

Social Circle App

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Abstract –Social media application plays an important part in our lives and has filled the void in many lives. The reason for the popularity of social media apps is that the app gives freedom to users; people can express their thoughts, ideas, and their success stories in virtual world through apps like Facebook and Instagram. User's chat, ask questions, learn new things and meet different people. According to a report, 3.6 billion people use social media apps that make up 45% of the total population. The number is expected to increase to about 58% of the population by 2025. One cannot deny the fact that social media trends will continue in the future. Our project aims at developing a social networking app that can be used to connect and interact with people. The main purpose of the app is to allow users to communicate. Users can share photos with other users. To build and upgrade this app the tools needed are Android Studio, Firebase and Flutter.

1. INTRODUCTION

In the world of networking and communication, one of the most effective ways to stay connected is social networking. The most popular category of apps used today by users are the communication apps as the average citizen of the world is always looking for novel means of communication.

A Social media is a designated name especially for websites and applications that focuses on communication, social input, content sharing and collaboration. Forums, small blogs, social media, social bookmarks, micro-blogging and wikis are the various social networking networks available in the world.

Social media has become bigger and easily accessible through mobile apps, with some examples of social networking apps include Twitter, Facebook, and LinkedIn. Social media services include:

- Social media is a collaborative online application.
- It is a user-generated content including texts, posts and comments, digital photos and videos and information generated in all online communications that keep social media active.
- It allows users to create application-specific profiles for a website or application.

2. LITERATURE SURVEY

Social Networking [1] talks about how social networking has affected the whole world in recent times. Earlier social networking was just a means to share information with the people around us but now in recent times it has become the main hub for most of the activities such as communication, employment, politics, healthcare, social relationships and personal productivity. It talks about how it has transformed into an indispensable part of our lives. It provides brief information about popular social networking platforms such as Facebook, Twitter, YouTube, LinkedIn and Myspace. It tells us about various applications of social networking in the field of social interaction, education, business, healthcare and politics. And finally, it also shows us the way how social networking is affecting our daily lives. Like any other technology the adverse effects of social networking have started to prevail. It shows us the evolution of human interaction.

Mobile Social Networking Applications [2] tells us about the recent advances the field of mobile computing hardware and software. It takes us through the migration of social networking services from personal computer i.e., used via internet browsers to handheld mobile phones or smartphones. The evolution of both hardware and software on smartphones has made the migration possible. Mobile applications can be used anytime, anywhere and at anyplace. Mobile social networking (MSN) applications can be categorised in hybrid and pure categories. It also talks about upcoming trends and opportunities such as smart TVs, cloud gaming and various cloud-based services.

In exploring the role of social media in collaborative learning [3] we discover how social media plays an important role in students' academics through communication via social media applications. To understand the impact of social media in academics, a survey of 360 students from a university in eastern India was conducted. In the survey it was concluded that the communication between peers, peers and teachers and the habit of knowledge sharing and helping has increased significantly. The use of social media in the field of education has definitely facilitated the students' to be more creative, dynamic and research oriented. Social

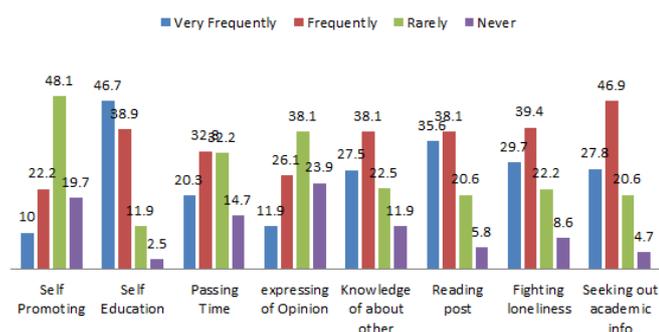
media is a pure domain of knowledge if we use it the right way.

