Savitribai Phule Pune University

Modern Education Society's College of Engineering, Pune

19, Bund Garden, V.K. Joag Path, Pune – 411001.

ACCREDITED BY NAAC WITH "A" GRADE (CGPA – 3.13)

DEPARTMENT OF COMPUTER ENGINEERING

A

MINI PROJECT REPORT

ON

JusTalk

T.E. (COMPUTER)

SUBMITTED BY

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Mr. Yash Patil Roll No: 055

GUIDED BY

Prof. S. S. Raskar

(Academic Year: 2019-2020)

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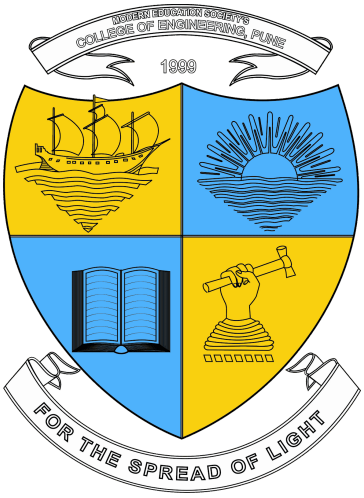

CERTIFICATE

This is to certify that
Mr. Dhruvil Shah (Roll No. 047)
Mr. Gaurav Verma (Roll No. 031)
Mr. Soham Khade (Roll No. 037)
Mr. Yash Patil (Roll No. 055)

has been completed Mini Project entitled

"JusTalk"

As a partial fulfillment of the Third Year of Bachelor degree in "Computer Engineering" as prescribed by the Savitribai Phule Pune University in TE COMP I the Semester - I of academic year 2019-2020

Prof. S. S. Raskar	*Dr. (Mrs.) N. F. Shaikh*
Project Guide	***HOD***

External Examiner:

Date:

ABSTRACT

JusTalk is a Firebase based Android Open-Source app. For developers to refer in case they want to integrate Chatting capabilities to their application. Users can search for other users and chat with them with ease.

How is it beneficial to the user?

We are providing users with a platform to communicate over the internet via text messages thus saving time and a platform to mimic human-like interaction. A secure place where the information of the users are encrypted so that there is safety in case of data leak.

ACKNOWLEDGEMENT

It gives me great pleasure and satisfaction in presenting this Mini project on “JusTalk”.

I would like to express my deep sense of gratitude towards all the teammates who were always there to support my idea of the app and who worked day and night to transform the idea into reality.

I would like to give thanks to Prof. S. S. Raskar for his guidance throughout the

project My special thanks to the lab staff for their valuable support.

I would like to thank all those, who have directly or indirectly helped me for the completion of the work during this seminar.

Mr. Dhruvil Shah
Mr. Gaurav Verma
Mr. Soham Khade
Mr. Yash Patil

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Chapter 1:

Introduction

1.1 Introduction:

We have Developed an app called JusTalk where users can chat with any person across the world through minimal security details and login credentials .

Fig.1
JusTalk

1.2 Motivation:

Realtime chatting application is the need of the hour . India is growing and developing at a faster rate and people are getting more busy in their work . Calling has not been a suitable option for communications as it wastes a lot of time even if the user wants to keep the talk small as possible . So chatting applications play a handy role as users can send the messages on our app smaller and faster and the other user can only receive messages when he turns online. Both users can send and receive messages whenever they are free thus not getting disturb again and again in their work .
Our app JusTalk serves all this purpose thus motivating us to develop a real time chatting application.

Chapter 2:

Problem Statement

2.1 Problem Statement:

This project is aimed to develop a Chat Application. The entire project is developed to ease the mode of communication between two people.

Basically, this app is developed for saving the time of the users because nowadays many apps have phone number authentication email id authentication but this app just needs your email id for signing-up and there won't be any misuse of your phone number.

