IJIREEICE ISSN (O) 2321-2004, ISSN (P) 2321-5526

International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering

Impact Factor 8.021 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 13, Issue 4, April 2025

DOI: 10.17148/IJIREEICE.2025.13419

STUDENTS ALUMINI HUB

MOHANRAJ C[1], Mrs.SOWNDHARYA M[2]

Student, Dept of Computer Science with Cognitive Systems, Dr.N.G.P Arts and Science College, Coimbatore, India.[1]

Assistant Professor, Dept of Computer Science with Cognitive Systems, Dr.N.G.P Arts and Science College, Coimbatore, India[2]

I. INTRODUCTION

1.1 ABSTRACT

The Alumni Hub is a PHP and MySQL-based web platform designed to connect alumni from educational institutions. It enables users to register, log in, manage profiles, and connect with fellow alumni based on shared academic backgrounds. The platform supports updating personal details like graduation year and degree while fostering networking and career opportunities. Key features include user authentication, profile management, and a connection system. Built as a database-driven application, it serves as a foundation for future expansions like event management, messaging, and alumni groups.

1.2 OBJECTIVES

The Alumni Hub is a web-based platform that connects former students with their alma mater and fellow alumni. It enables networking, event updates, mentorship, and job postings while maintaining alumni records. Features include user authentication, role-based access, real-time notifications, and social media integration. Alumni can update profiles, join discussions, and engage in fundraising or volunteering. Future enhancements may include AI-powered career recommendations and a mobile app. This platform strengthens alumni relationships, fostering a supportive and engaged community.

II. SYSTEM STUDY

2.1 EXISTING SYSTEM

Many educational institutions rely on outdated, manual alumni management systems, leading to inefficiencies, errors, and low engagement. Communication is often limited to email lists or newsletters, lacking personalization. Without a centralized platform, alumni struggle to connect, access career resources, or participate in events. Existing systems also lack automation, integration, and real-time support, making event organization and record updates challenging. Additionally, compliance with data protection regulations is difficult. These limitations hinder alumni engagement and prevent institutions from building strong, lasting relationships with graduates.

2.2 PROPOSED SYSTEM

The **Alumni Hub Management System (AHMS)** is a modern, web-based platform built with PHP and MySQL to streamline alumni engagement. It automates key functions like registration, profile management, networking, event participation, and career support. Features include a secure login system, real-time alumni directory, connection requests, job postings, and event registration. Automated notifications and detailed analytics help institutions enhance outreach. With strong security and privacy controls, AHMS ensures data protection, fostering long-term alumni relationships and a connected community.

III. SYSTEM SPECIFICATION

3.1HARDWARE SPECIFICATIONS

- Minimum 2GB RAM.
- Stable Internet Connection
- Minimum 16GB Internal Storage
- Development Machine.

3.2 SOFTWARE SPECIFICATIONS

- **PHP**: Used for server-side scripting to handle backend logic, manage donor registrations, blood requests, and inventory.

IJIREEICE ISSN (O) 2321-2004, ISSN (P) 2321-5526

International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering

Impact Factor 8.021 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 13, Issue 4, April 2025

DOI: 10.17148/IJIREEICE.2025.13419

- **MySQL**: A relational database to store information such as donor details, blood types, inventory, and donation requests.
- **Apache Web Server**: Used to serve the PHP-based web application and handle HTTP requests.
- **HTML/CSS**: For designing the user interface (UI) and creating the structure and style of web pages.
- **JavaScript**: For adding interactivity to the user interface, such as form validation and dynamic content updates.
- **Bootstrap**: A CSS framework for responsive design and to ensure the web application is

3.3 SOFTWARE DESCRIPTION

The **Alumni Hub Management System (AHMS)** is a web-based application designed to help educational institutions manage and engage with their alumni community. Built using **PHP** for the server-side logic and **MySQL** for database management, the platform provides a centralized space for alumni to connect, network, access career opportunities, and participate in events organized by the institution

- Frontend
- Authentication & Security
- Messaging System
- Event Management & Notifications
- Job Portal
- Admin Panel
- Data Analytics & Reporting
- Compatibility & Responsiveness

IV. SYSTEM DESIGN

4.1 DATABASE DESIGN

The **Alumni Hub Management System (AHMS)** database is designed to ensure efficient data storage and retrieval for alumni profiles, event management, job postings, networking connections, and notifications. The database is implemented using **MySQL**, a relational database management system, providing structured storage with relationships between tables. The database stores the following core data:

- **User Authentication Data** (User credentials and roles for secure access to the system)
- **Alumni Information** (Details about alumni members including their personal information, education, and current job)
- **Event Management** (Information about alumni events, including event details and registrations)
- **Job Postings** (Job and internship opportunities posted for alumni)
- **Job Applications** (Applications made by alumni for available job postings)
- **Networking Connections** (Connections between alumni for networking and professional growth)
- **Notifications** (Alerts for users about events, job opportunities, networking updates, and system-related notifications)

V. SYSTEM IMPLEMENTATION

Implementation is the process of deploying the Alumni Hub Management System into a live environment where real users can interact with it. This phase involves preparing the environment, deploying the system, and ensuring that the system is accessible and functional.