Table 1: Demographic profile n = 360

Variables	Subgroups	Percent
Gender	Male	49.2
	Female	50.8
Age	15-20	71.7
	20-25	18.3
	25-30	5.8
	30-35	4.2
Qualification	Intermediate	60.0
	Graduate	22.8
	Post Graduate	13.3
	Other	3.9
No. of Facebook friends	None	36.1
	1-200	30.0
	200-400	13.1
	400-600	20.8
Number of academic groups joined	None	25.6
	1-5	53.9
	6-10	14.2
	11-15	1.9
	Above 15	4.4
Number of educational pages followed	None	13.9
	1-5	44.4
	6-10	20.8
	11-15	11.4
A frequency of social media	1-5 h/week	46.1
	5-10 h/week	24.2
	10-15 h/week	17.2
	More than 15 h/week	12.5

Source: Computed and compile by researchers on basis of a questionnaire

Reasons for Using Social Media



The Web-based social networking applications and social networking services make it possible to connect people who share interests in political, economic, and geographic borders. Through e-mail and instant messaging, online communities are formed. Facebook and other social networking services are increasingly becoming the object of scholarly research. Scholars in many fields have begun to investigate the impact of social networking sites to the environment around us, investigating how much sites may play into issues of identity, privacy, social capital, youth culture, and education. Several websites are beginning to use the power of social networking model for philanthropy. Such models provide a means for connecting financially deprived industries and small organisations without the resources to reach a broader audience with interested users. Social networks are providing a new way for individuals to communicate digitally. These communities allow the sharing of information and ideas, an old concept placed in a digital environment.

2.1 Android Studio

Android Studio is the official integrated development site (IDE) of Google's own mobile operating system, built on JetBrains' IntelliJ IDEA software and specially designed for Android development. Available for download on Windows, MacOS and Linux operating systems or as a subscription-based service by 2020. It replaces Eclipse Android Development Tools (E-ADT) as the main IDE for Android application development. Kotlin is Google's preferred language in the development of the Android app that changed Java. Java is still supported, as is C++.

2.2 Flutter

Flutter is an open-source UI development tool developed by Google. Used for developing applications for Android, iOS, Linux, Mac, Windows, Google Fuchsia, and web applications from a single codebase. The first version of Flutter was known as the code name "Sky" and ran on the Android operating system. Presented at the 2015 Dart Engineers Conference, with the stated goal of being able to consistently deliver 120 frames per second. On May 6, 2020, the Dart SDK version 2.8 and Flutter version 1.17.0 were released, with support added to the API for hardware, improving performance on iOS devices, new Material widgets, and a new network to track.

2.3 Firebase

Firebase is a platform developed by Google for creating applications for smartphone and web applications. It was originally a private company founded in 2011. In 2014, Google acquired the platform and it is now its leading offering for app development. Firebase is used for reversible infrastructure. Firebase is a Backend-as-a-Service (BaaS) that started as a starting point for YC11 and

grew into the next generation of application development platform on Google Cloud Platform. Firebase frees developers to focus on creating a fun user experience. You do not need to manage servers and you do not need to write APIs.

3. APPLICATION

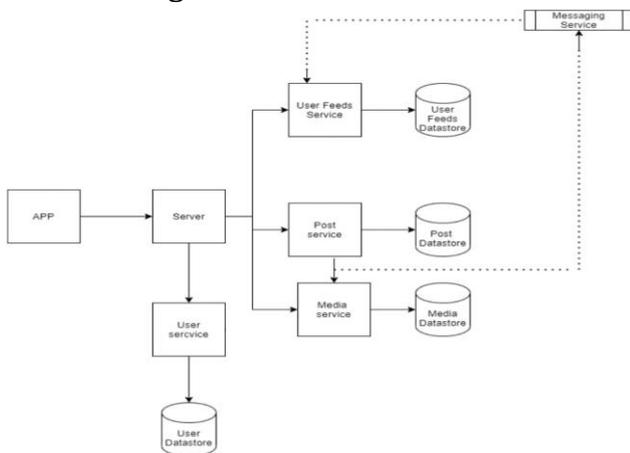
3.1 Existing System

Existing systems like Instagram and Facebook offer a variety of features such as reels, one minute video, IGTV videos (long duration video), shopping directly on the app which makes the app hybrid combination of features from various sections hence deviating from its core functionality. These systems consume more data due to various unnecessary features which most users rarely use. Also, these systems use certain psychological algorithm which tricks the users mind to spend more time on the application thereby consuming time and increasing screen time of users which can cause anxiety and depression.

