

Vichat- Messaging app using Flutter

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Abstract

Humans have been labelled as "social creatures," and their innate need for socializing is the basis for this. Communication is one of humanity's most fascinating characteristics. They have a natural affinity for it. A response to an external stimulus that is unique to everyone. Using the Flutter language and catering to need of the hour we have created a chat/messaging app for communication between Vit Students.

Keywords — Flutter, Streamchat, Firebase, API.

I. INTRODUCTION

Along with, changing times, advancing technologies, evolving species one innate trait that sets mankind apart from other beings is the need for communication, socialization. The means for communication have evolved from verbal to virtual, from letters to digital, from mail to text messages. Communication has always been the most significant part of human expression and interaction. Initially, verbal communication was used with symbols and images too were common. Later, sign languages and word-languages were created, and they were used, this later transformed to written format and finally the digital era began. Text messages were quite the norm for a while but never long-lasting alternative. After this there was the invention of Apps like Friendster, LinkedIn, MySpace, Facebook, Twitter, WhatsApp, Instagram which revolutionized the way of communication. We, in our research, have tried to create one such easy-to-use medium for communication for new-age users, the gen-z students, our beloved Vitians. The name of our app is Vchat. It aims to provide a user-friendly, dynamic, customizable app which is an easy getaway for interaction between students of Vit.

[1] (SCSE Galgotias University Greater Noida) web _based talking alludes to the way towards sending and getting message utilizing the web. In this paper “Android based chat application using firebase” they search that broadly utilized applications are Facebook messenger, QQ mobile, WhatsApp and they created proposed network- based android talk application utilized for visiting reason with distant customers or clients associated with the web and it won’t let the client to send unseemly message. They used Firebase, android, real time databases, java modules and the NoSQL database is used. [2](2022) In their paper “Webvibe: A Secure Webchat Application” authors developed client-server java chat application with security in mind and they used encryption algorithms like DES, AES, IDEA and Integrity algorithms like MD5, SHA and they also used key-exchange algorithm. They go through core and security concepts of java (JSSE, JCA) packages and for developing GUI they had implemented java swings. [3] In “Implementation Application Internal Chat Messenger Using Android System” Robi Sanjaya and Abba Sugandha Girsing suggested android chat application in which they built application chat messenger fellow android user through internal operation office. In their chat application achieve the good performance in CPU, RAM, GPU and bandwidth usage. They used LAN network that allow users to be able to send message to other users in real time instantly through internet. They also used Language API,Earth API, Javascript API. [4] International Journal of Interdisciplinary Innovative Research &Development (IJIIRD) ISSN: 2456-236X Vol. 05 Issue 01 | 2020- The main objective of this paper is to gift a package application for the launching of a true time communication between operators/users. Firebase is one in all the platforms that provides a period info cloud services that permits the developer to form these applications with ease. TOOLS that are used are Flutter, Firebase and Cloud Firestore. [5] 2019 International Conference on Computational Science and Computational Intelligence (CSCI)- Flutter is a popular UI framework for developing mobile applications by Google. It has caught traction in recent years. However, Flutter developers have to deal with a state management issue when developing their applications. In order to solve this problem, multiple architectures have been developed. This paper proposes a new Flutter architecture based on the Clean Architecture by Uncle Bob. The Flutter Clean Architecture proposed in this paper is packaged and released through a Flutter package. TOOLS that are used are Flutter, etc. [6] Quest Journals Journal of Software Engineering and Simulation Volume 8 ~ Issue 3

(2022). The purpose of this document is to give a complete reference about how SocialClub is developed. This This document describes in substantial detail, the software requirements of SocialClub, an online instant messaging application where people can follow friends, share videos and share photos, send and receive messages and keep in touch with friends, family and colleagues. TOOLS used are Android studio, Flutter.

II. EXPERIMENTAL METHOD

To start-off we designed all the user interface of our application. This included designing all the screens that we were going to be used in the app. After this the icon widgets we added. Design for our app was taken from Dribbble. Later we connected the stream api key to our app. During this process of connecting the app to our stream chat we added different functions that were present on streamchat viz. Current online and typing indicator. This was followed by connection of firebase that was our database. In the course, of making our project we used the Flutter language. The compiler that was used was VSCode.

III. RESULTS AND DISCUSSIONS

The app has a pleasant user interface. It has been found to be quite user-friendly. The steps to use the app are straightforward and simple to carry out. The project provides a customized way for chatting i.e the app has a way we can customize the UI as per our needs. This makes the experience more wholesome.

IV. LIMITATIONS

The limitation includes:

- I. Not 100 % ready for handling to many subscriber data.
- II. The customization options that we provide are limited.
- III. Security of the app is not strong yet, so we'd like to add end-to-end encryption.

V.FUTURE SCOPE

We can add different themes to our app according to user's choice. Different customization options like adding different colours to app bar, navigation bar. We will also want to add different fonts and introduce Gif's to our application. We also want to add video calling option to our application. We also want to add stories to our application where user can put their videos and images on stories. We will also create a firebase for the database where a user can create its own account.

VI. CONCLUSION

So, we have designed the application as we promised. Our app has features of sending text to a user. The main objective of the project is to develop a Secure Chat Application. We had taken a wide range of literature review to achieve all the tasks, where we came to know about some of the products that are existing in the market. We also made detailed research in that path to cover the loopholes that existing systems are facing and to eradicate them in our application.

In the process of research, we came to know about the latest technologies like flutter and different algorithms of Streamchat.

VII. ACKNOWLEDGEMENT

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