

Introduction

Overview

The Alumni Portal connects Jadavpur University IT alumni, students, and faculty, fostering engagement and showcasing achievements.

Motivation

Connections: Network among alumni and university.

Achievements: Highlight alumni success.

Engagement: Encourage event participation.

Resources: Access jobs, mentorship, and development.

Objectives

- Connect alumni, students, and faculty.
- Showcase alumni achievements.
- Encourage event participation.
- Provide job and mentorship resources.
- Support university growth.

problem statement

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Problem Statement

Lack of a centralized platform for alumni engagement.

Difficulty in maintaining alumni connections.

Limited visibility of alumni achievements.

Insufficient resources for alumni networking and mentorship.

Challenges in organizing and promoting alumni events.

Project Scope

Current Features

- ****Alumni Directory****: Connect with fellow alumni.
- ****Achievements****: Showcase notable alumni accomplishments.
- ****Events****: Information on upcoming alumni events.
- ****Batch Details****: Access UG and PG batch information.
- ****Student Details****: View student names and roll numbers.

Future Enhancements

- ****Job Portal****: Alumni job postings and opportunities.
- ****Mentorship Program****: Connect students with alumni mentors.
- ****Interactive Forums****: Discussion boards for alumni.
- ****Mobile App****: Access the portal on mobile devices.
- ****Alumni Contributions****: Feature for alumni to contribute to university initiatives.

Technology Stack

Frontend

- **React**: Building the user interface.
- **Tailwind CSS**: Styling and responsive design.
- **JavaScript**: Client-side scripting.

Backend

- **Node.js**: Server-side runtime environment.
- **Express.js**: Web application framework.

Database

- **MongoDB**: NoSQL database for storing user and event data.

Tools & Platforms

- **GitHub**: Version control and collaboration.
- **VS Code**: Integrated development environment.
- **Netlify**: Deployment and hosting.

System Workflow

1. **User Authentication**
 - Users log in or sign up to access the portal.
 - Authentication is managed via JWT tokens.
2. **Dashboard Access**
 - Users access the main dashboard with options to view achievements, events, and batch details.
3. **View Achievements**
 - Users click on "Notable Alumni" to view highlighted alumni achievements.
4. **Batch Selection**
 - Users select UG or PG batches to view specific batch details.
 - Batch details include student names and roll numbers.
5. **Event Participation**
 - Users view upcoming events and register for participation.
6. **Resource Access**
 - Users access job postings, mentorship programs, and other resources.
7. **Admin Functions**
 - Admins manage user roles, update event information, and add new achievements.

issues faced

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Issues Faced

User Authentication: Implementing secure login and session management.

Data Integration: Ensuring accurate and seamless integration of batch and student details from JSON files.

Responsive Design: Achieving consistent UI/UX across different devices and screen sizes.

State Management: Efficiently managing state transitions between different components (e.g., UG/PG batch selection).

Performance Optimization: Ensuring fast load times and smooth interactions, especially with large datasets.

Error Handling: Providing meaningful error messages and handling edge cases gracefully.

Future Scope

Job Portal for alumni opportunities.

Mentorship Program for student guidance.

Interactive Forums for networking.

Mobile App for easy access.

Alumni Contributions to university projects.

Enhanced Event Management.

Analytics Dashboard for insights.

Automated Notifications for updates.

Conclusion::

Key Accomplishments:

Developed a centralized Alumni Portal.

Connected alumni, students, and faculty.

Showcased notable alumni achievements.

Provided access to batch and student details.

Organized and promoted alumni events.

Future Scope:

Job Portal for alumni opportunities.

Mentorship Program for student guidance.

Interactive Forums for networking.

Mobile App for easy access.

Alumni Contributions to university projects.