

INFOTSAV 25

Problem Statement:

Most existing alumni platforms are generic and fail to meet the personalized networking, privacy, and engagement needs of individual institutions. There is a growing need for an institute-focused solution that ensures secure data management, real-time interaction, and seamless connectivity between alumni and students.

Abstract:

The *Alumni Connect* platform is a MERN stack-based web application designed to strengthen communication, mentorship, and engagement between alumni, students, and administrators within an institute. Unlike global networking systems such as LinkedIn or AlmaConnect, this platform is lightweight, institute-specific, and optimized for scalability and performance. It efficiently manages large alumni datasets using MongoDB and enables real-time interactions through WebSockets, ensuring quick response and smooth user experience. The system emphasizes data security and privacy through role-based access control, JWT authentication, OTP verification, and end-to-end encryption, ensuring complete institutional data ownership. Its responsive and accessible interface promotes active participation through event notifications, mentorship modules, and personalized dashboards, enhancing community engagement. Moreover, being built on open-source technologies, the solution offers cost-effectiveness and ease of maintenance, making it an ideal, sustainable platform for institutes seeking to foster lasting alumni relationships and collaborative growth.

Keywords: MERN Stack, Scalability, Security, Privacy, Engagement, Accessibility, Cost-effectiveness, Maintainability

Team Members:

1)Kamali R(7376232IT169)

2)Pramila N(7376232IT220)

3).Jeya Dharani K(7376231CS186)

4)Prithika S(7376232IT230)

