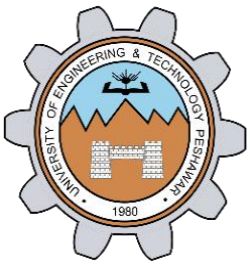
PROJECT REPORT

COURSE REGISTRATION SYSTEM



Database Management Systems Lab

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1. Introduction

The Course Registration System is a web-based platform that enables students to register for courses, instructors to manage their teaching schedules, and administrators to oversee academic data.

2. Objectives

- Build a digital alternative to manual course registration

- Enable real-time enrollment

- Facilitate instructor and admin access to course data

- Provide a responsive user interface

3. Tools & Technologies

- Backend: Laravel 11, MySQL

- Frontend: React.js, Axios

- Hosting: Netlify (frontend), Hostinger (backend)

4. System Overview

- Users: Student, Instructor, Admin

- Features: Authentication, Course Enrollment, Admin Panel, RESTful API integration

5. Backend Development

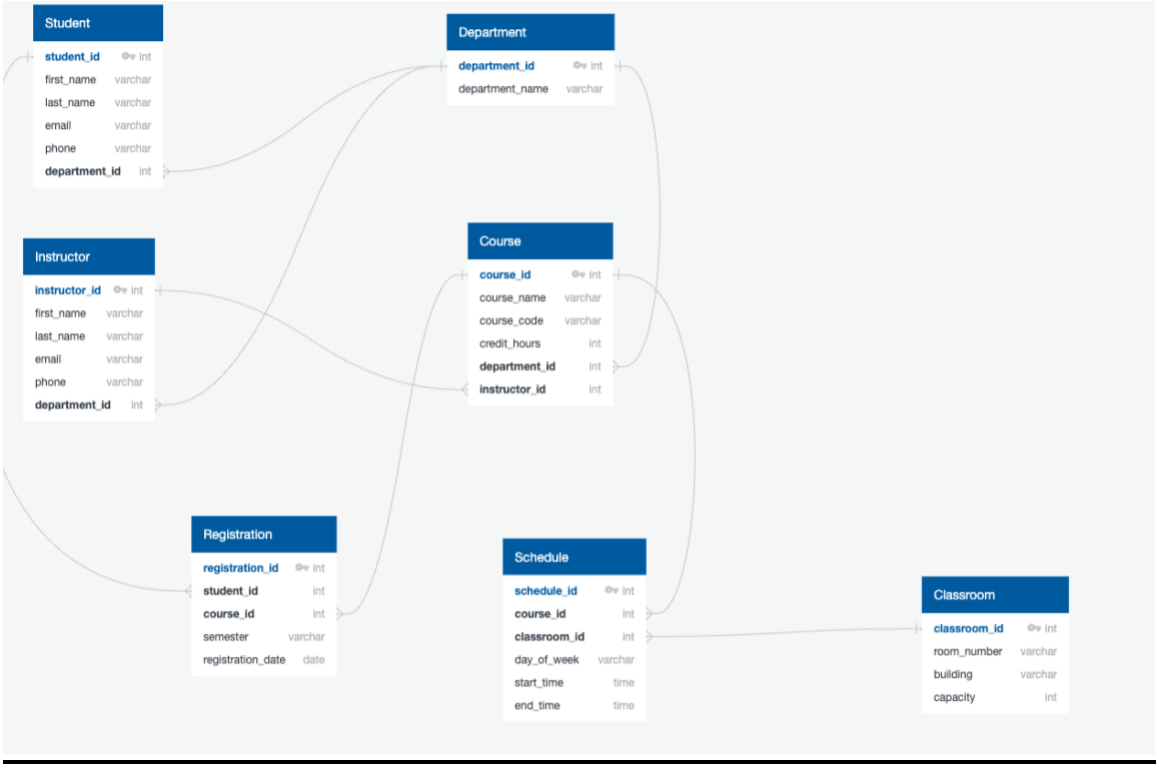
- Laravel Models: Student, Instructor, Course, Enrollment, Department

- RESTful APIs using api.php

- Eloquent relationships and middleware

- Tested using Postman

6. Entity Relationship Diagram (ERD)



7. Frontend Development

- Built using React

- Pages: Home, Login, Dashboard, Course Registration

- Axios for API requests

8. Hosting & Deployment

- Frontend hosted on Netlify

- Backend hosted on Hostinger

- .env setup and CORS configured

9. Challenges Faced

- CORS handling

- Hosting Laravel on Hostinger

- State management in React

- Many-to-many data handling in Laravel

10. Conclusion

This project demonstrates how modern web technologies can be used to streamline academic systems, offering scalability and efficiency.

11. References

- https://laravel.com/docs

- https://react.dev

- https://docs.netlify.com

- https://support.hostinger.com

- https://chat.openai.com