CS-313 DBIS Project
Course Management System

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1 Abstract

The database maintains a record of the courses that a teacher is teaching and the classes in which a student has registered. Assignments, tests, question banks, and solutions were all saved. Students' feedback is also taken into consideration. Based on the saved prerequisite data, a straightforward course suggestion system is offered for the benefit of the learner.

2 Functionalities

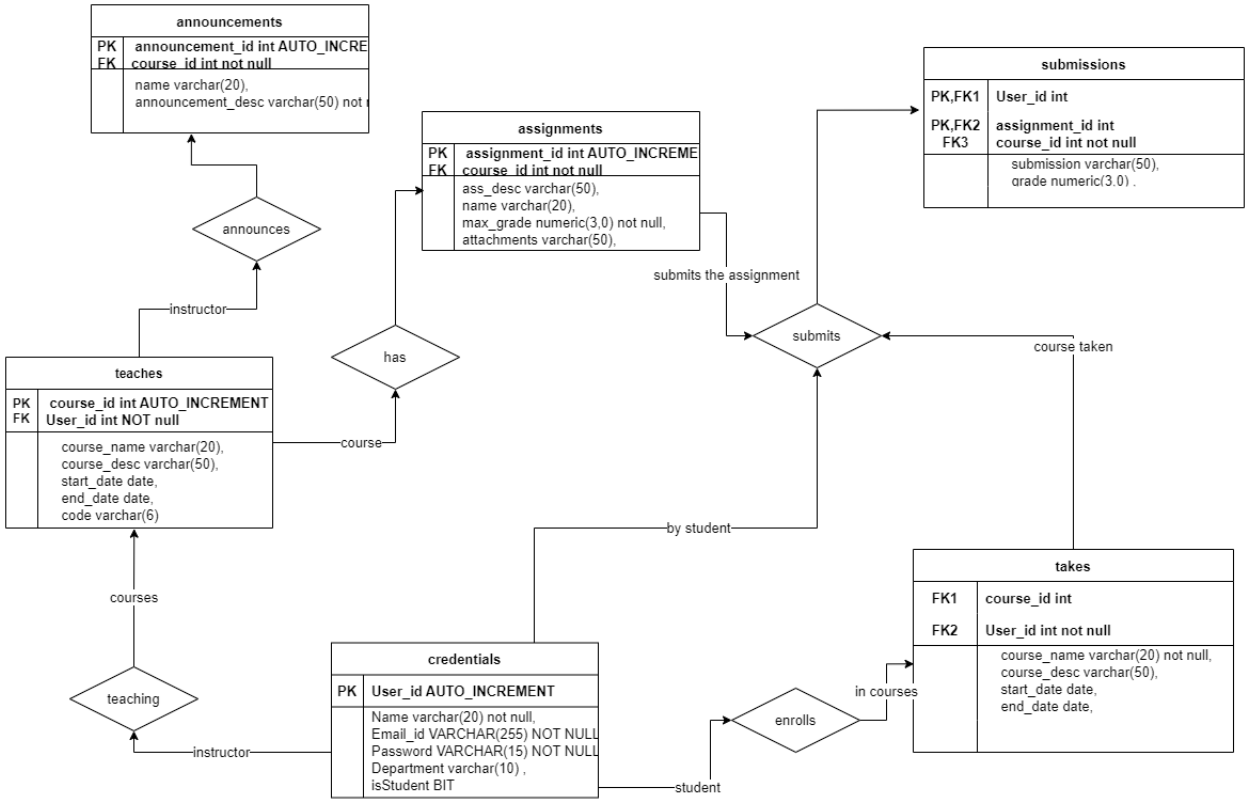
A simple sign-up and sign-in window can be found on the login page. After logging in, a user's page is displayed depending on whether they are a student or an instructor. A student dashboard shows the courses he is currently engaged in and has a profile section that shows the courses, department and dashboard has the option to join a new course. The instructor dashboard shows the list of courses he is currently taking and a option to add a new course. It also has profile section which shows about the instructor.

When a student clicks on a certain course on his dashboard, he can view activities such as quizzes, assignments, exam papers, projects. On going to certain activity, student can see the work assigned, announcements etc. In a similar way an instructor can assign a new activity/homework and can view all the submissions of the students for that particular activity.

3 Database Schema

```
credentials (User_id, Name, Email_id, Password, Department, isStudent)
teaches( course_id, User_id, course_name, course_desc, start_date, end_date, code )
takes(course_id, User_id, course_name, course_desc, start_date,  end_date)
assignments( assignment_id, course_id, name, ass_desc, max_grade, attachments)
submissions( course_id , User_id, assignment_id ,submission, grade )
announcements( announcement_id, course_id, User_id, name, announcement_desc)
```