2.2 Explanation:

- **Features:**
  1. Login/signup feature
  2. Google material design UI
  3. Uses Google's way of material design
  4. Uses Firebase Realtime Database Users to chat with each other
  5. Used different open-source libraries to create the app

In this the user can chat with any person who has logged in the application just by searching their usernames. In this app the user can also check if any other user is online or offline and also check whether the user has seen the messages that they have sent to them.

Chapter 3:

System Requirements Specification

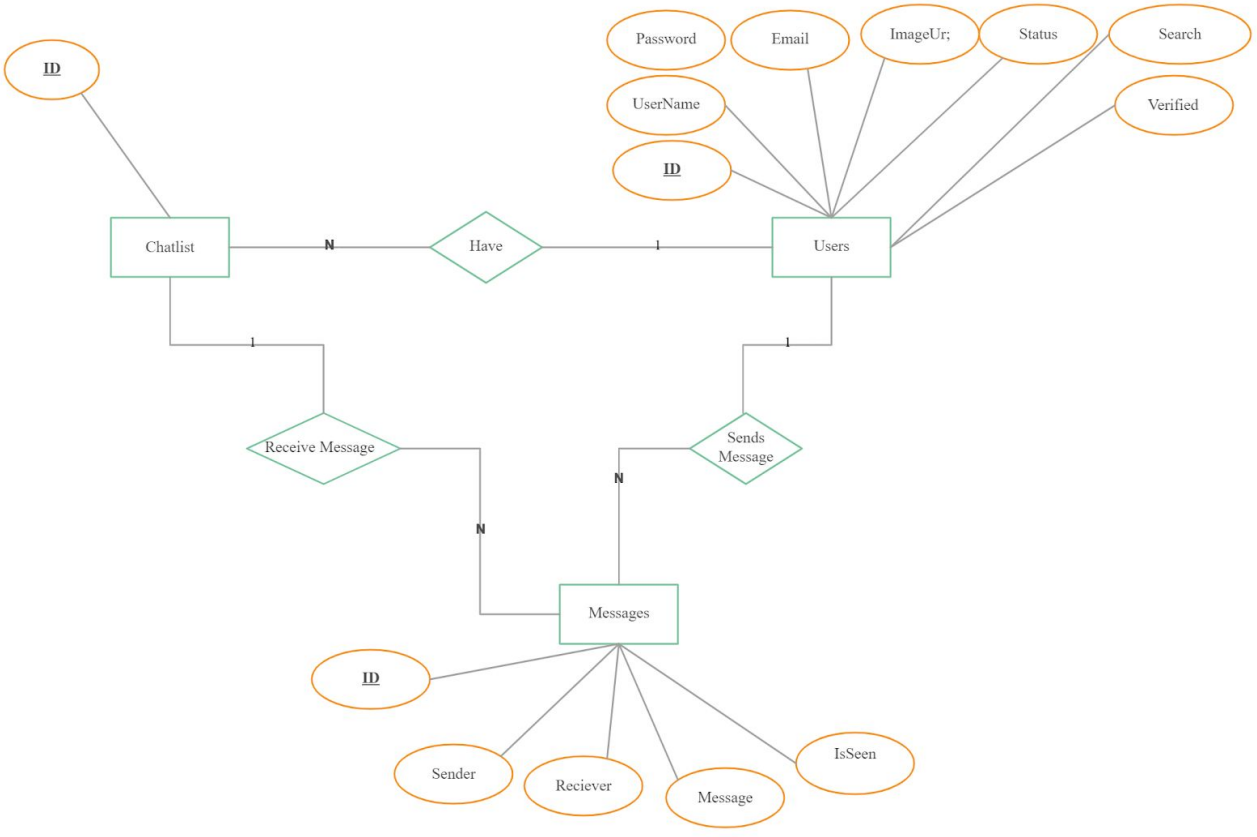
3.1 Software Specifications:

