 401 | ECSN | 11:00-12:15 | 1002 | 2 | 1 | 5 | N | DELETE
2002 | 858 | 2 | N | 2018 | 402 | JSOM1 | 1:00-2:15 | 1003 | 3 | 22 | 22 | N | DELETE
2003 | 853 | 2 | N | 2017 | 403 | JSOM2 | 11:00-12:15 | 1004 | 4 | 100 | 100 | N | DELETE
2004 | 872 | 2 | Y | 2018 | 404 | ATEC | 10:00-11:15 | 1005 | 5 | 58 | 60 | N | DELETE
1 2 3 4 5 6 7
ADD A NEW ENTRY