iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 11 **Issue:** III **Month of publication:** March 2023

DOI: https://doi.org/10.22214/ijraset.2023.49386

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue III Mar 2023- Available at www.ijraset.com

Raisonians: Social Media App for Educational Institutions

Riad Haidar[1], Adnan Asaad[2], Khedr Ibrahim[3], Prof. Swati Shamkuwar[4]
[1, 2, 3]*Information Technology, G H Raisoni College of Engineering,* Nagpur, Maharashtra
[4]*Assistant Professor, G H Raisoni College of Engineering,* Nagpur, Maharashtra

Abstract: Overall, the application aims to provide a user-friendly platform for students and faculty members of Educational Institutes to communicate, collaborate, and share knowledge. By utilizing the latest technologies and backend services, the application is expected to offer a seamless experience to its users. With the increasing demand for online education and remote learning, the application is expected to be a valuable asset for the educational institution and its community
Index Terms: Social media, Education, Mobile Application, Firebase.

I. INTRODUCTION

Social media has become an integral part of our lives, allowing us to connect with others, share information and create communities of interest. In the educational realm, social media tools have been increasingly used to enhance the teaching and learning experience, by facilitating communication, collaboration and the sharing of resources. However, the widespread use of social media apps can pose a threat to the privacy and security of educational institutions [1]. To address this issue, a social media app tailored specifically to the needs of an educational institution, such as a college, can provide a more secure and dedicated platform for students, faculty and staff to connect, communicate, and share resources. In this paper, we present an overview of a social media app developed for a college that provides features such as department-specific communication, news and updates, learning resource sharing and privacy settings [2]. We also discuss the potential benefits and challenges of such a social media app for educational institutions, and explore its implications for the future of social media in education [3].

II. LITERATURE SURVEY

The use of social media tools for educational purposes has become increasingly popular in recent years. Research has shown that social media can improve student engagement, facilitate communication, and provide a platform for collaborative learning (Manca & Ranieri, 2016). However, concerns about privacy and security have been raised, particularly in the context of educational institutions.[4]

According to a study by Kirschner and Karpinski (2010), the use of social media in education can have both positive and negative effects. While social media can enhance communication and collaboration, it can also be a distraction from learning and may pose risks to student privacy. To address these concerns, some educational institutions have turned to social media apps that are specifically tailored to their needs [5].

Research has shown that such tailored social media apps can provide a more secure and private platform for communication and resource sharing within educational institutions. For example, a study by Wu and Wang (2015) found that a social media app designed specifically for a university increased students' engagement with course content, improved communication with instructors, and promoted a sense of community among students [6].

The development of social media apps that are dedicated to educational institutions can also offer several benefits over existing social media tools. For example, the ability to create department-specific groups and forums can facilitate targeted communication and resource sharing, while privacy settings can help to protect sensitive information from public access.

However, there are also challenges associated with the development and implementation of such apps. For example, there may be resistance to the adoption of new technology, and the cost of developing and maintaining a custom app may be a barrier for some institutions.

Despite these challenges, the potential benefits of tailored social media apps for educational institutions are significant, and research in this area is likely to continue to grow. The app presented in this paper provides a model for future development and research in this area, and may serve as a valuable tool for educational institutions looking to enhance communication and collaboration among students, faculty, and staff [7].

©IJRASET: All Rights are Reserved

References: Kirschner, P. A., & Karpinski, A. C. (2010). Facebook and academic performance. Computers in Human Behavior, 26(6), 1237-1245. Manca, S., & Ranieri, M. (2016). Is Facebook still a suitable technology-enhanced learning environment? An updated critical review of the literature from 2012 to 2015. Journal of Computer Assisted Learning, 32(6), 503-528. Wu, W., & Wang, Y. (2015). The impact of WeChat on college students' engagement in a Chinese classroom setting. Journal of Educational Technology Development and Exchange, 8(1), 1-14

III. METHODOLOGY

A. Background

The tools used for the application include Flutter for the frontend, Firebase for the backend, and Firestore for the database. Flutter is a Google's UI toolkit that can be used to create mobile, web, and desktop applications using a single codebase. Firebase is a Backend-as-a-Service (BaaS) product of Google that allows developers to build, manage, and grow their applications easily. It provides services to Android, iOS, web, and Unity, and uses NoSQL for the database. Firestore is a cloud-based NoSQL database provided by Firebase that can manage data at a blazing speed of milliseconds.