4 ER model of our database

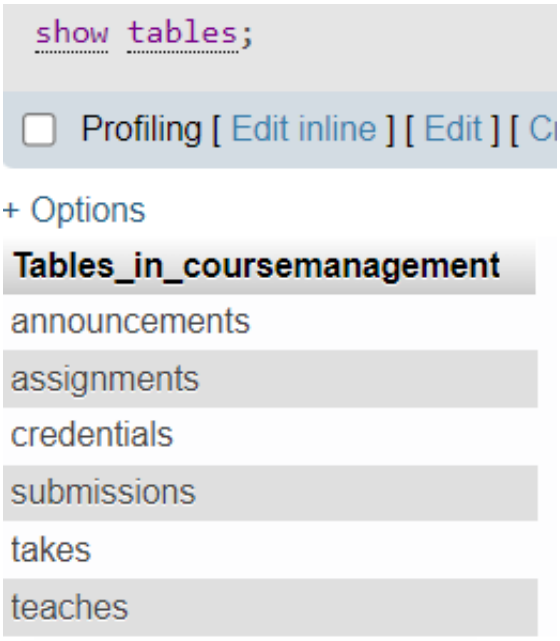


5 Relational Database design

```
Create database coursemanagement;
use coursemanagement;

CREATE TABLE credentials(
    User_id int AUTO_INCREMENT PRIMARY KEY,
    Name varchar(20) not null,
    Email_id VARCHAR(255) NOT NULL ,
    Password VARCHAR(15) NOT NULL,
    Department varchar(10) ,
    isStudent BIT
);

CREATE TABLE teaches(
    course_id int AUTO_INCREMENT primary  key,
    User_id int NOT null,
```

```
    course_name varchar(20),
    course_desc varchar(50),
    start_date date,
    end_date date,
    code varchar(6),
    FOREIGN KEY(User_id) REFERENCES credentials(User_id) on DELETE CASCADE
);

CREATE TABLE takes(
    course_id int PRIMARY key,
    User_id int not null,
    course_name varchar(20) not null,
    course_desc varchar(50),
    start_date date,
    end_date date,
    FOREIGN key(course_id) REFERENCES teaches(course_id) on delete CASCADE,
    FOREIGN KEY(User_id) REFERENCES credentials(User_id) on DELETE CASCADE

);

CREATE TABLE assignments(
    course_id int not null,
    assignment_id int AUTO_INCREMENT PRIMARY key,
    name varchar(20),
    ass_desc varchar(50),
    max_grade numeric(3,0) not null,
    attachments varchar(50),
    FOREIGN key(course_id) REFERENCES teaches(course_id) on delete CASCADE
);




CREATE TABLE submissions(
    course_id int not null,
    assignment_id int not null,
    User_id int NOT null,
    submission varchar(50),
    grade numeric(3,0) ,
    FOREIGN key(course_id) REFERENCES teaches(course_id) on delete CASCADE,
    FOREIGN KEY(User_id) REFERENCES credentials(User_id) on DELETE CASCADE,
    FOREIGN KEY(assignment_id) REFERENCES assignments(assignment_id) on DELETE CASCADE,
    PRIMARY KEY(assignment_id, User_id)
);

CREATE TABLE announcements(
```

```
    course_id int not null,
    User_id int not null,
    announcement_id int AUTO_INCREMENT PRIMARY KEY,
    name varchar(20),
    announcement_desc varchar(50) not null,
    FOREIGN key(course_id) REFERENCES teaches(course_id) on delete CASCADE

);
```

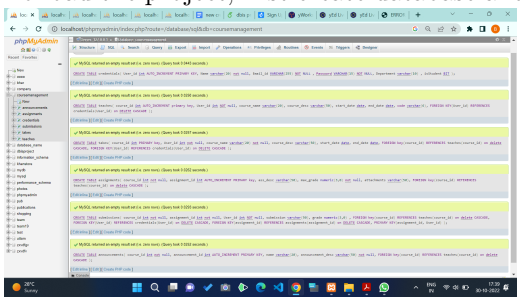


6 Languages and Technologies

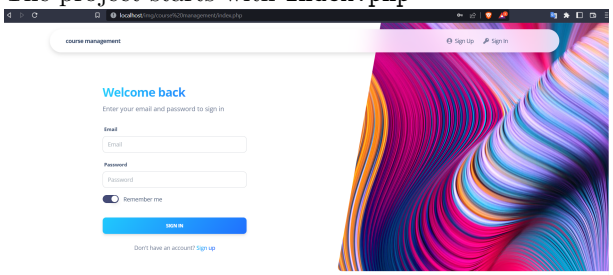
We have used ***HTML, CSS, Javascript, Bootstrap*** for the fronted development of our website and ***PHP, SQL*** in the backend of our project.

