

CAMPUS CONNECT

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I. ABSTRACT :

In today's digital era, universities strive to provide students with seamless access to resources and services to enhance their campus experience. The "Campus Connect" app serves as a centralized platform designed to facilitate communication and resource accessibility within the university ecosystem. This abstract presents an overview of the app's key features and benefits. Firstly, the app enables real-time announcements, notifications, and messaging between students, faculty, and staff. This feature ensures timely updates on-campus events, academic deadlines, and administrative announcements. Students can discover campus clubs, organizations, and extracurricular activities tailored to their interests. Event calendars enable users to stay informed about upcoming events, workshops, and seminars, promoting participation and networking opportunities.

Keywords – real-time notification, community enhancement, communication, and connectivity.

II. INTRODUCTION :

Campus Connect is a revolutionary mobile application designed to bridge the gap between students, faculty, and staff within the university ecosystem. This abstract highlights the key features and benefits of Campus Connect, emphasizing its role in fostering communication and engagement across campus.

The core of Campus Connect is a robust communication platform that facilitates seamless interaction among campus stakeholders. Through instant messaging, announcements, and notifications, users can stay updated on important campus news, events, and deadlines. Whether it's coordinating group projects or seeking academic support, Campus Connect ensures that communication remains efficient and accessible.

Campus Connect revolutionizes campus life by providing a centralized platform for communication, collaboration, and engagement. By connecting campus communities and empowering users with essential resources and tools, Campus Connect enriches the university experience and fosters a sense of belonging within the campus community.

III. LITERATURE REVIEW :

"Key Technology on Uniform Identity Authentication for Digital Campus"

The digital campus is an important part of university construction, original campus network teaching, research, management, service, and another application system, it uses a separate identity authentication, which is not convenient for memory, but also manages and maintains trouble. Contrary to the identity authentication problem, this paper researches uniform identity authentication key technology, including a uniform identity authentication system model, remote authentication dial-in user service, lightweight directory access protocol, and so on. Uniform identity authentication is the foundation work of digital campus, the dispersed user centralized management and permissions resources help achieve the intranet information portal user uniform authentication, and simplify user access to the internal process of the application system, so users only need to pass uniform identity authentication once have permission to access all resource.

"The Research of Mobile Campus Services Platform Based on Android"

In this paper, a mobile campus services platform based on Android is studied and implemented. This platform combines with the actual needs of campus life groups. The platform provides some functions for all teachers and students such as campus information, interested friends, community participation, and communication, etc. By connecting the educational administration system, it can also provide class schedule inquiry, personalized customized calendar schedules, performance management, etc. It is a highly targeted, comprehensive function of the campus services APP.

"The Research of Campus Networks Layout and Application"

Aiming at problems of test, layout, and application of campus network and combining with fundamental characteristics, introducing primary technology about the transition from IPv4 campus network to IPv6 one, This paper discusses the status of IPv6 support technology and presents the basic concept that campus network can be formed Gradually through layout testing

network and experimental network; At the same time, to offer practical technical reference to favourable upgrading and applying campus network of ordinary universities It also discusses some services and applications

IV . PROGRAMMING :

Platform Selection:

Decide whether you want to develop a native app for iOS, Android, or both, or a cross-platform app using frameworks like React Native or Flutter. If you choose native development, you'll need to use Swift or Objective-C for iOS and Java or Kotlin for Android. For cross-platform development, you can use JavaScript (React Native), Dart (Flutter), or other supported languages.

Frontend development :

Develop the front end of your app using appropriate frameworks and libraries based on your chosen platform. For native iOS development, use UIKit or SwiftUI with Swift. For native Android development, use XML layouts and Android Jetpack components with Java or Kotlin. For cross-platform development, use React Native with JavaScript or TypeScript, Flutter with Dart, or other cross-platform frameworks

Real time communication :

If your app requires real-time communication features like chat or notifications, integrate technologies like Web Sockets or push notifications. Use platforms like Firebase Cloud Messaging (FCM) for push notifications on both iOS and Android.

Database integration :

Choose a database solution based on your requirements, such as MySQL, PostgreSQL, MongoDB, Firebase Realtime Database, or Firestore. Design the database schema to efficiently store and retrieve data related to users, events, messages, etc.

V. ALGORITHMS :

User authentication and authorization :

Prompt the user to log in or sign up to access the app. Verify user credentials against a database of registered users. Upon successful authentication, authorize the user's access based on their role (student, faculty, staff, administrator).

Dashboard display :

Upon successful login, display a personalized dashboard for each user role. Show relevant information such as upcoming

events, announcements, notifications, and personalized recommendations based on user preferences and interests.

Event management :

Allow authorized users to create, manage, and promote campus events. Implement functionalities for creating event listings, setting event details (date, time, location), and managing RSVPs. Enable users to browse and search for events based on categories, dates, and keywords.