1. Front End: Android
2. Back End: Firebase, Java
3. Operating System: Window OS+
4. Documentation: Latex

3.2 Hardware Specifications:

1. Processor: 2GHZ and above
2. RAM: 4GB (minimum)

3.3 ER Diagram:



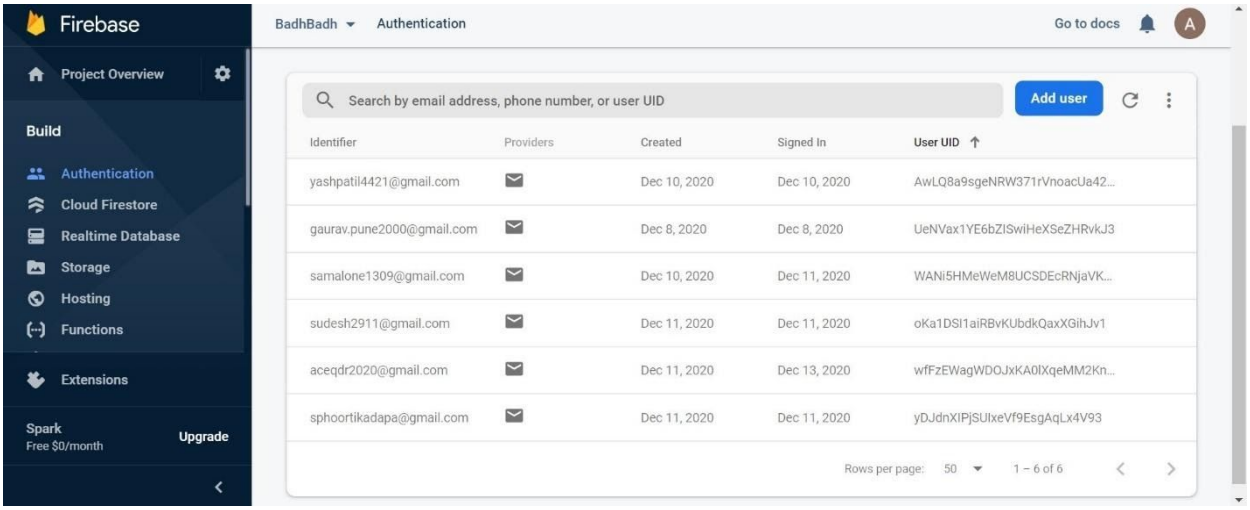
3.4 Database Connectivity:

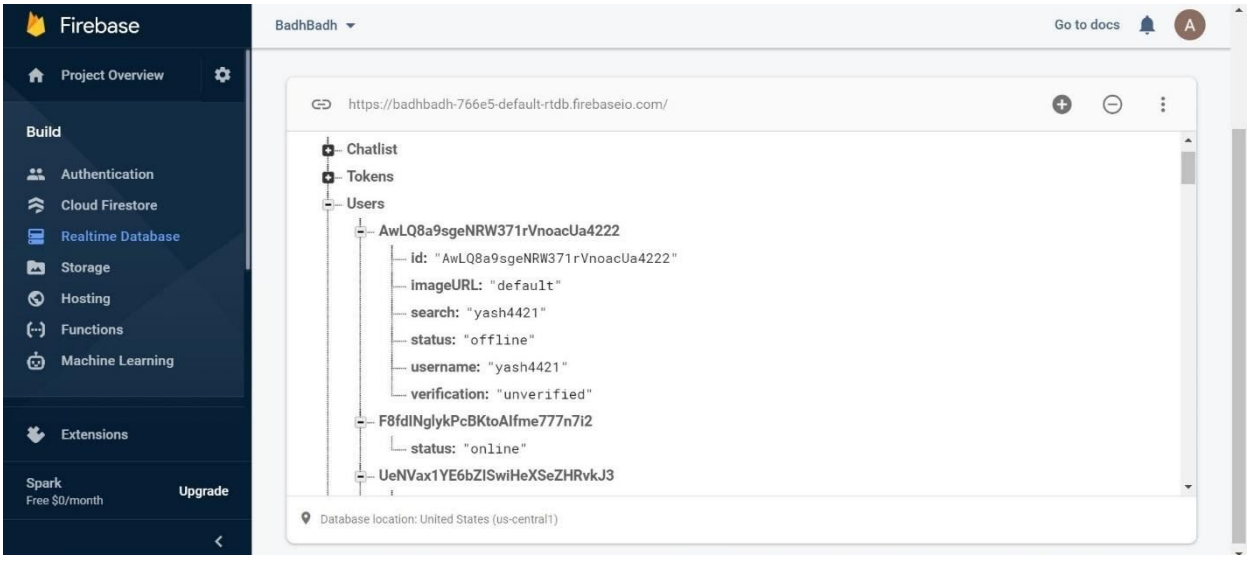
Firebase is a mobile and web application development platform developed by Firebase, Inc. in 2011, then acquired by Google in 2014.As of October 2018, the Firebase platform has 18 products, which are used by 1.5 million apps.