STEPS COVERED INTO SYSTEM IMPLEMENTATION:

1. Deployment Plan
2. Data Migration
3. System Configuration
4. Go-Live Process
5. User Training
6. Post-Implementation Support

IJIREEICE ISSN (O) 2321-2004, ISSN (P) 2321-5526

International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering

Impact Factor 8.021 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 13, Issue 4, April 2025

DOI: 10.17148/IJIREEICE.2025.13419

VI. CONCLUSION

The **Alumni Hub Management System (AHMS)** is a user-friendly platform designed to connect alumni, share opportunities, and maintain engagement with their alma mater. It features user authentication, event management, job postings, networking, and real-time notifications. With an efficient database, secure backend, and intuitive interface, AHMS ensures seamless alumni interaction, career development, and institutional support. The system enhances alumni relations by fostering meaningful connections and professional growth opportunities.

VII. FUTURE ENHANCEMENT

1. Mobile Application Development:
2. Advanced Networking Features:
3. Artificial Intelligence (AI) and Machine Learning (ML) Integration:
4. Event Streaming and Virtual Engagement:
5. Alumni Mentorship Program:
6. Integration with Social Media Platforms:
7. Enhanced Analytics and Reporting for Administrators:
8. Payment and Donation Integration:
9. Language and Localization:
10. Blockchain for Credential Verification:

REFERENCES

[1]. Chowdhury, S. & Mishra, P. (2021). Mobile Application Development with Flutter and Firebase. Springer.
[2]. Martin, R. C. (2017). Clean Architecture: A Craftsman's Guide to Software Structure and Design. Prentice Hall.
[3]. Sommerville, I. (2020). Software Engineering (10th Edition). Pearson.
[4]. Russell, S. & Norvig, P. (2022). Artificial Intelligence: A Modern Approach (4th Edition). Pearson.
[5]. Smith, J. & Brown, A. (2022). Real-time communication systems for travelers: A cloud- based approach. IEEE Transactions on Mobile Computing, 18(5), 1123-1135.
[6]. Gupta, P. & Kumar, R. (2021). Enhancing location-based services through AI-driven recommendation systems. Journal of Emerging Technologies, 27(3), 45-60.
[7]. Lee, M. & Wang, C. (2020). Geo-tagged emergency response systems for travelers: Design and implementation. International Journal of Computer Science and Information Security, 19(2), 78-89.
[8]. Banerjee, S. (2021). Community-driven support networks: A study on digital platforms for travelers. Elsevier Future Generation Computer Systems, 112, 98-110.

APPENDIX

SCREENSHOTS:

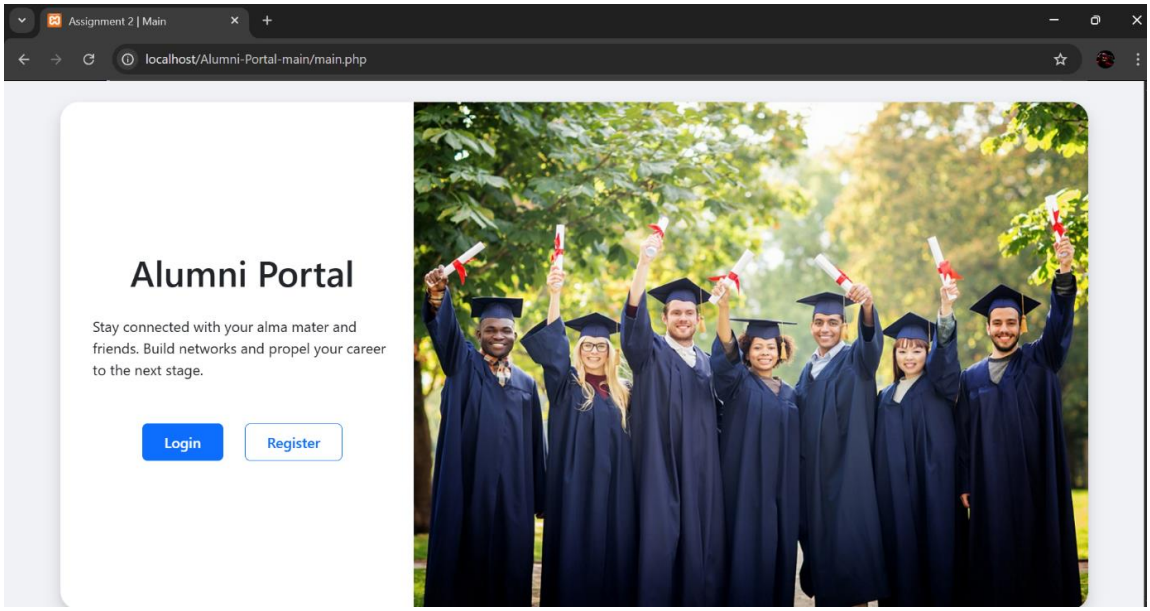

Fig:1 Android Studio

IJIREEICE ISSN (O) 2321-2004, ISSN (P) 2321-5526

International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering

Impact Factor 8.021 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 13, Issue 4, April 2025

