

Specification of University Course and Result Management System

This web application is only for using one semester only of a university. If it will make user happy in a semester, university will then ask you for changing several features so that it can be used for long time. So, just think about the stories and features below (don't think about the future). Noted that, you are not authorized person for changing any specification.

For accessing all the features below, you should make a home page and keep menus/submenus or links accordingly.

1. Save Department

During department saving, you must ensure that, code and name must be unique. Noted that, code must be two (2) to seven (7) characters long.



The form is titled "Save Department". It contains two input fields: "Code" and "Name". The "Code" field is a single-line text box. The "Name" field is a single-line text box. Below the "Name" field is a "Save" button.

Fig. 1: Save Department

2. View All Departments

In this page, all the existing department information will be displayed.

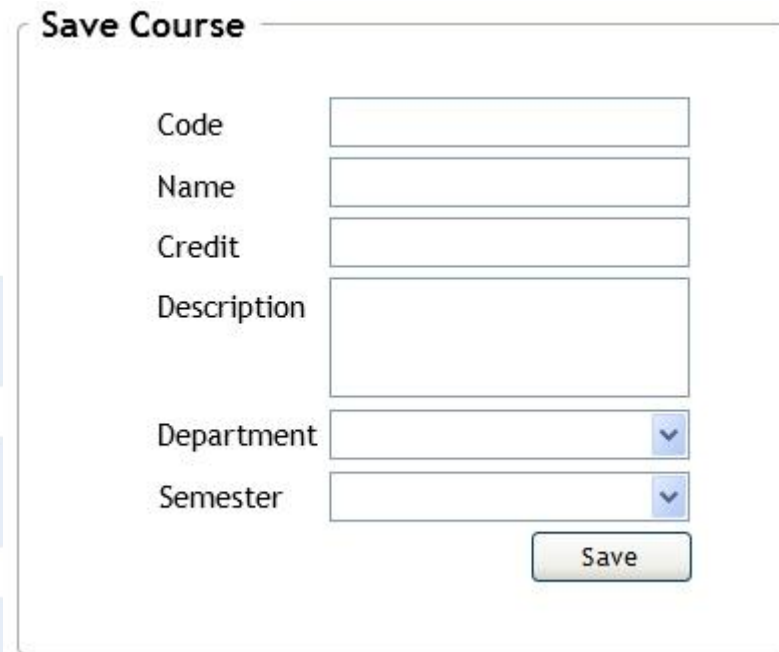
View All Departments

Code	Name

Fig. 2: View All Departments

3. Save Course

Here, code and name must be unique. Code must be at least five (5) characters long. Credit range is from 0.5 to 5.0 i.e. credit cannot be less than 0.5 and more than 5.0. Department DropDownList will be loaded with the existing department data from database. You should keep eight (8) semesters' data in database and the semester DropDownList will be loaded with those data.



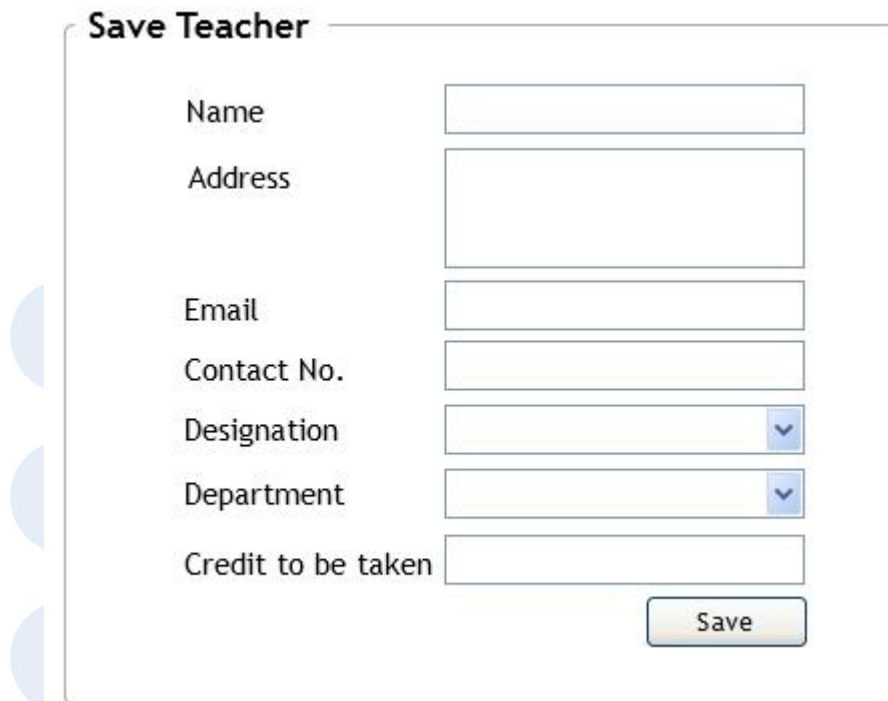
The form is titled "Save Course" and contains the following fields:

