

“EduGram” An Android Application

Prof. M. S. Karande¹, Jivan Sawant², Karan Gore³, Swapnil Doddi⁴

HOD, Department of Information Technology¹
Student, Department of Information technology^{2,3,4}
K. K. Wagh Polytechnic, Nashik, India

Abstract: *The "EduGram" an Android Application aims to transform students' mindset towards education by integrating social media and education. The platform offers a dynamic learning and community-building experience, catering to both students and educators. Key features include user profiles, note sharing, social interactions, robust search capabilities, real-time notifications, and stringent privacy measures. The app continuously adapts to user needs, ensuring effective communication and resource sharing. The educational content on the platform is primarily educational, focusing on enhancing learning experiences and knowledge-sharing. Users can share resources like notes, study guides, and lecture materials, and engage with others through likes, comments, and note sharing. The app also integrates a chat application for seamless communication and provides comprehensive profiles for users to showcase their educational backgrounds and interests. The app is designed to cater to the evolving needs of its users and ensure effective communication and resource sharing.*

Keywords: Educational Platform, Aesthetic User Interface (UI), Notes & Resources Sharing, Social Interaction, Collaborative Communication

I. INTRODUCTION

In the modern era, the intersection of social media and education is an exciting concept. "EduGram" is an Android project that capitalizes on this by seamlessly integrating these two domains. It's designed to be a valuable resource for both students and teachers, serving as a platform where learning and networking converge. Beyond merely acquiring knowledge, EduGram fosters a sense of community, enhancing the enjoyment of the learning process and eliminating traditional educational barriers.

EduGram aims to meet the diverse needs of students and educators. It facilitates real-time interactions, personalized learning, and community building, fostering an engaging and supportive learning environment. Additionally, EduGram offers opportunities for ensuring sustainability and continuous improvement. Ultimately, EduGram aspires to adapt to modern learning styles, support lifelong learning, and connect learners worldwide for an enriched educational experience.

The creation of "EduGram" stems from an in-depth examination of the challenges that students and teachers face in today's educational landscape. With a wealth of information available online and a growing need for collaborative digital work, conventional teaching methods are due for an upgrade. Research indicates that students often struggle to access learning materials and effectively collaborate online. Additionally, teachers encounter difficulties in connecting with their students in the digital age. EduGram emerges as a solution to these issues, leveraging social media to enhance the quality of education and make the learning experience more engaging and enjoyable.

II. BACKGROUND

Background behind developing "EduGram" as an integrated social and educational Android project is to provide a convenient and collaborative platform for learners. By merging social media features with educational tools, EduGram aims to meet the diverse needs of students and educators. It facilitates real-time interactions, personalized learning, and community building, fostering an engaging and supportive learning environment. Additionally, EduGram offers opportunities for ensuring sustainability and continuous improvement. Ultimately,

EduGram aspires to adapt to modern learning styles, support lifelong learning, and connect learners worldwide for an enriched educational experience.

III. PROBLEM STATEMENT

In today's digital landscape, the disconnect between social media and education poses a series of critical challenges for students and educators. These challenges encompass the fragmentation of educational resources, the lack of effective online collaboration tools, limited engagement and connections between teachers and learners in the digital realm, and the absence of a cohesive learning community. This is where "EduGram" steps in as a groundbreaking Android application designed to bridge this divide.

"EduGram" seeks to address these pressing issues by creating an Android application that seamlessly blends the worlds of social media and education. Through its key features such as User Profiles, Notes Sharing, Social Interaction, and Search Notes, EduGram strives to build an integrated learning and social community. It offers a dynamic and engaging educational experience for all users, ensuring that educational resources are easily accessible and fostering effective online collaboration. By allowing students and educators to connect, share knowledge, and engage in real-time interactions, EduGram serves as a solution to these challenges, ultimately enhancing the educational experience in the digital age.

IV. LITERATURE REVIEW

Existing Solution:

Before embarking on the development of the "EduGram" an android application, a literature survey is conducted. This survey included an analysis of existing online research paper which introduces the concepts of Note sharing, Classrooms, E-learning, etc.