Firebase provides a real-time database and backend as a service. The service provides application developers an API that allows application data to be synchronized across clients and stored in Firebase's cloud.

Simple steps to create a database and handle are as follows.

1. Add the firebase dependency to your build.gradle file.
2. Open or Create database and create connection.
3. Perform insert, update or delete operation.
4. Create Cursor to display data from table of database.
5. Close the database connectivity.





Screenshots of the Google Firebase

Chapter 4:

Implementation of Project

4.1 Module description:

4.1.1 Login Module:

A login is a set of credentials used to authenticate a user. Most often, these consist of an email and password. They are a security measure designed to prevent unauthorised access to confidential data. In this module even if you forget your password , we have given a forgot password function to the login module.

4.1.2 SignUp Module:

With the Sign Up module, you can quickly and easily register to the application. Through which you can create your own username and register through email and password.

4.1.3 Chat Module:

Under chats module users can view a list of available users with online and offline status. The green colour symbol near the user's name indicates where he/she is online. Users can chat with multiple users at a time and can view list previous chats.

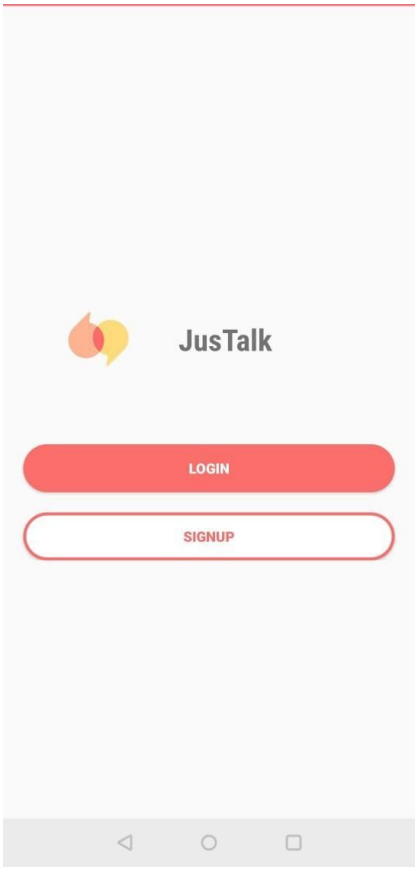
4.1.4 User Module:

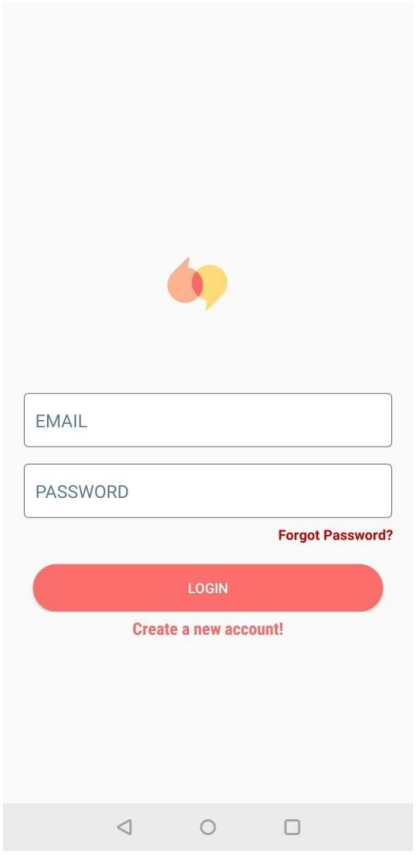
With the Users module it becomes easy to search a particular user with whom he/she has to chat. It doesn't need to save anyone's details to chat. The participants only have to register once then they all will appear in the users search list.

