

1. Overview

Create the necessary PHP files using PDO in order to create an application called "Course Manager". This application maintains a list of courses. Each course has a list of students enrolled in that course. The database structure and initial data used for the application is included with these instructions.

If you want to do Node with Mongo as well as PHP with PDO, then each web application will be 10 points.

2. The Home Page

The default or home page shows a list of courses and the enrolled students (if any..) for the first course in your list of courses.

Course Manager

Courses
[cs601](#)
[cs602](#)
[cs701](#)

Student List
cs602 - Server-Side Web Development

First Name	Last Name	Email	
John	Smith	john@smith.com	Delete
Jane	Smith	jane@smith.com	Delete

[Add Student](#)
[List Courses](#)

3. The List Courses page

The List Courses page shows the current set of courses we have in the database, ordered by course id. The page also has the ability to add a new course. The user can also go the home page by clicking the List Students link.

You should have basic validations that check the course name having 2 characters and 3 numeric characters. And, the minimum length is 5 characters and maximum length is no more than the database column width.

The course name should be validated to be at least 2 characters and no more than your width of the column in your database. And, course names typically do not have any meta-characters.

Course Manager

Course List

ID	Name
cs601	Web Application Development
cs602	Server-Side Web Development
cs701	Rich Internet Application Development

Add Course

Course Id:

Course Name:

[List Students](#)

Below is an example of after saving cs520 to the database and updating the screen.

Course Manager

Course List

ID	Name
cs520	Information Structures
cs601	Web Application Development
cs602	Server-Side Web Development
cs701	Rich Internet Application Development

Add Course

Course Id:

Course Name:

List Students

4. The List Student page

The List Student link allows the user to add students to a course. Create a list of courses sourced from the database and fields for entering the first name, last name, and email of a student.

The representation below shows the student listing when there are no student in the course.

Course Manager

Student List

Courses

[cs520](#)
[cs601](#)
[cs602](#)
[cs701](#)

cs520 - Information Structures

First Name	Last Name	Email
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[Add Student](#)

[List Courses](#)

The example below shows 2 students in cs602. There is a button to remove each student from the course.

Course Manager

Student List

Courses

[cs601](#)
[cs602](#)
[cs701](#)

cs602 - Server-Side Web Development

First Name	Last Name	Email	
John	Smith	john@smith.com	Delete
Jane	Smith	jane@smith.com	Delete

[Add Student](#)

[List Courses](#)

Add Student page

You should have basic validations like names must be ≥ 2 characters but not more than your database column width.

Course Manager

Add Student

Course:

First Name:

Last Name:

Email:

[View Student List](#)

The schema to follow for your data modeling (Mongo and MySQL) should be:

```
CREATE TABLE sk_courses (
  courseID      VARCHAR(12)    NOT NULL,
  courseName    VARCHAR(255)   NOT NULL,
  PRIMARY KEY (courseID)
);

CREATE TABLE sk_students (
  studentID     INT(11)        NOT NULL AUTO_INCREMENT,
  courseID      VARCHAR(12)    NOT NULL,
  firstName     VARCHAR(255)   NOT NULL,
  lastName      VARCHAR(255)   NOT NULL,
  email         VARCHAR(255)   NOT NULL,
  PRIMARY KEY (studentID)
);
```