CEG-CMS

DBMS - CS6106 - PROJECT 2020-21

Developed by-

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View the hosted site here

AIM:

We all have faced the problem where we would have missed some information that was sent in the official groups, sometimes lost track of the information sent. Also the study materials that are sent can get lost in the chats. So we have designed a Course Management System where for each course the professor can directly send the details and any other announcements to the students. Also the student will be able to see all the available courses and enroll in any new course they would want to feature in.

How to use the site:

- Install XAMPP and start Apache and MySQL server from XAMPP Control Panel
- Clone the repository inside your xampp/htdocs/ folder
- Create a database cmsproj inside the phpMyAdmin of your localhost
- Import the latest cmsproj.sql file from the repository to the database
- Goto http://localhost/dbmsproject/

Views in the site and the roles possible:-

1. STUDENT

- view student details
- view all available courses:
 - course details
 - study materials uploaded by the professor
 - o notifications from the professor
 - participate in discussion with fellow students and professor
- view admin notification
- send request for updation of details

2. PROFESSOR:-

- view courses details they are taking
 - enrolled student detials
 - o send study materials (files, youtube video, website link, html code)
 - o send course notifications
 - Participate in discussions with the students
- view professor details
- view admin notifications

3. ADMIN

- create, update and delete students, professors
- send overall notification, specific notification to professors
- create and delete courses and assign professor

Tables Used (and their definitions)

STUDENT_DETAILS (ALL DETAILS OF STUDENTS)

```
-- Triggers `student_details`
-- DELIMITER $$
CREATE TRIGGER `forstudentcourses` BEFORE DELETE ON `student_details` FOR EACH ROW DELETE from student_courses WHERE rollno=OLD.rollno
$$
DELIMITER ;
DELIMITER ;
DELIMITER $$
CREATE TRIGGER `forstudentupdate` BEFORE DELETE ON `student_details` FOR EACH ROW DELETE from student_update WHERE rollno=OLD.rollno
$$
DELIMITER ;
```

 STUDENT_COURSES (MAPPING BETWEEN STUDENTS AND COURSES (WHICH STUDENT ENROLLED TO WHICH COURSE))

```
CREATE TABLE `student_courses` (
   `rollno` bigint(20) UNSIGNED NOT NULL,
   `courseid` varchar(10) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
--
-- Indexes for table `student_courses`
--
ALTER TABLE `student_courses`
   ADD PRIMARY KEY (`rollno`,`courseid`),
   ADD KEY `rollno` (`rollno`),
   ADD KEY `coursestudentfk` (`courseid`);

--
ALTER TABLE `student_courses`
   ADD CONSTRAINT `coursestudentfk` FOREIGN KEY (`courseid`) REFERENCES `course_details` (`courseid`),
   ADD CONSTRAINT `student_courses_ibfk_1` FOREIGN KEY (`rollno`) REFERENCES `student_details` (`rollno`);
```

PROF_DETAILS (ALL DETAILS OF PROFESSORS)

```
CREATE TABLE `prof_details` (
  `profno` bigint(20) UNSIGNED NOT NULL,
  `name` varchar(30) NOT NULL,
  `password` varchar(20) NOT NULL,
  `email` varchar(30) DEFAULT NULL,
  `contactno` bigint(20) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
-- Indexes for table `prof details`
 ALTER TABLE `prof_details`
   ADD PRIMARY KEY (`profno`),
   ADD UNIQUE KEY `email` (`email`),
   ADD UNIQUE KEY `contactno` (`contactno`);
-- Triggers `prof_details`
DELIMITER $$
CREATE TRIGGER `forcoursedetails` BEFORE DELETE ON `prof_details` FOR EACH ROW DELETE from course_details WHERE
profno=OLD.profno
$$
DELIMITER;
       COURSE_DETAILS (ALL COURSE NAMES AND ASSIGNED PROFESSOR)
CREATE TABLE `course_details` (
   `courseid` varchar(10) NOT NULL,
   `name` varchar(50) NOT NULL,
   `profno` bigint(20) UNSIGNED NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
 -- Indexes for table `course_details`
 ALTER TABLE `course_details`
  ADD PRIMARY KEY ('courseid'),
  ADD KEY `PROFFK` (`profno`);
 ALTER TABLE `course_details`
   ADD CONSTRAINT `PROFFK` FOREIGN KEY (`profno`) REFERENCES `prof_details` (`profno`);
-- Triggers `course_details`
DELIMITER $$
CREATE TRIGGER `forcoursedata` BEFORE DELETE ON `course_details` FOR EACH ROW DELETE from course_data WHERE courseid=OLD.courseid
$$
CREATE TRIGGER `forcourseforumqn` BEFORE DELETE ON `course_details` FOR EACH ROW DELETE from course_forum_qn WHERE courseid=OLD.courseid
$$
DELIMITER :
DELIMITER $$
CREATE TRIGGER `forcoursenotification` BEFORE DELETE ON `course_details` FOR EACH ROW DELETE from course_notifications WHERE courseid=OLD.courseid
$$
DELIMITER :
CREATE TRIGGER `forstudentcoursesbycourse` BEFORE DELETE ON `course_details` FOR EACH ROW DELETE FROM student_courses WHERE courseid=OLD.courseid
$$
DELIMITER;
```