Research Paper 1: Toward Selection of Trustworthy and Efficient E-Learning Platform

Authors: Bader Alojaiman

Description: The paper explores the rapid growth of the e-learning sector and the challenges academics face in selecting suitable platforms, using a hybrid multiple criteria decision-making model-oriented analysis.

Research Paper 2: A Study of Mobile App Use for Teaching and Research in Higher Education

Authors: Annika Hinze, Nicholas Vanderschantz, Claire Timpany, Sally Jo Cunningham, Sarah Jane Saravani, Clive Wilkinson

Description: The study examines mobile applications in higher education, focusing on classroom use. Surveys reveal they're mainly used for document storage, data exchange, and communication, emphasizing the need for institutional support.

Research Paper 3: Notes Sharing and Student Performance Analysis Web Application

Authors: K. Swasha, S. Steffie Gracia, M. Maheswari

Description: The paper introduces a web application that enables students to share notes, earn part-time income, and conduct a Student Performance Analysis using Random Forest Regressor, promoting note-taking and collaboration among students.

Proposed Solution:

The survey reveals the implementation of an innovative "EduGram" application, designed to cater to diverse student and educator needs. It offers real-time interactions, personalized learning, and community building, fostering an engaging environment. EduGram aims for sustainability improvement.

III. PROPOSED MODEL

"EduGram" operates within a dynamic system involving various stakeholders, technologies, and external factors. It primarily serves users such as students, educators, and lifelong learners, enhancing their educational experiences. The app integrates with social media APIs for user registration and content sharing.

Technologically, EduGram is built on the Android operating system and uses backend servers to manage user profiles, educational content, and messaging. It employs a database to store critical data and features a user-friendly interface. Analytics tools are used to gather insights into user behavior for app refinement. Security measures are implemented to protect user data and privacy

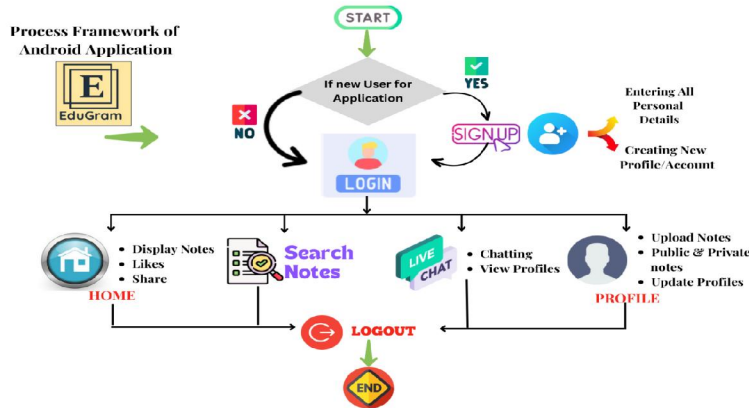
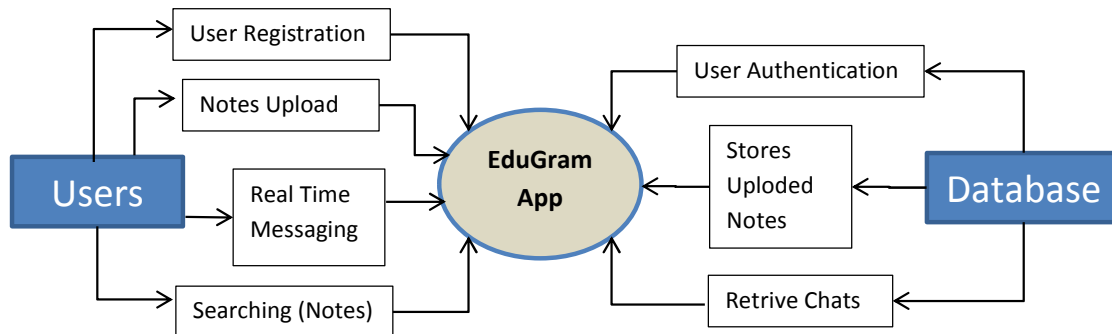


Figure 2. Flow of the EduGram

The working of "EduGram" involves a series of steps and interactions:

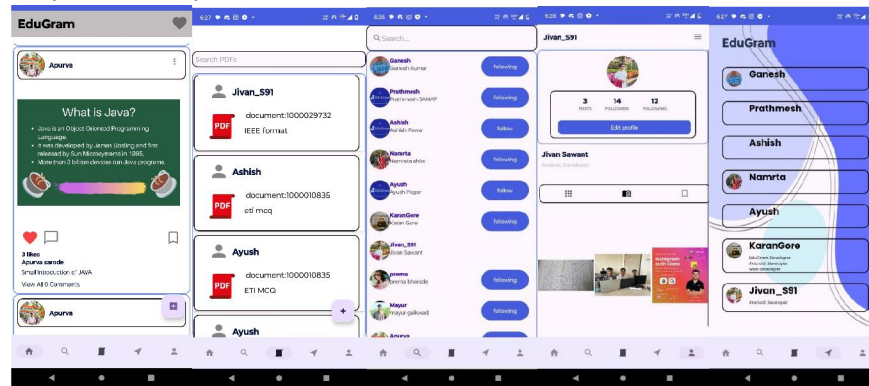
- User Registration: Users download and install the EduGram Android app. They register by providing their email or creating new Account.
- Profile Creation: Upon registration, users create their profiles, add profile pictures, and provide information about their educational background and interests.
- Notes Creation: Users can create educational notes by composing text, attaching documents, or uploading multimedia content. They categorize the notes and choose whether to share them publicly or keep them private.
- Social Interaction: Users can follow other users and receive updates from those they follow. They can engage with educational content by liking, commenting, and sharing notes.
- Search and Discovery: Users can search for specific educational content, users, or communities using the search bar. Filters and sorting options help users refine their search results.
- Real-Time Messaging: EduGram includes a messaging system that allows users to send direct messages to other users, fostering friend's discussion.
- Notifications: Users receive notifications for various activities on the platform, keeping them informed about new interactions notifications, privacy, and security

DFD Model



IV. RESULT

The Resource Sharing and Communication module in EduGram enhances learning by promoting educational content exchange and communication among users. It supports collaboration, information sharing, and community development. The module uses files to facilitate sharing of resources. EduGram is an innovative Android application that blends social media and education, providing a dynamic platform for learning and community-building. Key features include user profiles, notes sharing, social interaction, search notes, notifications, privacy, and security.



V. CONCLUSION

"EduGram" presents a compelling vision for the integration of social media and education, offering a platform that fosters collaboration, resource sharing, and interactive learning among students and educators. The application seeks to revolutionize education by facilitating meaningful connections, idea sharing, and project collaboration.

However, EduGram faces challenges in maintaining content quality control, which is crucial for the accuracy and relevance of educational materials. To address this issue, the platform must implement effective content moderation mechanisms and educate users on responsible content creation. Additionally, ensuring data security is paramount for a platform dealing with user data and personal information.

In conclusion, "EduGram" has the potential to significantly impact education by creating a supportive community for students and teachers to collaborate and learn together. It offers advantages such as enhanced collaboration, personalized learning, and a sense of belonging within the educational community. To realize its full potential, EduGram must address challenges such as content quality control and data security through meticulous management, user education, and continuous improvement efforts. With these measures in place, EduGram can become a transformative force in education, bridging the gap between traditional teaching methods and the evolving needs of modern learners.

REFERENCES

- [1] Bader Alojaiman, "Toward Selection of Trustworthy and Efficient E-Learning Platform" Shaqra University, Shaqra, Kingdom of Saudi Arabia, Grant Number: 2021/001., 2017 pp 13:
- [2] Annika Hinze, Nicholas Vanderschantz, Claire Timpany "Study of Mobile App Use for Teaching & Research in Higher Education" University of Waikato in New Zealand. Springer 2022 pp :16
- [3] K. Swasha & S. Steffie Gracia, M. Maheswari "Notes Sharing & Student performance Analysis Web Application" Sathyabama institute of Sci & Tech, Chennai. IEEE Xplore 2023 pp : 06