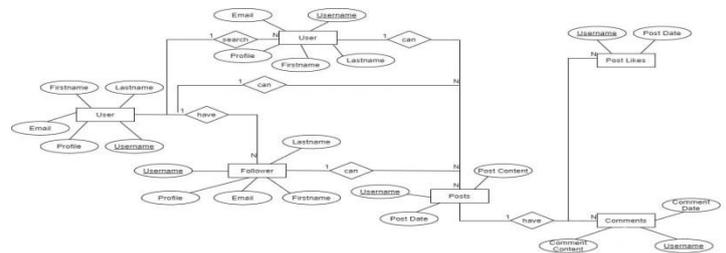
3.2 Proposed System

In order to overcome the problems in the existing systems we have proposed to develop a system which is an Android app i.e., Social Circle app which will focus on communication i.e., instant messaging and media sharing as the core principles of our app are simplicity and functionality. The app will consume less data as we do not intend to offer unwanted or unnecessary features which most users rarely use. The system does not make of use any psychological algorithms to trick people to stay online. The app will show photos related to the user i.e., the people he/she follows on the network. The feed won't contain any irrelevant data.

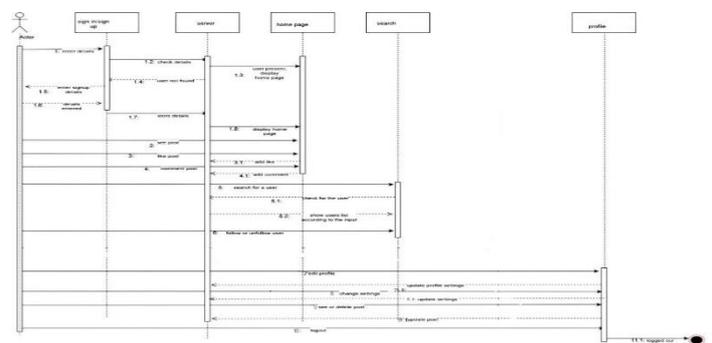
3.2.1 Block Diagram



3.2.2 ER Diagram



3.2.3 Sequence Diagram



3.3 Scope of the Project

The purpose of Social Circle app is to give users a simple and convenient android application for sharing photographs and instant communication through text-based interaction which is simple to use without any complicated functions. It can be used by individuals to market or promote the products they use by uploading photos on the app. Above all, we aim at providing a seamless user experience which is simple and easy to use.

3.4 Purpose of the Project

Social Circle is a communication app that will allow users to share photos from their lives, add captions, share with others, explore and access and more. It is a completely visible platform. Its sole purpose is to enable users to share photos with their audience. Social circle is a social networking app designed to share photos from a smartphone.

3.5 Working of the Project

- Everyone who creates a Social Circle account has a profile and a scrollable feed where photos uploaded by users will be visible.
- When you post a photo on Social Circle, it will be displayed on your profile and on the home page.

- Users who follow you will see your posts in their own feed and you'll see posts from other users whom you choose to follow.
- You can interact with other users on Social Circle by following them, being followed by them, commenting, liking, tagging and private messaging.
- Social Circle is all about visual sharing, so everybody's main goal is to share and find only the best photos.
- Every user profile will have a "Followers" and "Following" count, which will represent how many people they follow and how many other users are following them.

collaborative learning the new domain of learning”

4. CONCLUSIONS

The Social Circle application's aim is to achieve simplicity. It focuses on messaging i.e., communication and media sharing i.e., photos and short videos. It helps to understand more about multimedia database in applications which are popular among the teenagers nowadays. Social Circle will continue becoming the photo sharing application it intends to become. Hence, it will further prove that multimedia elements in database are very useful to various applications. Social circle will continue to improve its services to attract more users over time.

5. Future Scope

The Social Media app gives us endless opportunities to grow or expand the app by adding an extra feature whenever we want, but we do not want to force any new feature on the user where the user is rarely using the feature as simplicity and basic functionality are the core principles of the Social Circle app. Going forward we can extensively optimize the app to reduce the storage size of the app and to reduce the application load time. We can still make the animations a lot smoother in the app. Additional features can be added to stay ahead of the competition such as uploading of different types of media in addition to photo upload feature.

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- [3] Jamal Abdul Nasir Ansari and Nawab Ali Khan, "Exploring the role of social media in