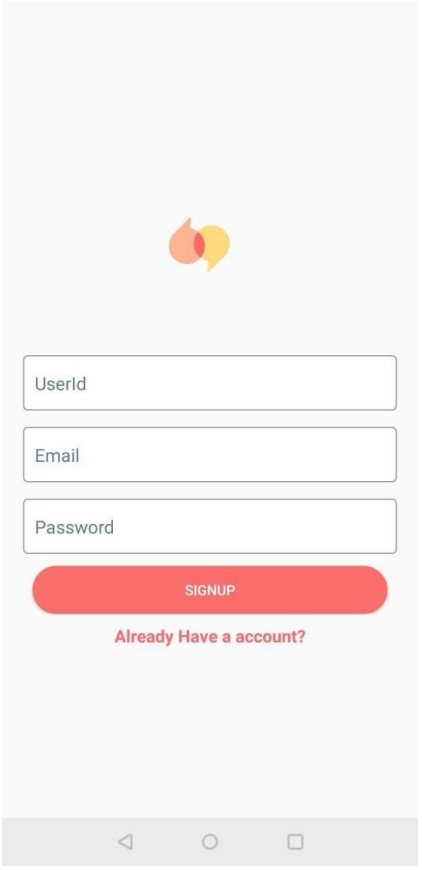
4.1.5 About Module:

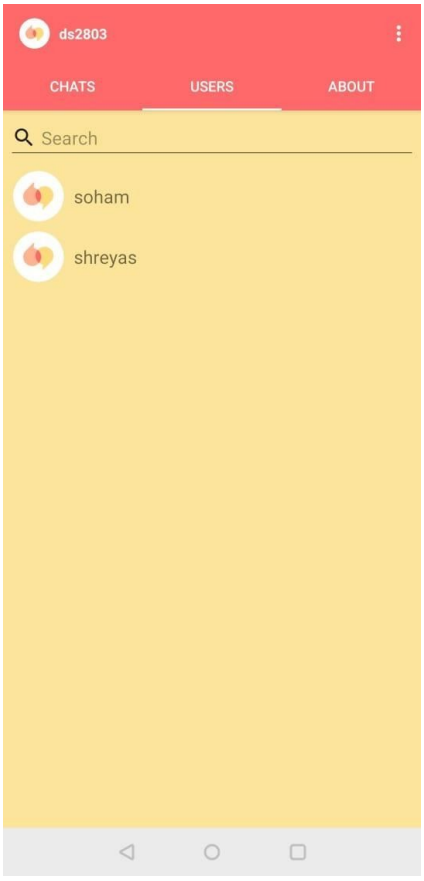
The About module is just to display your personal details like username and email with which you have registered. In short, it's just a profile page. In this module, we have given the developer names and through which you can visit their Github Profile