7 workflow

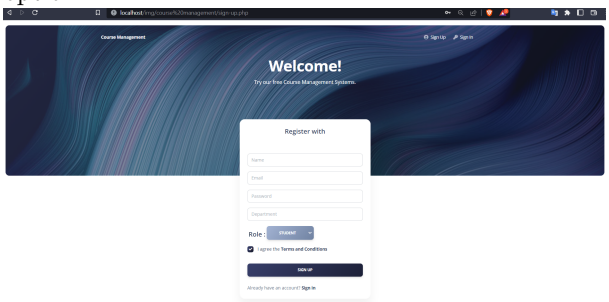
To load the project, first create database and tables using the `queries.sql` file



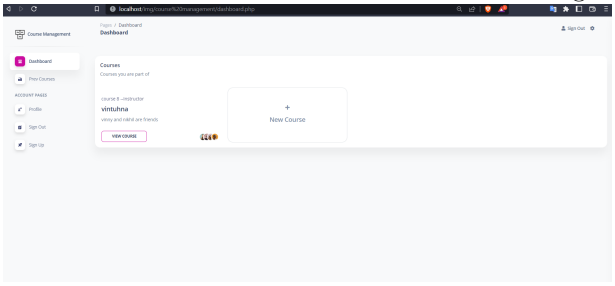
The project starts with `index.php`



User can login using his credentials else he can create account using sign-up option.

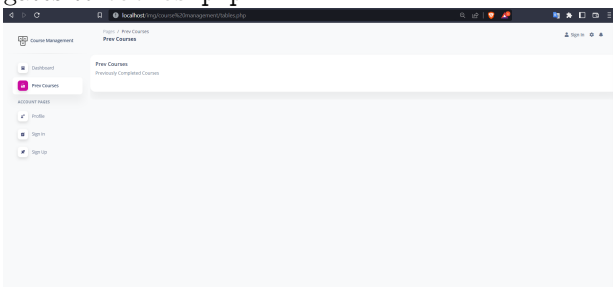


After login, redirected to `dashboard.php` where student can his enrolled courses and for instructor he can see courses he is offering

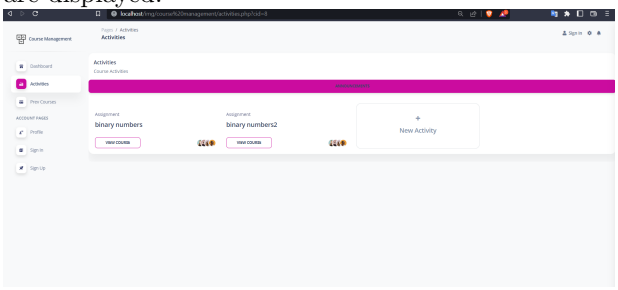


The previous courses can be viewed by clicking on `Prev Courses` which navi-

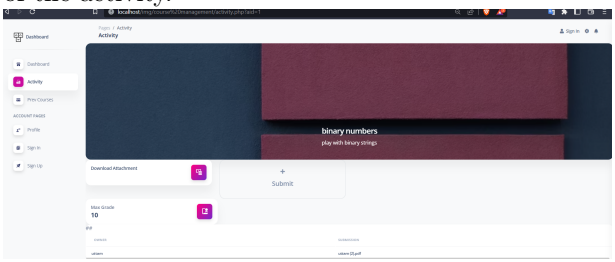
gates to `tables.php`



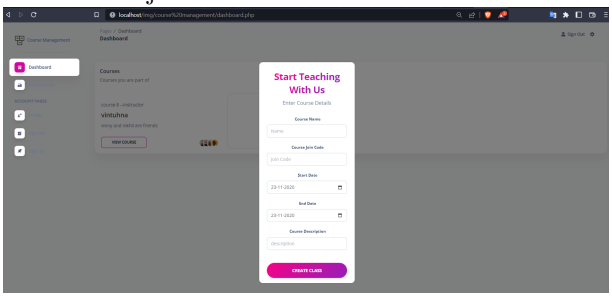
On clicking a course `activites.php` is opened where assignments, quizzes etc are displayed.

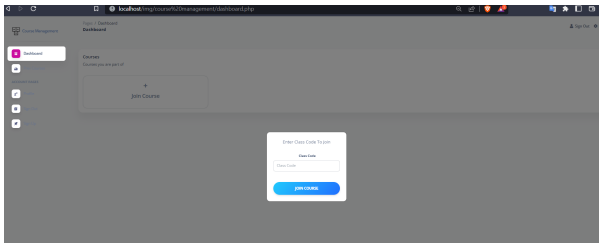


On clicking a activity `activity.php` is opened which displays the information of the activity.

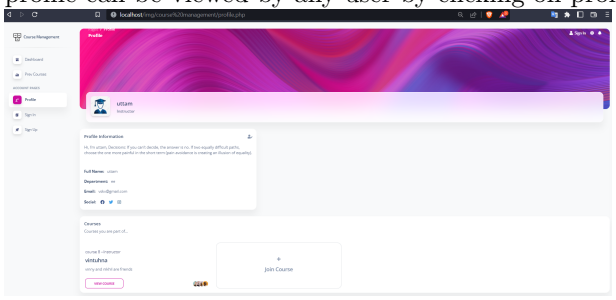


A new course can be added by the instructor on the dashboard similarly student can join new course from the his dashboard itself.





profile can be viewed by any user by clicking on profile button



8 Conclusion

We have successfully created a webpage that keeps record of the courses, announcements, question papers, projects, submissions. The webpage is both student and instructor friendly with a beautiful UI and with good functionalities.