- Code: A text input field.
- Name: A text input field.
- Credit: A text input field.
- Description: A larger text input field.
- Department: A dropdown menu with a downward arrow.
- Semester: A dropdown menu with a downward arrow.
- Save: A button located at the bottom right of the form.

Fig. 2: Save Course

4. Save Teacher

During teacher saving, you must ensure that, email must be in correct format and unique. You don't need to make a UI for entering designation information, just keep some designation in database and *Designation* DropDownList will be loaded with those data. You also have to ensure that, *Credit to be taken* field must contain a non-negative value.



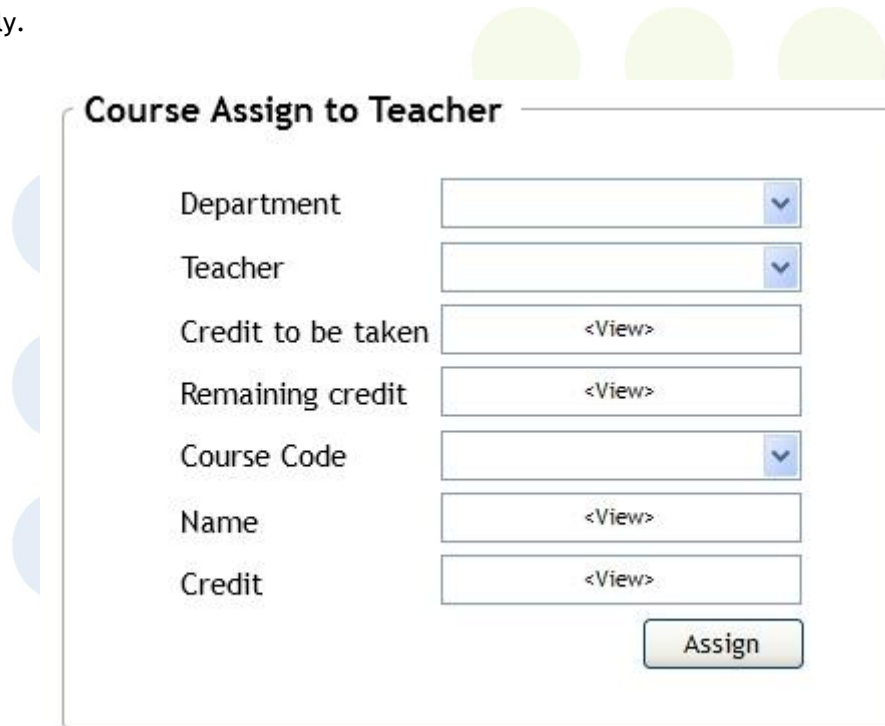
The form is titled "Save Teacher" and contains the following fields:

- Name: Text input field
- Address: Text input field
- Email: Text input field
- Contact No.: Text input field
- Designation: Drop-down list
- Department: Drop-down list
- Credit to be taken: Text input field
- Save: Button

Fig. 3: Save Teacher

5. Course Assign to Teacher

User will select a department from the DropDownList and all the teachers' name and course code of that specific department will be loaded in the *Teacher* and *Course Code* DropDownList. When user will select a teacher, *Credit to be taken* and *Remaining credit* will be displayed accordingly. When user will select a course code, *Name* and *Credit* of that course will be displayed. You must ensure to avoid overlapping problem. A course cannot be assigned to more than one teacher, i.e. an assigned course cannot be assigned again. If user tries to assign a course, which credit is more than teacher's remaining credit, system will show an option (Yes/No) dialog box and work accordingly.



The form is titled "Course Assign to Teacher". It contains the following fields and controls:

- Department:** A dropdown menu.
- Teacher:** A dropdown menu.
- Credit to be taken:** A text box displaying "<View>".
- Remaining credit:** A text box displaying "<View>".
- Course Code:** A dropdown menu.
- Name:** A text box displaying "<View>".
- Credit:** A text box displaying "<View>".
- Assign:** A button located at the bottom right of the form.

