**COLLEGE DATABASE MANAGEMENT SYSTEM**

1. **PURPOSE OF THE PROJECT**

This project is built to keep a record of a college, the departments of the college, the courses associated, and the information regarding instructors and students of that college gets stored. Information regarding the subject studied by a student, courses taught by a instructor, number of students in a department is stored. The project is meant to easily and efficiently access, update, view, delete and create records of a student. Also, it displays a list and accessing information of an instructor. The website uses:

* HTML
* CSS
* JavaScript
* PHP
* MySQL

1. **WEBSITE STRUCTURE**

The website contains a homepage, which leads to a student menu page and to another teacher menu page. The student menu contains options to add a record, delete a record, edit existing record, search a record using roll number and show a list of students which can be filtered according to a department. The teacher’s menu contains options to search a teacher using his id and view a full teacher’s list, which can be filtered department-wise.

1. **PAGE DESCRIPTIONS**
   1. HOME

Home page contains links to go to access student’s menu or teacher’s menu.

* 1. STUDENT MENU

This page contains options to Add a student record, search a student record, edit an existing student record, delete a student record and show a list of students. It also contains links to go back to home page or go to the Teacher’s Menu.

* 1. ADD A STUDENT

This page contains a form which requires the basic information of a student, his name, roll number, date of birth, mobile number(optional), address(optional), department, and his 5 subjects. A front-end validation is done using HTML to check format of Name, roll number and mobile number, and also to ensure required fields are not empty. A back-end validation is done to ensure none of the fields is empty, and also to check whether the record being added already exists (using roll number). If the data doesn’t exist, it displays an alert box showing message “data entered successfully”. An arrow button is provided to go back to Student Menu.

* 1. SEARCH STUDENT

This page contains a search bar to retrieve information of a student, using his roll number. A front-end validation is done using HTML to ensure the roll number is in correct format (6 digits). A back-end validation is done to ensure the student being searched exists. If the student doesn’t exist, an error message is shown in the same page. Else, redirection to another page is done which displays all the information of student, Name, Roll Number, Department, Date of Birth, Mobile, Address, Subjects studying and corresponding instructor. Both these pages contain an arrow to go back to previous page (Student Menu and Search Page respectively).

* 1. EDIT STUDENT

This page contains an interface similar to the search page button. It searches the entered value, with front end validation. If the student does not exist, it displays an error message. Else, we get redirected to another page which contains a form with checkboxes to tick which values need to be edited, and an input field to input the aforementioned values, using front end validation. After submitting the form, we are redirected to a page which gives a list of changes done.

* 1. DELETE STUDENT

This page contains an interface similar to the search button. A front-end validation is done to check whether data is entered in correct format. A back-end validation is done to ensure that the data entered exists. If it exits, a message confirming the deletion is shown. Else, an error message showing data doesn’t exist is shown.

* 1. SHOW STUDENT LIST

This page displays a list of students in tabular form. It displays their Roll Number, Name, Date of Birth, Mobile, Address and Department using columns of a table. A student record is displayed in row. A filter button is provided at top which can filter out the records according to the department of a student.

* 1. TEACHER MENU

This page contains record to search a teacher according to his id, and display a list of all instructors, which can be filtered according to their department. This page also contains links to go back to home page or to Student’s Menu.

* 1. SEARCH TEACHER

This page contains a search bar to search a teacher using his id. A front-end validation is done using HTML to ensure correct id format is entered (2 to 3 lowercase alphabets). A back-end validation is done to ensure teacher with the inputted it exists. If it exists, we are redirected to a page displaying the information of the required teacher (Name, ID, Department, Date of Birth, Mobile Number, Address, and a list of courses taught).

* 1. SHOW TEACHER LIST

This page displays a list of teachers in tabular form. It displays their ID, Name, Date of Birth, Mobile, Address and Department using columns of a table. A teacher record is displayed in row. A filter button is provided at top which can filter out the records according to the department of a teacher.

1. **REQUIREMENTS**

This project is expected to run on all modern web browsers. No responsive design has been added as yet.