4.2 Screenshots of Project:






UserId
Email
Password
SIGNUP
Already Have a account?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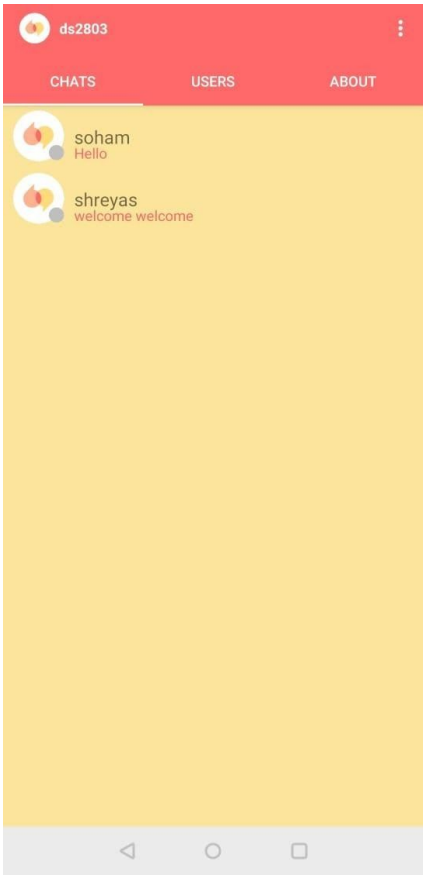
CHATS
USERS
ABOUT
Search
soham
shreyas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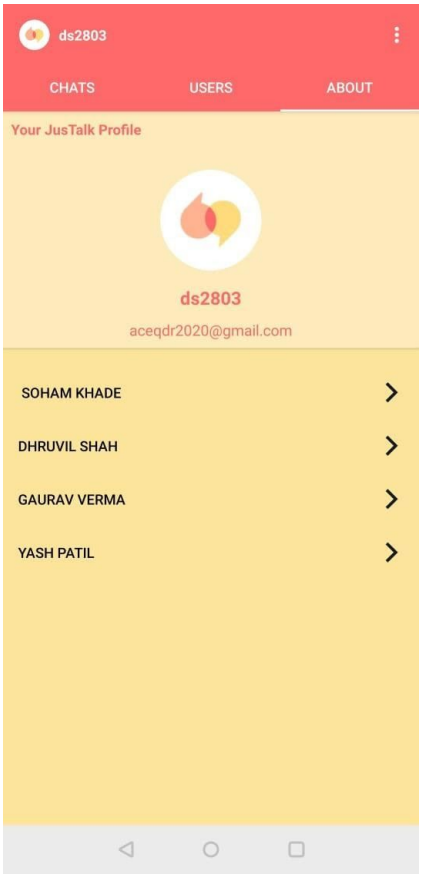
CHATS
USERS
ABOUT
soham
Hello
shreyas
welcome welcome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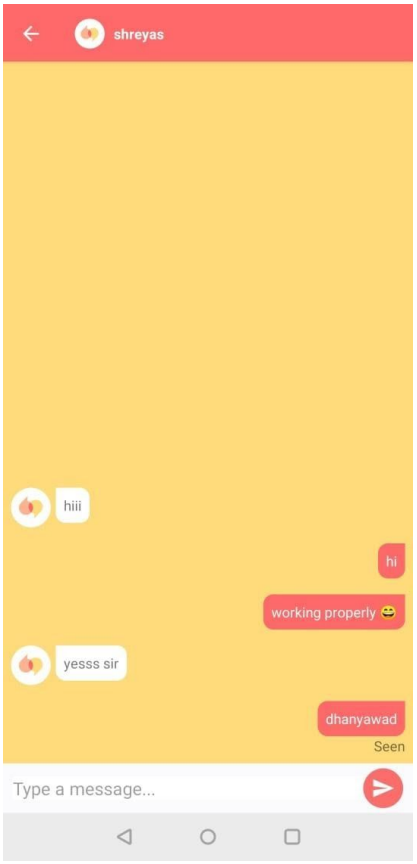
CHATS
USERS
ABOUT
Your JusTalk Profile
ds2803
aceqdr2020@gmail.com
SOHAM KHADE
DHRUVIL SHAH
GAURAV VERMA
YASH PATIL


shreyas
hiii
hi
working properly 😄
yesss sir
dhanyawad
Seen
Type a message...

Chapter 5:

Conclusion

As the primary objective of this Mini Project, we have been able to build a JusTalk app.We have built a platform to communicate over the Internet that offers a real-time transmission of text messages from sender to receiver.A feeling similar to a spoken conversation is created, which distinguishes our application from other text-based online communication forms such as Internet forums and email. Thus, we have designed and implemented the Mini Project title “JusTalk”