Messaging and networking :

Implement messaging features to facilitate communication and networking among users. Allow users to send direct messages, create chats, and participate in discussion forums. Enable users to search and connect with other users based on common interests, academic programs, or extracurricular activities.

Notification and alerts :

Implement push notifications and alerts to keep users informed about important updates, announcements, and reminders. Send notifications for upcoming events, deadlines, class cancellations, campus emergencies, and personalized messages based on user preferences and settings.

VI. METHODOLOGY

Overviewing of the existing system :

The current method of communication and connection within the college relies heavily on traditional methods such as notice boards, email lists, and word-of-mouth announcements. While these methods have been used for years, they often lack efficiency and accessibility, leading to challenges in disseminating information effectively across the college community.

The challenge with the existing system :

Limited accessibility :

The information posted on notice boards may not reach all students and faculty members, especially those who are not physically present on campus.

Fragmented communication :

With various departments and clubs using different communication channels, it can be difficult for students to stay updated on the relevant events and activities.

Manual event promotion :

With various departments and clubs using different communication channels, it can be difficult for students to stay updated on the relevant events and activities.

PROPOSED SYSTEM :

Department page :

Description of the department-specific pages where faculty members can post announcements, share resources, and communicate with students.

Club page :

Overview of dedicated pages for student clubs and organizations to promote activities, recruit members.

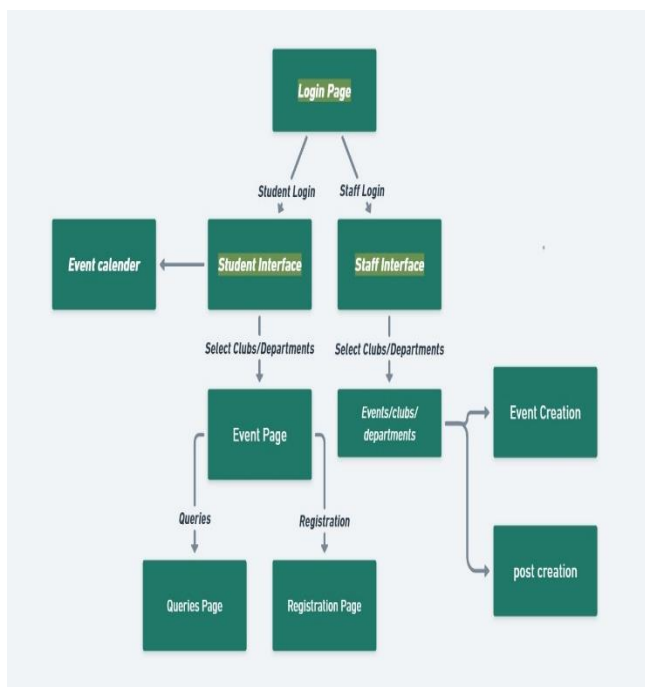
Event calendar :

Introduction to an interactive calendar feature displaying upcoming events, workshops, seminars, and social gatherings on campus.

Notification system :

Description of a push notification system for delivering important announcements, event reminders, and updates to users.

VII . FLOW DIAGRAM



VIII . WORKING :

The Campus Connect app operates through a comprehensive platform designed to facilitate communication, collaboration, and engagement within the university or college community. Here's an overview of how it typically works:

User Registration and Profile Creation

Events and Activities

Group Communication and Collaboration

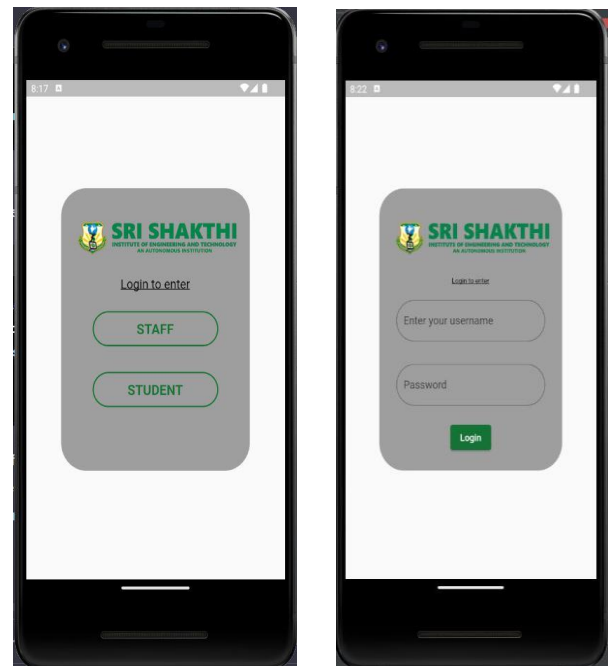
Campus Resources and Services

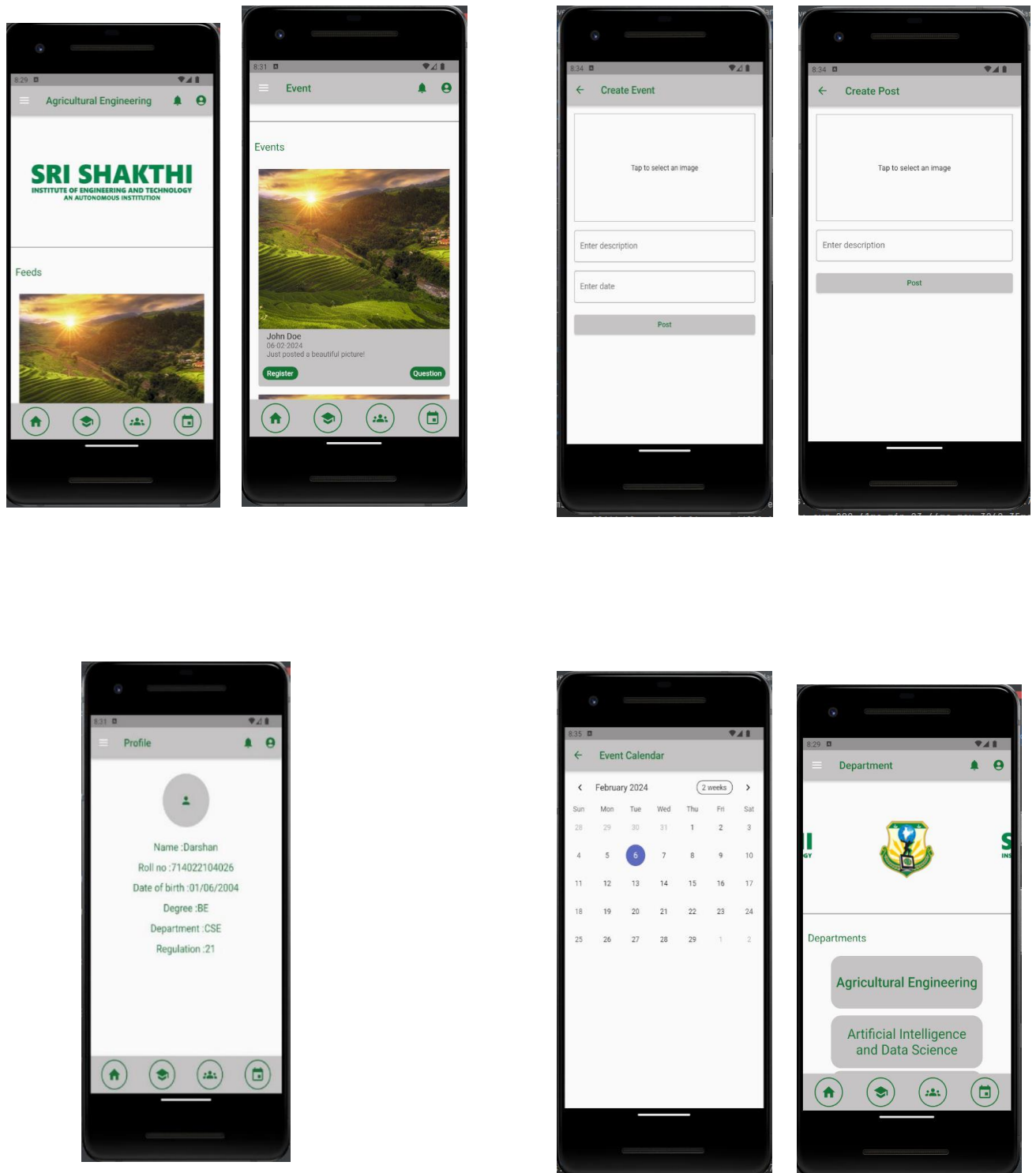
Interactive Maps and Navigation

Social Networking Features

Notifications and Alerts

IX. EXPERIMENTAL RESULT :





X . CONCLUSION :

In conclusion, the Campus Connecting App stands as a transformative solution for enhancing the collegiate experience by bridging the gap between students, faculty, and staff, and fostering a more connected campus community. By providing a comprehensive platform for communication, collaboration, and engagement, the app not only streamlines access to vital campus resources but also cultivates a sense of belonging and inclusivity among its users.

Through its intuitive interface and diverse features such as event management, group communication, interactive maps, and social networking capabilities, the app empowers users to navigate campus life with ease, stay informed about relevant activities and opportunities, and build meaningful connections with their peers.

As universities continue to embrace digital innovation, the Campus Connecting App stands at the forefront, redefining the way members of the campus community interact and collaborate in today's fast-paced and interconnected world. With its potential to enhance communication, foster collaboration, and promote a vibrant campus culture, the app serves as a valuable asset in shaping a more enriching and fulfilling collegiate experience for all.