COURSE_DATA (ALL STUDY MATERIALS OF EACH COURSES)

```
CREATE TABLE `course data` (
  `dataid` int(11) NOT NULL,
  `courseid` varchar(10) NOT NULL,
  `type` varchar(20) NOT NULL,
  `link` text NOT NULL,
  `title` text NOT NULL,
  `description` text NOT NULL,
  `time` timestamp NOT NULL DEFAULT current timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
-- Indexes for table `course_data`
ALTER TABLE `course_data`
  ADD PRIMARY KEY ('dataid'),
  ADD KEY `cdatafk` (`courseid`);
2 ALTER TABLE `course data`
3
  ADD CONSTRAINT `cdatafk` FOREIGN KEY (`courseid`) REFERENCES `course_details` (`courseid`);
4
5 --

    COURSE_NOTIFICATIONS (ALL NOTIFICATIONS OF EACH COURSE)
```

```
CREATE TABLE `course_notifications` (
   `id` int(11) NOT NULL,
   `courseid` varchar(10) NOT NULL,
   `content` text NOT NULL,
   `file` text DEFAULT NULL,
   `time` timestamp NOT NULL DEFAULT current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
-- Indexes for table `course_notifications`
ALTER TABLE `course_notifications`
   ADD PRIMARY KEY ('id'),
   ADD KEY `courseid` (`courseid`);
ALTER TABLE `course_notifications`
  ADD CONSTRAINT `course_notifications_ibfk_1` FOREIGN KEY (`courseid`) REFERENCES `course_details` (`courseid`);
```

COURSE_FORUM_QN (QUESTIONS ASKED IN COURSE DISCUSSION PAGE)

```
CREATE TABLE `course_forum_qn` (
   `qnid` int(11) NOT NULL,
   `courseid` varchar(10) NOT NULL,
   `description` text NOT NULL,
   `usertype` varchar(30) NOT NULL,
   `posted_by` bigint(20) NOT NULL,
   `time` timestamp NOT NULL DEFAULT current_timestamp()
 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
 -- Indexes for table `course_forum_qn`
ALTER TABLE `course_forum_qn`
  ADD PRIMARY KEY ('qnid'),
   ADD KEY `courseid` (`courseid`);
ALTER TABLE `course forum qn`
  ADD CONSTRAINT `course_forum_qn_ibfk_1` FOREIGN KEY (`courseid`) REFERENCES `course_details` (`courseid`);
-- Triggers `course_forum_qn`
L DELIMITER $$
2 CREATE TRIGGER `forcourseforumans` BEFORE DELETE ON `course_forum_qn` FOR EACH ROW DELETE FROM course_forum_ans WHERE qnid=OLD.qnid
1 DELIMITER;
```

 COURSE_FORUM_ANS (ANSWER OF EACH QUESTION ANSWERED IN THE COURSE DISCUSSION PAGE)

```
CREATE TABLE `course_forum_ans` (
  `ansid` int(11) NOT NULL,
  `qnid` int(11) NOT NULL,
  `usertype` varchar(30) NOT NULL,
  `userid` bigint(20) NOT NULL,
  `answer` text NOT NULL,
  `time` timestamp NOT NULL DEFAULT current timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
-- Indexes for table `course_forum_ans`
ALTER TABLE `course_forum_ans`
 ADD PRIMARY KEY (`ansid`),
 ADD KEY `qnid` (`qnid`);
ALTER TABLE `course_forum_ans`
 ADD CONSTRAINT `course_forum_ans_ibfk_1` FOREIGN KEY (`qnid`) REFERENCES `course_forum_qn` (`qnid`);

    ADMIN_NOTIFICATION (ALL NOTIFICATIONS SENT BY ADMIN)

CREATE TABLE `admin notifications` (
   `notid` int(11) NOT NULL,
   `target` varchar(10) NOT NULL,
   `title` varchar(50) NOT NULL,
  `message` text NOT NULL,
   `logs` timestamp NOT NULL DEFAULT current_timestamp(),
   'upload' varchar(100) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
 -- Indexes for table `admin_notifications`
 ALTER TABLE `admin_notifications`
   ADD PRIMARY KEY (`notid`);
```