Fig. 5: Course Assign to Teacher

6. View Course Statics

User will select a department and all the course information (*Code, Name/Title, Semester and Assigned To*) will be displayed accordingly. If there is any course which is not assigned to any teacher yet, then in the *Assigned To* column there must be written “Not Assigned Yet”.

View Course Statics

Department


Course Information

Code	Name/Title	Semester	Assigned To

Fig. 6: View Course Statics

7. Register Student

During student registration, you must ensure that, email must be in correct format and unique. In date there should be a DatePicker, where current date should be selected by default. When register successfully, all the information will be displayed as well as a *Registration Number*. For registration number, there is a fixed format. Registration Number format: <dept code>-<current year>-XXX. For example, CSE-2012-001, CSE-2012-002, EEE-2012-001, EEE-2013-001, CSE-2013-001, BBA-2015-001, BBA-2015-002, BBA-2015-003.



The form is titled "Register Student" and contains the following fields:

- Name: Text input field
- Email: Text input field
- Contact No.: Text input field
- Date: Date picker (dropdown menu)
- Address: Text input field
- Department: Dropdown menu

A "Register" button is located at the bottom right of the form.

Fig. 7: Register Student

8. Allocate Classrooms

Day DropDownList will be loaded with seven (7) days' name of the week. Keep some room data in database and *Room No.* DropDownList will be loaded with those data. You must ensure to avoid the overlapping problem here. Both full and partial overlapping must be avoided.

Allocate Classrooms

Department

▼

Course

▼

Room No.

▼

Day

▼

From

:

☐ AM ☐ PM

To

:

☐ AM ☐ PM

Allocate

Fig. 8: Allocate Classrooms

9. View Class Schedule and Room Allocation Information

User will select a department, the class schedule and room allocation information of the courses of that particular department will be displayed. Noted that, for a single course, a single row will be generated, i.e. you cannot generate multiple rows for multiple schedule of a single course. If there is any course which is not scheduled yet, then in the *Schedule Info* column there must be written “Not Scheduled Yet”.

View Class Schedule and Room Allocation Information

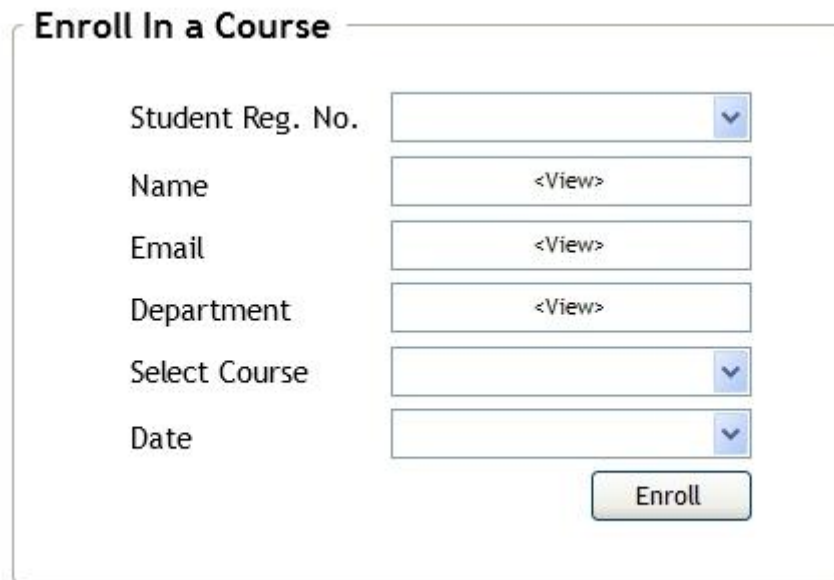
Department

Course Code	Name	Schedule Info
CSE-001	Com. Programming	R. No : A-202, Tue, 9:00 AM - 12:00 PM; R. No : B-202, Thu, 8:00 AM - 10:00 AM

Fig. 9: View Class Schedule and Room Allocation Information

10. Enroll In a Course

Student Reg. No. DropDownList will be loaded with existing students' registration numbers. User will select a registration number, and name, email, department of that particular student will be displayed. *Select Course* DropDownList will be loaded with the courses' name of that selected student's department. A student can enroll in a course once only.



