Project Overview: NALUM- NSUT Alumni Student Networking Platform

Problem Statement:

In the educational ecosystem, the involvement of alumni is vital for institutional growth and enhancement. Their feedback, experiences, and contributions can significantly impact the quality of education and the development of the institution. However, despite recognizing this importance, NSUT currently lacks a comprehensive platform for effective alumni-student interaction. This limitation restricts the potential for knowledge exchange, mentoring, and collaborative opportunities between alumni and current students. Recognizing the need for a cohesive and efficient networking solution, we present NALUM - the NSUT Alumni Student Networking Platform.

Approach to Solving the Problem:

NALUM is a sophisticated web-based solution designed to bridge the gap between NSUT alumni and students. The platform's technical foundation is built upon React and Next.js, enabling the creation of an intuitive, responsive, and user-friendly frontend interface. At the backend, Express powers the data management processes, facilitating seamless interactions between users and data. To ensure efficient data storage and retrieval, MongoDB has been integrated, while Realm provides a scalable and adaptable database infrastructure. This strategic technology stack guarantees the platform's efficiency, security, and a high-quality user experience.

Product Features:

Functional:

1. Universal Search:

   The platform integrates a comprehensive universal search feature that empowers users to seamlessly search for NSUT alumni and students. This feature enhances networking opportunities by allowing users to discover and connect with peers, mentors, and professionals from diverse fields. This feature strengthens the NSUT community's connections and encourages the exchange of ideas and experiences.

2. Identity Transition: Student to Alumni:

   The process of transitioning from student to alumni status has been simplified within NALUM. Graduating students can effortlessly update their profiles, ensuring the accuracy and relevance of their information. This streamlined process maintains up-to-date records of students' educational journey and serves as a foundation for their continued involvement as alumni.

3. Internship and Recruitment Hub: Offers and Applications:

   NALUM introduces a dedicated hub for internship and job opportunities, connecting alumni and students in the professional sphere. Alumni can post internship offers, providing valuable real-world experiences for students. Students, on the other hand, can easily apply for these opportunities and track the status of their applications within the platform. This functionality enhances career prospects for students and offers alumni a pool of talented candidates.

4. Knowledge Sharing Sessions and Startup Funding Requests:

   A significant expansion of NALUM's features includes the introduction of knowledge sharing sessions and startup funding requests. Alumni are empowered to propose sessions, sharing their expertise and insights directly through the platform. These sessions can be authorized by administrators, ensuring quality and relevance. Additionally, students can seek startup funding from alumni, fostering an environment of entrepreneurship and innovation within the NSUT community.

Non-Functional:

1. Secure Registration and Verification:

   NALUM prioritizes user security through a robust registration and identity verification process. The platform employs stringent identity verification and authentication mechanisms during registration, safeguarding user data and interactions from unauthorized access. This approach ensures the confidentiality of sensitive information and establishes trust among platform users.

2. Intuitive User Interface:

   NALUM offers an intuitive and responsive user interface, meticulously designed to enhance user engagement and ease of navigation. The user experience is seamless across various devices, encouraging active participation and exploration of the platform's diverse features.

3. Efficient Data Management:

   Leveraging the capabilities of MongoDB and Realm, NALUM efficiently manages user data, ensuring smooth operations and swift retrieval of essential information. This streamlined data management process minimizes latency, optimizes platform performance, and provides users with a reliable and efficient space for interactions.

4. Scalable Architecture:

NALUM's architecture has been meticulously crafted to accommodate growth and accommodate future feature expansions. The platform's design allows for the seamless integration of new functionalities, making it adaptable to evolving user needs and technological advancements.

Process Flow:

1. Registration and Identity Verification:

   Users register with @nsut.ac.in for students and any email for alumni.

   An OTP-based verification process ensures authenticity and security.

2. Login and Access:

   Registered users log in using verified credentials.

3. Universal Search:

   Users can easily search for NSUT alumni and student profiles.

4. Identity Transition: Student to Alumni:

   Graduating students can update their status to alumni within a few simple steps.

5. Internship and Recruitment Hub:

   Alumni post internship offers; students apply and track application status.

Use Cases:

1. Alumni:

   Alumni can post internships, recruit from the platform, interact with mentees, propose knowledge sharing sessions, and support student startups.

2. Students:

   Students can search for and connect with alumni, apply for internships, track application statuses, attend knowledge sharing sessions, and request startup funding.

3. Admin:

Administrators are responsible for verifying registrations, managing user accounts and data, authorizing knowledge sharing sessions, and overseeing the startup funding request process.

Technology Stack Used:
Frontend: React, Next.js

Backend: Node

Database: MongoDB, Realm

Future Enhancements:
- Integration with alumni association events for broader community engagement.

- Enhanced analytics for improved insights into user engagement and behavior.

- Development of a mobile application for convenient on-the-go interaction.

- Integration with social media platforms to extend the platform's outreach and impact.

We are excited about the potential of NALUM to establish a thriving and collaborative NSUT alumni-student network. Your consideration of this detailed project update is highly valued.

Diagrams

Use Case Diagram

ALUMNI

STUDENT

ADMIN

- Mentor Creates Sessions
- Sponsor Students
- Attends Session — <<include>>
- Attend Events — <<extend>>
- View Events — <<include>>
- Post Job Offers — <<include>>
- Sign IN — <<include>>
- View Job Offers
- Search Batchmates
- Request Scholarships & Fundings
- Update Events
- Verify Registrations — <<include>>

Flow Diagram

REGISTERATION PAGE

LOGIN PAGE

Fill Form → Verified → Yes → Type → Alumni → Provide Recruitment

Verified → No → PENDING VERIFICATION PAGE

Type → Student → View Recruitments

Provide Recruitment → Request Session → Provide Sponsorships/Fundings

View Recruitments → Request Sponsorships/Fundings → Change Status to Alumni

Forum

Society Event Details

Society Event Details