DOI: 10.17148/IJIREEICE.2025.13419

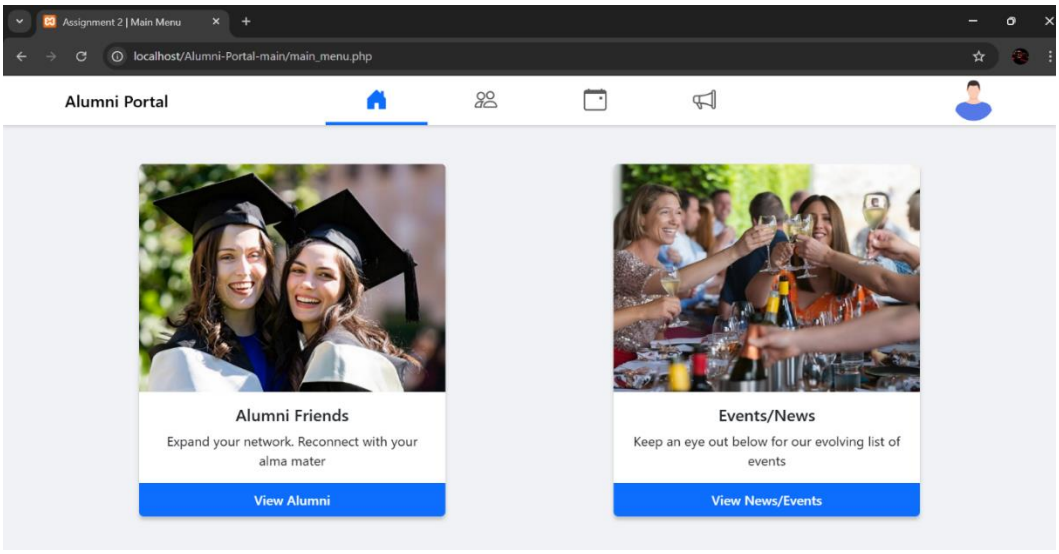

FIG:2Firebase

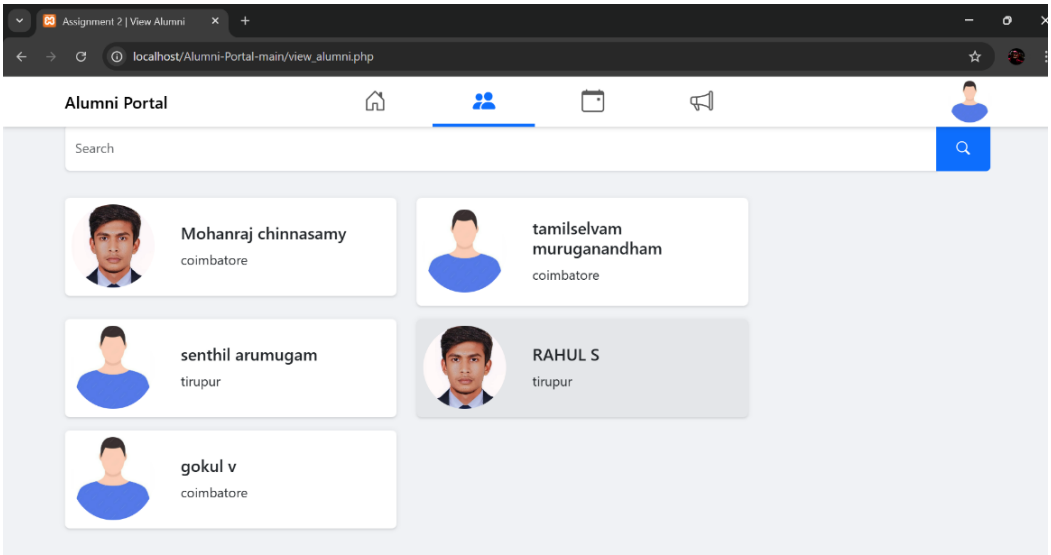

FIG:3

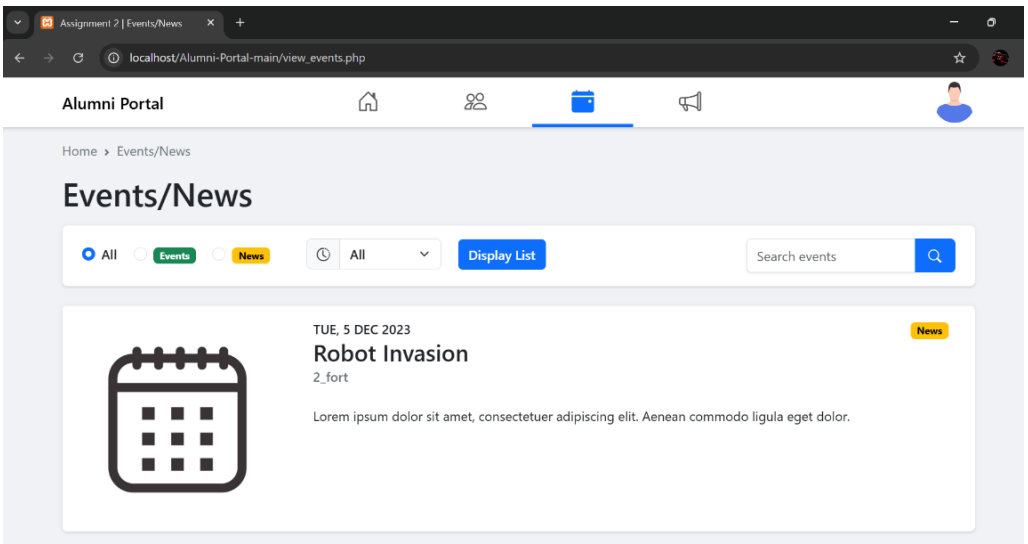

FIG:4

IJIREEICE ISSN (O) 2321-2004, ISSN (P) 2321-5526

International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering

Impact Factor 8.021 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 13, Issue 4, April 2025

DOI: 10.17148/IJIREEICE.2025.13419

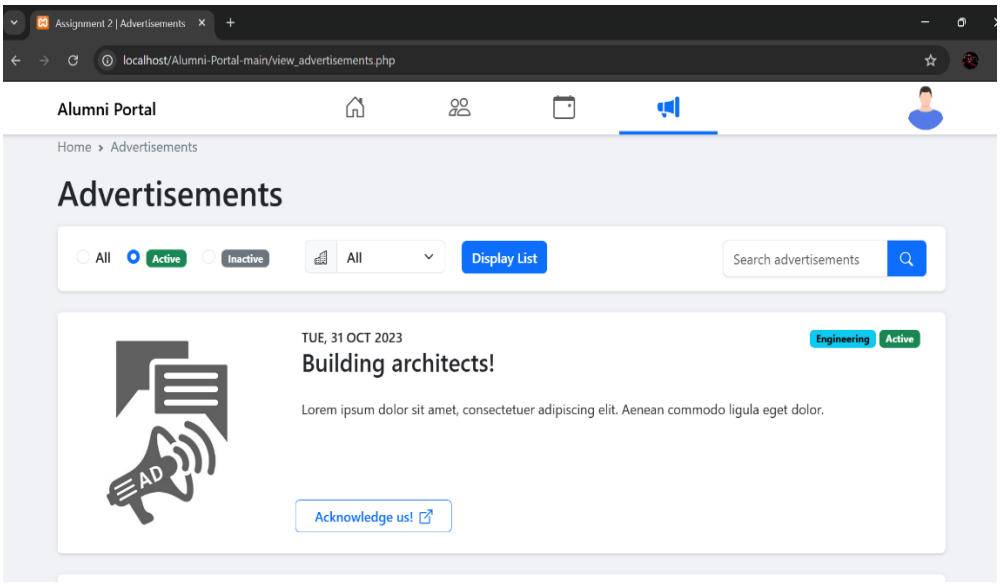

FIG:5