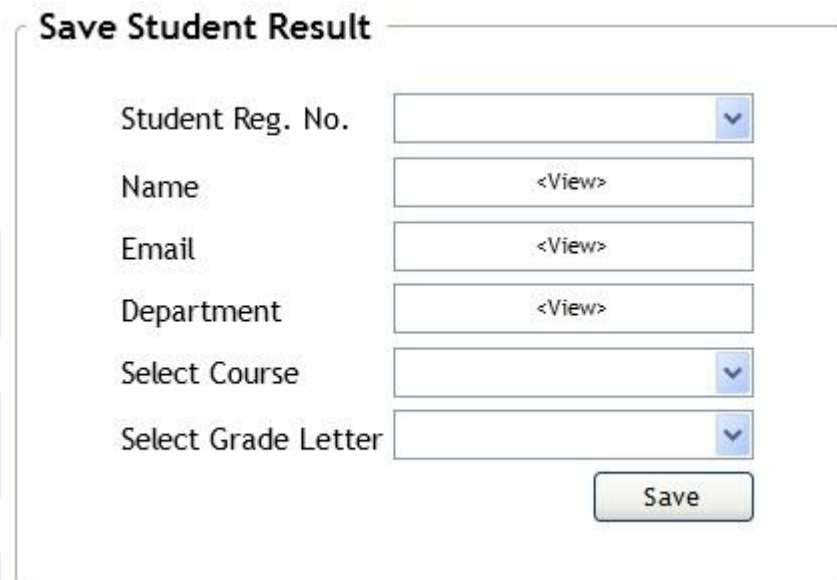
The screenshot shows a web form titled "Enroll In a Course". It contains the following fields and controls:

- Student Reg. No.:** A dropdown menu with a blue arrow icon on the right.
- Name:** A text input field displaying "<View>".
- Email:** A text input field displaying "<View>".
- Department:** A text input field displaying "<View>".
- Select Course:** A dropdown menu with a blue arrow icon on the right.
- Date:** A date picker control with a blue arrow icon on the right.
- Enroll:** A button located at the bottom right of the form.

Fig. 10: Enroll In a Course

11. Save Student Result

User will select a registration number, and name, email, department of that particular student will be displayed. *Select Course* DropDownList will be loaded with the enrolled courses' name of that selected student. In the *Select Grade Letter* DropDownList, there will be thirteen (13) grades - A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, and F. **Note that result can be saved only for enrolled courses of that student.**



The screenshot shows a web form titled "Save Student Result". It contains the following fields and controls:

- Student Reg. No.:** A text input field with a dropdown arrow on the right.
- Name:** A text input field displaying "<View>".
- Email:** A text input field displaying "<View>".
- Department:** A text input field displaying "<View>".
- Select Course:** A text input field with a dropdown arrow on the right.
- Select Grade Letter:** A text input field with a dropdown arrow on the right.
- Save:** A button located at the bottom right of the form.

Fig. 11: Save Student Result

12. View Result

User will select a registration number, and name, email, department along with the enrolled courses' information (*Course Code, Name and Grade*) of that particular student will be displayed. If there is any course which is not graded yet, then in the *Grade* column there must be written "Not Graded Yet". When user will click *Make PDF* button, a PDF will be generated with that student's name, registration number, department, email and all the courses' result in a nice format.

View Result

Student Reg. No.

Name

Email

Department

Make PDF

Course Code	Name	Grade

Fig. 12: View Result

13. Unassign All Courses

When user will click the *Unassign Courses* button, a confirmation dialog box will be displayed: “Are you sure to unassign all courses?” with Yes/No button. If user clicks Yes button, all the courses will be unassigned. Noted that, you cannot delete data from database for unassigning courses.

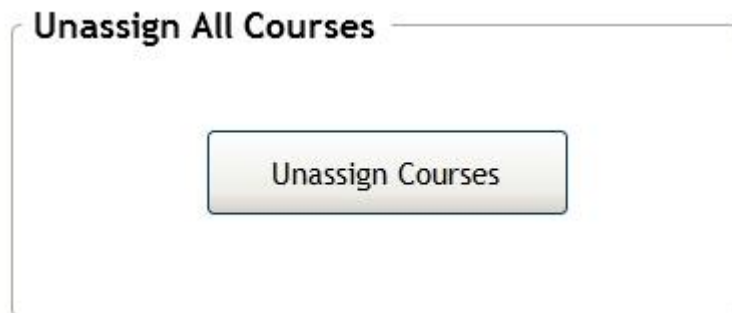


Fig. 13: Unassign All Courses

14. Unallocate All Classrooms

When user will click the *Unallocate Rooms* button, a confirmation dialog box will be displayed: “Are you sure to unallocate all classrooms info?” with Yes/No button. If user clicks Yes button, all the classrooms will be unallocated, i.e. all class schedule and room allocation information will be unallocated/reset. Noted that, you can't delete data from database when for unallocating classrooms information.



Fig. 14: Unallocate All Classrooms

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