Firebase provides various backend services to help developers build and manage their applications better. These services include Realtime Database, Cloud Firestore, Authentication, Remote Config, Hosting, and Firebase Cloud Messaging. The Realtime Database is a cloud-based NoSQL database that manages data at a high speed, while Cloud Firestore is a NoSQL document database that provides services to store, sync, and query data globally. Authentication allows easy user authentication using UI libraries and SDKs, while Remote Config helps to publish updates to users immediately. Hosting provides a platform for hosting applications, while Firebase Cloud Messaging enables the exchange of messages and notifications between the server and the application end-users.

In conclusion, the application's primary focus is on the three main features, registration, dashboard, and personal page. Flutter, Firebase, and Firestore are the main tools used to develop the application, with Firebase providing various backend services to help developers build and manage their applications better.

B. Existing System

The existing system is based on interaction between the flutter app in the front-end and firebase services in the back-end, A use must register and have email id with their college domain in order to access the app, once the user is registered, they can start interacting with other users and get to know about latest updates from the college.

C. Module Description

The application will have three main categories of features, namely registration, dashboard, and personal page.

The registration feature will allow users to register/login into the system using their College Email ID, with the verification OTP code sent to their email.

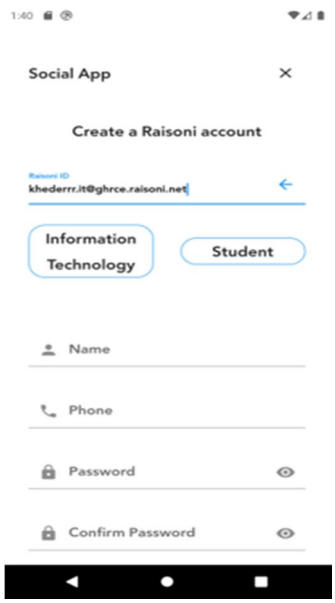


Fig 1. Image of the Registration process

The dashboard feature will enable users to post content, interact with other posts (like, comment), and create classrooms for specific departments and sections.

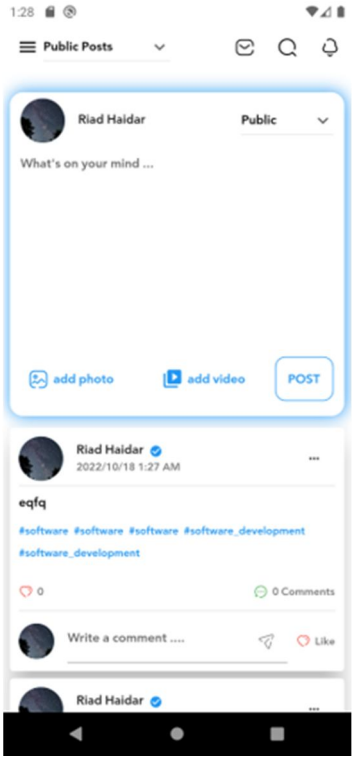


Fig 2. Image of the existing homepage.

The personal page feature will allow users to edit their personal details, post personal content, and edit the category of their post.