STUDENT_UPDATE (ALL REQUEST SENT FROM STUDENT TO ADMIN)

```
CREATE TABLE `student_update` (
  `id` int(10) NOT NULL,
  `rollno` bigint(20) UNSIGNED NOT NULL,
  `title` varchar(20) DEFAULT NULL,
  `request` varchar(100) NOT NULL,
  `logs` timestamp NULL DEFAULT current timestamp(),
  `status` tinyint(1) NOT NULL DEFAULT 0
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
-- Indexes for table `student_update`
ALTER TABLE `student_update`
  ADD PRIMARY KEY ('id'),
  ADD KEY `rollno` (`rollno`);
ALTER TABLE `student_update`
 ADD CONSTRAINT `student_update_ibfk_1` FOREIGN KEY (`rollno`) REFERENCES `student_details` (`rollno`);

    ADMIN_LOGIN (ADMIN LOGIN CREDENTIALS)

CREATE TABLE `admin_login` (
  `aid` varchar(20) NOT NULL,
  `apassword` varchar(20) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

ALTER TABLE `admin_login`
ADD PRIMARY KEY (`aid`);

VIEWS:-

VIEW ALL COURSES

```
1 CREATE VIEW `view_all_courses_student` AS
2 select `all_courses`.`courseid` AS `courseid`,
3 `all_courses`.`course_name` AS `course_name`,`all_courses`.`prof_name` AS `prof_name`,
4 `student_courses`.`rollno` AS `rollno`
5 from (`all_courses` left join `student_courses`
6 on(`all_courses`.`courseid` = `student_courses`.`courseid`));
