PROJECT SYNOPSIS REPORT

ON

CAMPUS CONNECT

SUBMITTED

TO

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

FOR

BACKEND ENGINEERING (22CS026)

Submitted By:

Name(s): Bhuvesh Mittal, Daanushi Sharma

University Roll No(s): 2210991450, 2210991469

Semester: 5

Session: 2024-2025

**Index**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Topic** | **Page No** |
| 1 | Problem Statement | 3 |
| 2 | Title of project | 3 |
| 3 | Objective & Key Learning’s | 3 |
| 4 | Options available to execute the project | 4 |
| 5 | Advantages/ Disadvantages | 5 |
| 6 | References | 5 |

**Problem Statement**

In a university setting, students, faculty, and clubs often face challenges in communication, event management and academic tracking. The lack of unified platform leads to fragmented information, inefficient processes and reduced engagement. The University Engagement and Management System (UEMS) aims to address these issues by providing an integrated platform that enhances interaction, event management, academic tracking for all university stakeholders.

**Title of Project**

Campus Connect

**Objective & Key Learning’s**

**Objective:**

* Develop a unified web-based platform for students, faculty, and clubs within a university.
* Features include:
  + Event management
  + Quiz handling
  + Attendance tracking
  + Real-time communication
  + Achievements and leaderboards for clubs
* Aim to improve efficiency and user engagement.

**Key Learnings:**

* Full-Stack Development:
  + Technologies: React.js, Node.js, Express.js, PostgreSQL/MongoDB
* Secure Authentication & Access Control:
  + Implementing Passport.js and JWT
* UI/UX Design:
  + Creating intuitive, responsive interfaces
* Database Design:
  + Managing data relationships, efficient storage, and retrieval
* Integration & Testing:
  + Combining frontend and backend, writing unit & integration tests, debugging
* Project Management:
  + Planning, task management, teamwork

**Options available to execute the project**

1. **Frontend Development**
   1. EJS
2. **Backend Development**
   1. Node.js with Express.js
   2. Database
3. **Authentication & Authorization**
   1. JWT
4. **Prototyping**
   1. Figma
5. **Coding**
   1. IDE/Text Editor

**Advantages & Disadvantages**

**Advantages**

1. Centralized Platform
2. Enhanced Engagement
3. Improved Academic Management
4. Club Management
5. Scalable Architecture
6. Secure & Reliable

**Disadvantages**

1. Complex Development
2. Integration Challenges
3. Maintenance & Updates

**References**

1. W3Schools -- <https://www.w3schools.com/>
2. JavaTPoint -- <https://www.javatpoint.com/>