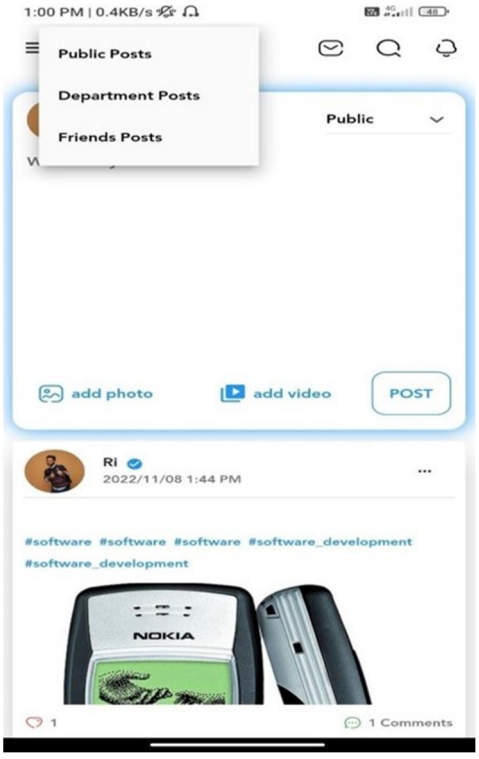


Fig 3. Image of the Interactions page

IV. CONCLUSION

The development of a social media app specifically designed for educational institutes has the potential to revolutionize the way students and faculty interact and collaborate. By offering a platform for sharing and disseminating information, the app can serve as a central hub for communication, allowing users to easily exchange ideas and feedback in real-time.

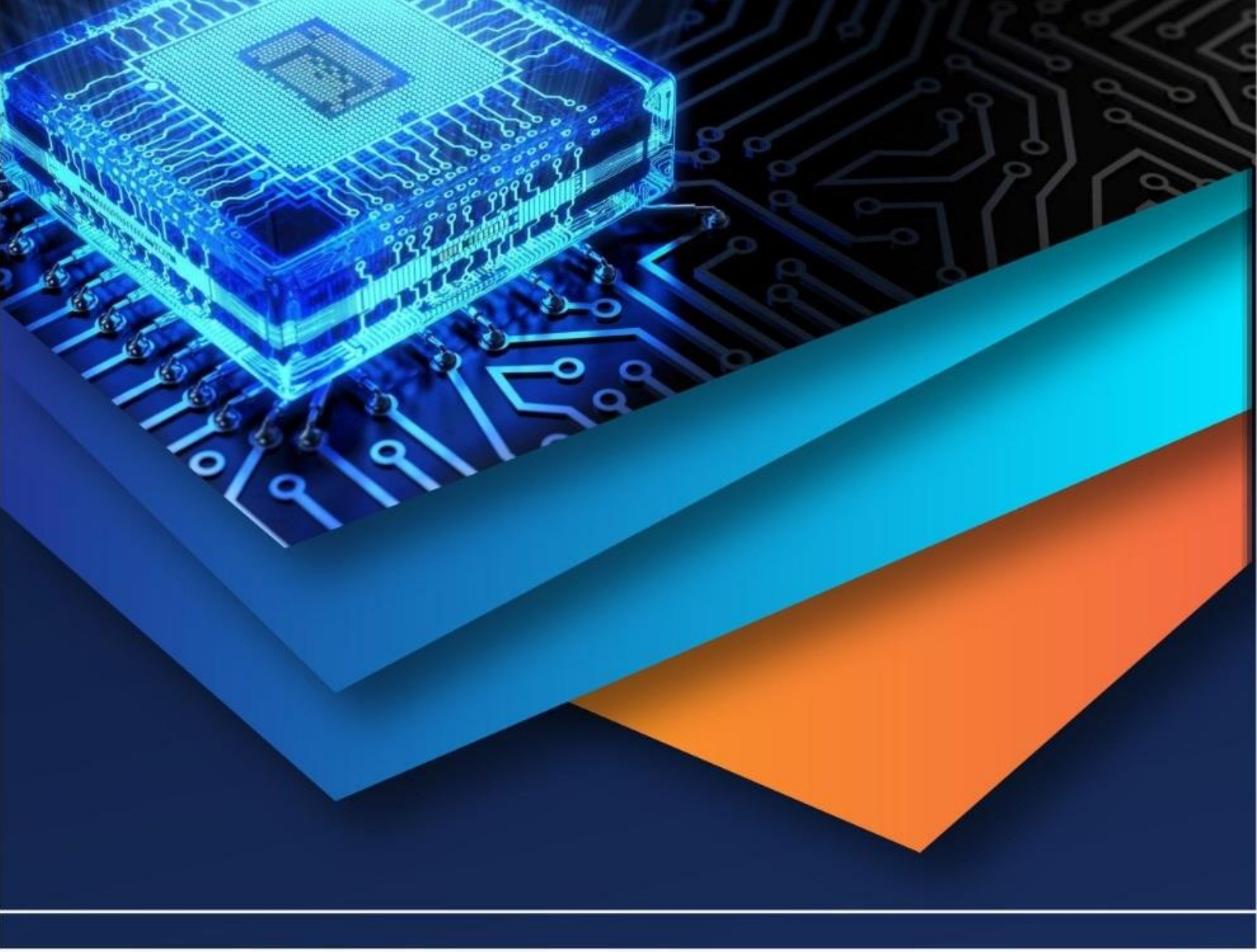
Through our research and development process, we have identified several key features that are essential for the success of such an app. These include user-friendly interfaces, secure authentication, effective search functionality, and reliable notification systems. We have also explored various testing methods and test cases to ensure the app is functional and meets the needs of users.