```

ALL_COURSES

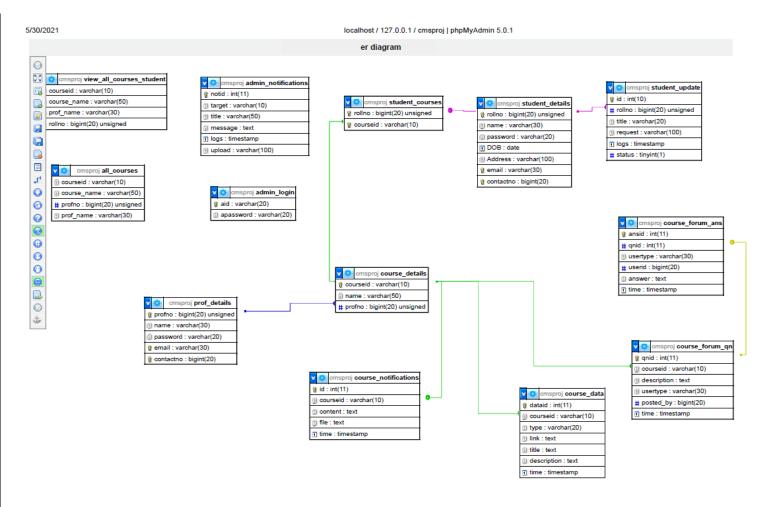
```
1 CREATE VIEW `all_courses` AS
2 select `course_details`.`courseid` AS `courseid`,
3 `course_details`.`name` AS `course_name`,
4 `prof_details`.`profno` AS `profno`,`prof_details`.`name` AS
5 `prof_name` from
6 (`course_details` join `prof_details`
7 on(`course_details`.`profno` = `prof_details`.`profno`));
```

All tables are in their Boyce Codd Normal Form (BCNF)

Technologies Used to Develop the site:-

- PHP
- MySQL
- jQuery
- Bootstrap
- HTML
- CSS

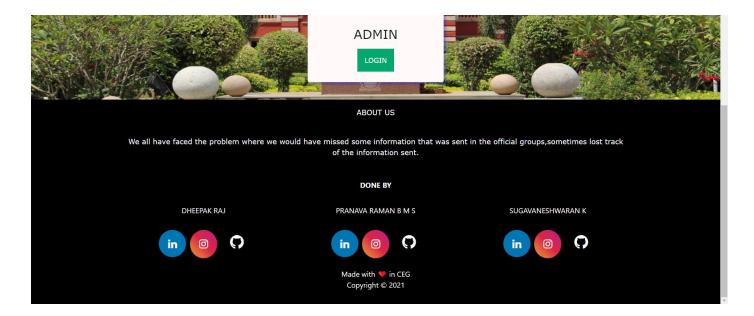
ER - DIAGRAM



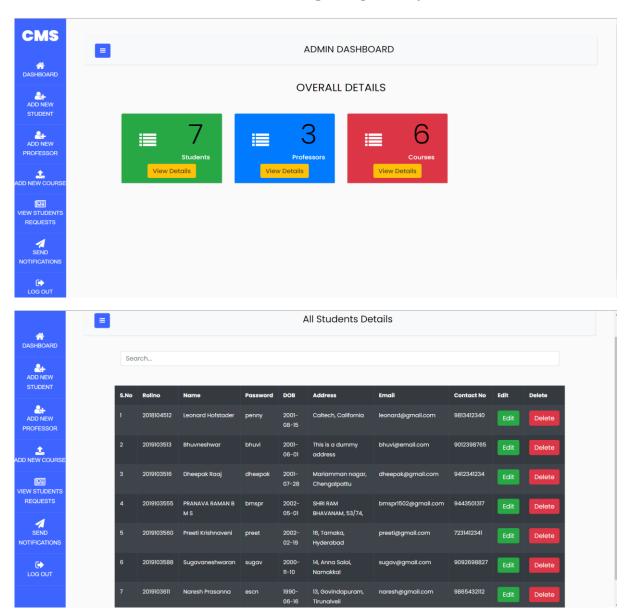