Based on the feedback we received from students and faculty who used the app, it is clear that there is a demand for this type of platform in the educational sector. The app has the potential to enhance the learning experience by facilitating communication and collaboration among students and between students and faculty. Furthermore, it can provide an efficient and streamlined way for educational institutions to share information and resources.

In conclusion, the social media app for educational institutes is a promising development that has the potential to transform the way education is delivered and consumed. With continued investment and improvement, this app can become an indispensable tool for students and faculty alike, enabling them to connect, collaborate, and succeed in their educational endeavors.

REFERENCES

[1] Kabilan, M. Ahmad, and N. Abidin. Facebook: An online environment for learning of English in institutions of higher education? Internet and Higher Education, 15(2):127–134, 2012.
[2] C. A. Davis, A. S. Deil-Amen, E. M. Rios-Aguilar, and S. J. Gonzalez Canche. Social media in higher education: A literature review and research directions. Washington, DC: American Council on Education, 2012.
[3] Washington, DC: American Council on Education, 2012. 3. J. L. Wang, H. Y. Chen, and C. C. Liang. The effects of social media on college students. Journal of Educational Technology Development and Exchange, 5(1), 2012.
[4] N. Junco. The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. Computers & Education, 58(1):162–171, 2012.
[5] A. Ellison, C. Steinfield, and C. Lampe. The benefits of Facebook “friends:” Social capital and college students’ use of online social network sites. Journal of Computer-Mediated Communication, 12(4):1143–1168, 2007.
[6] M. J. Meier, K. J. Geisler-Brenstein, and M. T. English. Facebook and online privacy: Attitudes, behaviors, and unintended consequences. Journal of Computer-Mediated Communication, 15(1):83–108, 2009.
[7] J. P. Jones and R. E. Elbeck. A social media primer for professionals. Journal of Applied Business and Economics, 12(3):75–82, 2011.
[8] J. F. Hair, C. M. Ringle, and M. Sarstedt. Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. Long Range Planning, 46(1-2):1–12, 2013.
[9] M. Ahmad and N. Abidin. The effectiveness of using Facebook for teaching and learning: A quantitative analysis. The Turkish Online Journal of Educational Technology, 12(4):189–198, 2013.
[10] K. H. Kuo and Y. W. Chuang. How do social media affect college students? Journal of Educational Technology Development and Exchange, 4(1), 2011.



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)