Screen shots of the pages

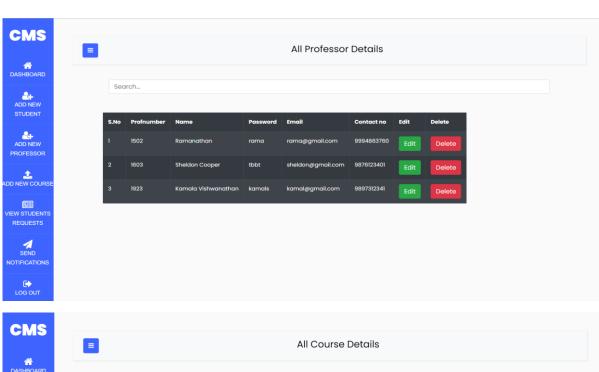
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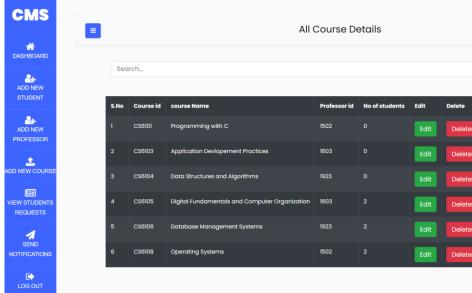


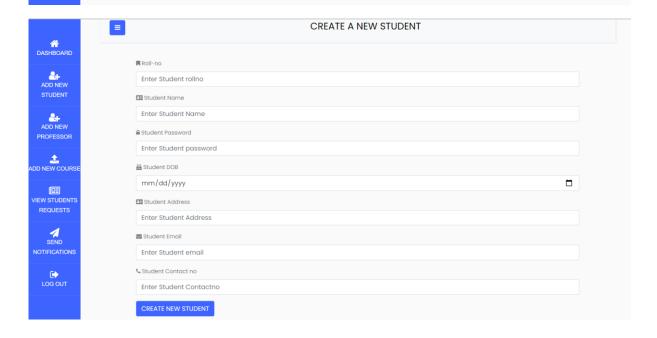


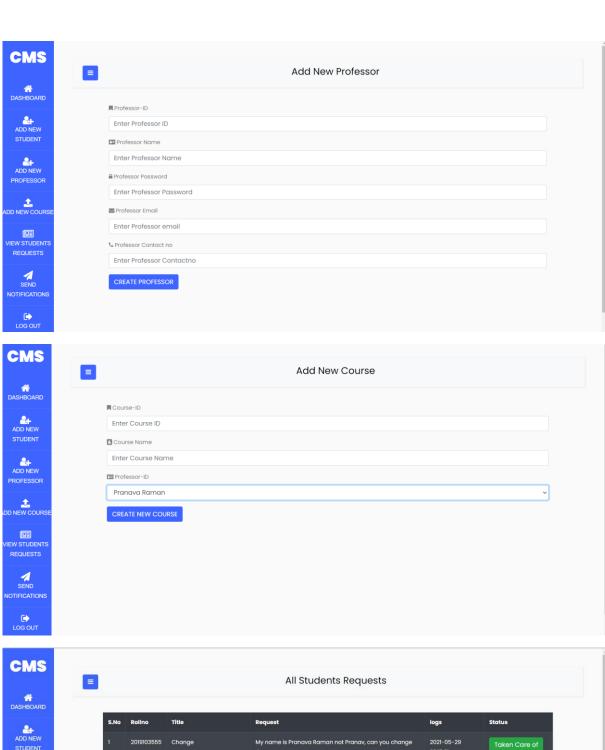
ADMIN DASHBOARD:-

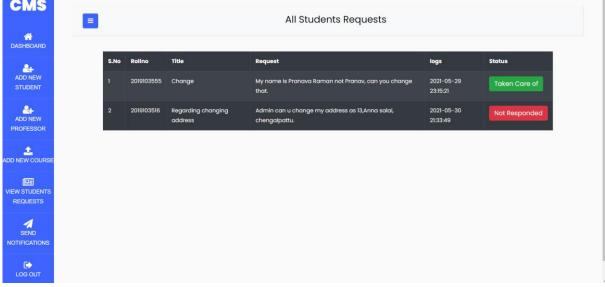


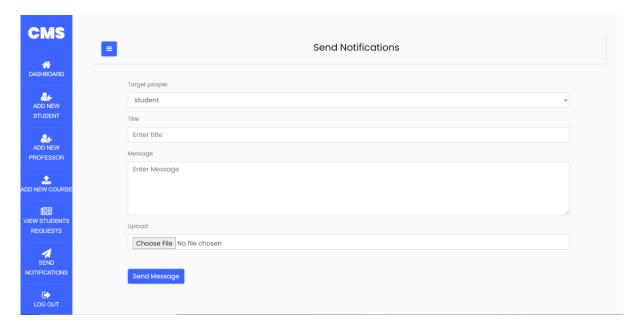




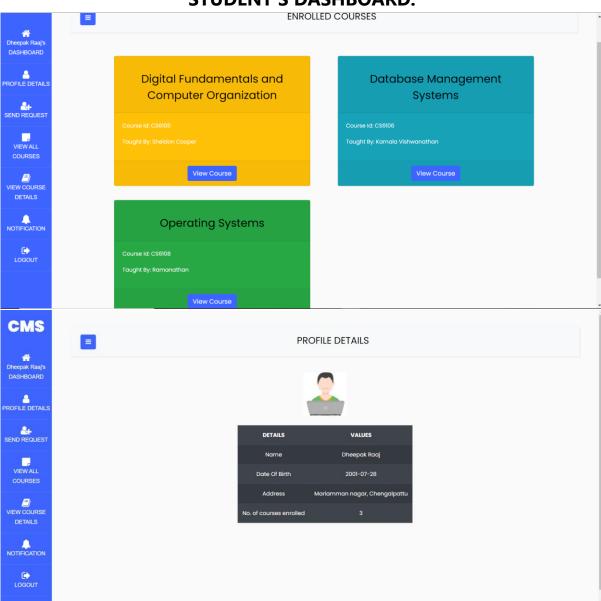


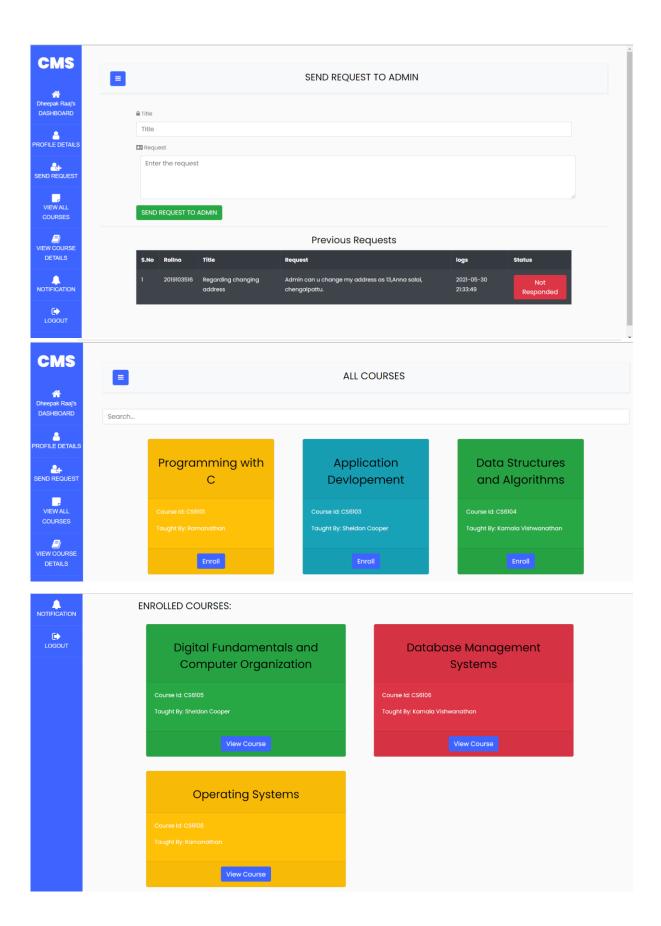


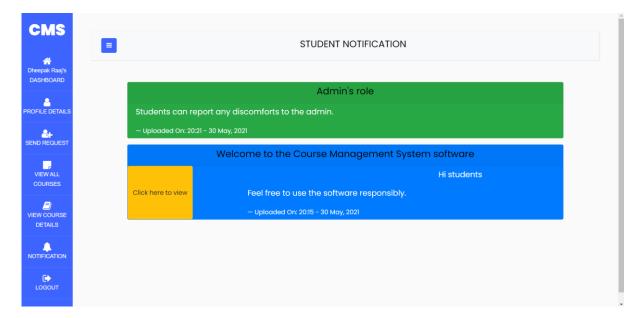


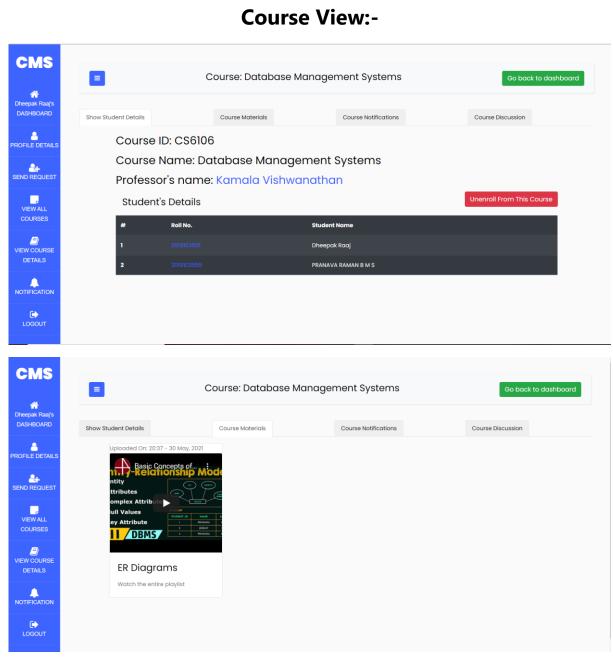


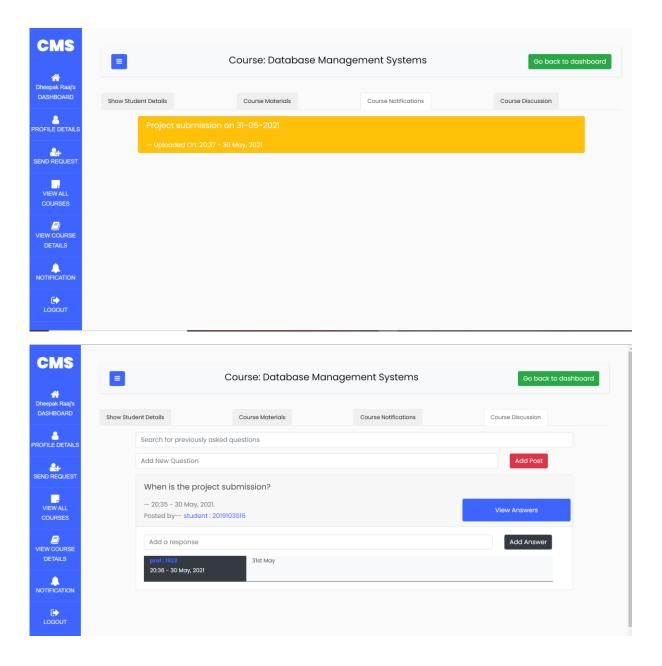
STUDENT'S DASHBOARD:











PROFESSOR DASHBOARD:

