

**PROJECT REPORT**  
**ON**  
**tutorsbd.com**



**DAFFODIL INTERNATIONAL UNIVERSITY**  
**DHAKA, BANGLADESH**  
**DECEMBER 2020**

**“Tutorsbd.com”**

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering.

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**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

**December 2021**

# APPROVAL

This Project titled **Tutorsbd.com** , submitted by Nayeem khan(ID-171-15-883) and Hasibul hoque shihab (161-15-6893) to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. In Computer Science and Engineering and approved as to its style and contents. The presentation was held on 30 october,2021.

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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of our respected **Mr.Mohammad Monirul Islam,Senior lecturer Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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We would like to thank our entire course mate in Daffodil International University, who took part in this discussion while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

## **ABSTRACT**

Nowadays private tutors or home tutor's are very much essential in our country. But our parents or students find it very difficult to find the suitable teacher they desired. We can find many techniques in the world of computers which are very helpful to get a tutor very easily. Mobile applications which are helpful to find anything you need and as you desired. In this project java framework is used. it can run in android. Android studio is used as an IDE. The main function of this project is to register for both students and teachers with proper information. Then just login and find their suitable teacher.

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# CHAPTER 1

## INTRODUCTION

### 1.1 INTRODUCTION

Mobile applications such as tutors bd is an android application system for both students and teachers. In this application both teacher and student can create their account by providing valid information. In the early days it was difficult to find good teachers. Parents would have to wait a long time to wait for a good teacher. Now Students can find their desired teacher in this application. Teachers can update their bio-data in the application.

Students can also register by providing required information. After completing registration they can easily login by their email and given password. Key features are-

- A Full job feed
- Apply Function
- Post module
- Cv module
- Profile module
- Messaging option
- Setting option

### 1.2 Motivation

The main motivation to create this application is that from my young age I always thought of helping our people. And I personally didn't get a good teacher for many subjects. So I always thought about how I could make it happen. So I finally have the power and ability to build it.

This application will make a connection between students and teachers and will make their job a lot easier. Another thing is that it is very difficult for Parents to complain about teachers. We will set everything, but in this application, we make the solution of this complexity.

## **1.3 EXPECTED OUTCOME**

There are some potential outcomes which are important and also essential for students and their parents to find their desired teacher. These are very unique from other mobile applications.

The expected outcome of this project is given below:

1. Students can easily login and find any teacher they want.
2. They can also review the teacher.
3. Every teacher's resume and schedule will be provided.
4. Teachers can also find their tuition easily through this application.

## **REPORT LAYOUT**

This project report carries six chapters. Chapter one introduces the tutor bd application its objectives, the expected outcomes of our project. Chapter two presents background study and related work of our project. Chapter three portrays the basic ideas of java framework and the basics of android application. Chapter four describes the tools and technology used in the project like android studio, devices, connected cables, activities, fragment, firebase and recycler view. Chapter five is about execution and testing and other parts of the project, codes and figures of the project. Finally chapter six is about further work of the project and decision.

## CHAPTER 2

### BACKGROUND AND HISTORY

#### 2.1 Overview of the project

For developing our whole project, we have to sort out some process. For this we have to follow some steps to use this app. First of all, a user must be registered to access our app then he/she can login from our app. In this chapter we will describe the existing work on tutor bd applications. We tried to find out the limitations of those projects and also the actuality of those projects. Using our knowledge on mobile application development we were able to prepare a very successful application.

#### 2.2 Application Features

There are many android apps out there for online tutors. But our app is slightly different from the others. It is very easy to operate, just login (if registered, if not then registration first), with password, look for teachers and confirm it.

##### 2.2.1 Create Post

In this section the user must create a Post in this app. There is a news feed for all the users Out there. Students create a job post and then the teacher can apply for the job. All the requirements will be set on the post.

##### 2.2.2 Feed

After a successful post, now students and teachers can see all the posts out there. For teacher module a Apply button is out there, but no button for the student .

- 1.No location restriction
- 2.full users posts
- 3.unlimited apply option

### **2.2.3 CV**

When teachers apply for any post in the feed.that apply data goes to respective students cv module.then he can accept or decline the post.

### **2.2.4 Message Option**

.In our application we provided an advanced messaging system.From that we can send messages and receive messages in real time .We have used nodejs as our backend server.thanks to firebase .we didn't have to write so much code.

### **2.2.5 Student and teacher list**

The both student and teacher portal will have a list of respective teacher and student.it will be useful to track all the teachers and students we have.

### **2.2.6 User Profile**

This feature contains user profile's information.it will show address or any metadata we need to know .

## **2.3 Related Works**

There are many applications we found in the play store. But we make our work unique from all other application. Every other application working on only to show the data of the users .But within the application there is less user interaction with each other.But our application able to Managed to show both of them. All the work done with our app will be helpful to our country's people. With the help of our applicationmanagement will change significantly in our country..

## **2.4 Requirement for Project**

- Language:Java, XML
- Software: Android Studio for development.
- Design: Adobe XD.

- Database: Firebase database.

## **2.5 Comparative Studies**

Our tutorsbd have only advantages.

### **Advantage:**

1. Our system is developed for those who want to find teacher hassle free and easily.
2. It's an android application.
3. It is user friendly for users.

## **2.6 Recognizing Multiple Viewpoint**

Different participants perform totally different actions. Participant's read purpose

1. User friendly System.
2. Error free System.

## **2.7 Challenges**

We faced a few challenges while developing the project as the concept was a bit challenging. We had to face database complexity sometimes. By the grace of Almighty we successfully & completed our project.

## **2.8 Summary**

In this chapter, we conferred about the full project inquire about the application feature, appointment confirmation system. Also, we know user requirements, Project specialty, specification of the requirement of this project.

## CHAPTER-3

### REQUIREMENT SPECIFICATION

#### 3.1 Requirement Management

Requirements are abilities that a product must fit to satisfy our project's necessity to solve a problem. To buildable our project we have to define all the requirements for our project. To develop such a type of project we have to gather huge project related information and figure out all the expectations which are needed for the project.

#### 3.2 Requirement Collection

- Android Studio for development
- Java, xml for Language
- Adobe XD for Design
- Firebase for database

#### 3.3 Android Studio

Android studio is an integrated development environment (IDE) for android apps development. It is founded on IntelliJ IDEA and java integrated development software and including with our code editing tools. For supporting apps development within the android operating system, and android studio uses a Gradle-based build system, emulator, code templates and GitHub- and , integration.For developing our project, we initially used the 3.1.4.0 version where we have faced lots of problems such as app build in problems, code errors, time to build a system, slow running etc. But Present version of android studio 3.5 is much better for smoothing, better code.

#### 3.4 JAVA

Java is a high-level programming language originally developed by Sun Microsystems and released in 1995. Java runs on a variety of platforms, such as Windows, Mac OS, and the various versions of UNIX. This tutorial gives a complete understanding of Java.

This reference will take you through simple and practical approaches while learning Java Programming language.

### **3.6 Adobe XD**

Adobe Experience Design (XD) is an optimized design process. This tool is used to create wireframes, mockups and prototypes that can be showing in live previews on the device such desktop and on the mobile devices including files storage, and is available on multiple operating systems and devices.

### **3.7 Firebase Database**

Store and sync data with our NoSQL cloud database. Data is synced across all clients in real time, and remains available when your app goes offline. The Firebase Realtime Database is a cloud-hosted database. Data is stored as JSON and synchronized in realtime to every connected client. When you build cross-platform apps with our Apple platforms, Android, and JavaScript SDKs, all of your clients share one Realtime Database instance and automatically receive updates with the newest data.

### **3.8 Use Case Modeling and Description**

UML diagrams are usually used to describe the functionality or behavior of the system in a horizontal way. It represents the details of the individual features of a system.

### **3.9 Use case model(teacher ,student)**

Use case models show how the system is connected to each other. we build use case diagram



To see how the data flows to the full software and can gain ideas about new design and terms.

### **3.10 Design Requirements**

Design requirement is the front-end design of our system that can be seen by users and admin. While developing Tutorsbd apps we have kept in mind that, we need to.

1. Easy to access
2. Performance good
3. Make our apps simple and flexible for the users

### **3.11 General Methodology**

We have followed some methods to make this app. To gain performance and real time data we have used new advanced technology. We didn't use traditional databases in our app.

# CHAPTER 4

## DESIGN SPECIFICATION

### 4.1 Front End Design

Front-end design is basically the front view of our application that can be viewed by a user

#### User Interface (UI)-

- XML
- J Query
- Tables, Button, Forms, Images

#### 4.1.1 Welcome Screen

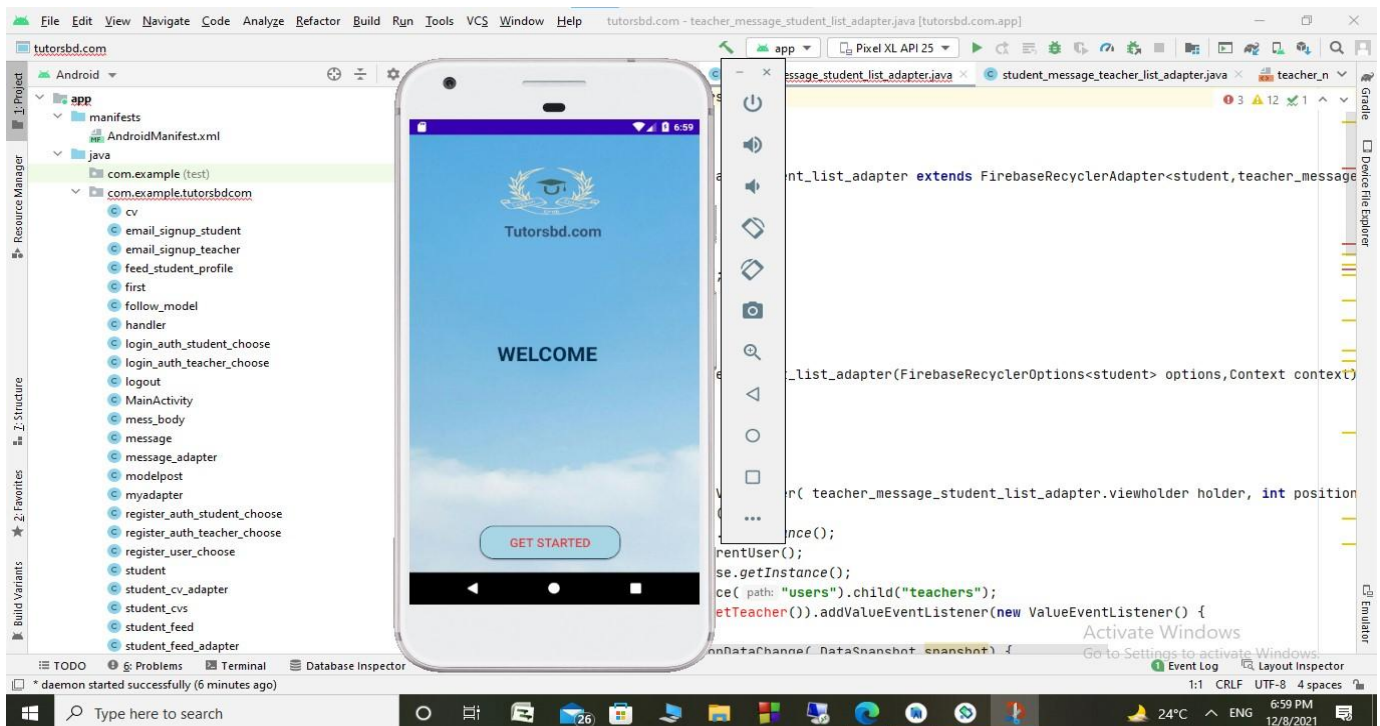


Figure: 4.1.1 User welcome activity

This is the first screen/activity of our application.

## 4.1.2 Login or Register

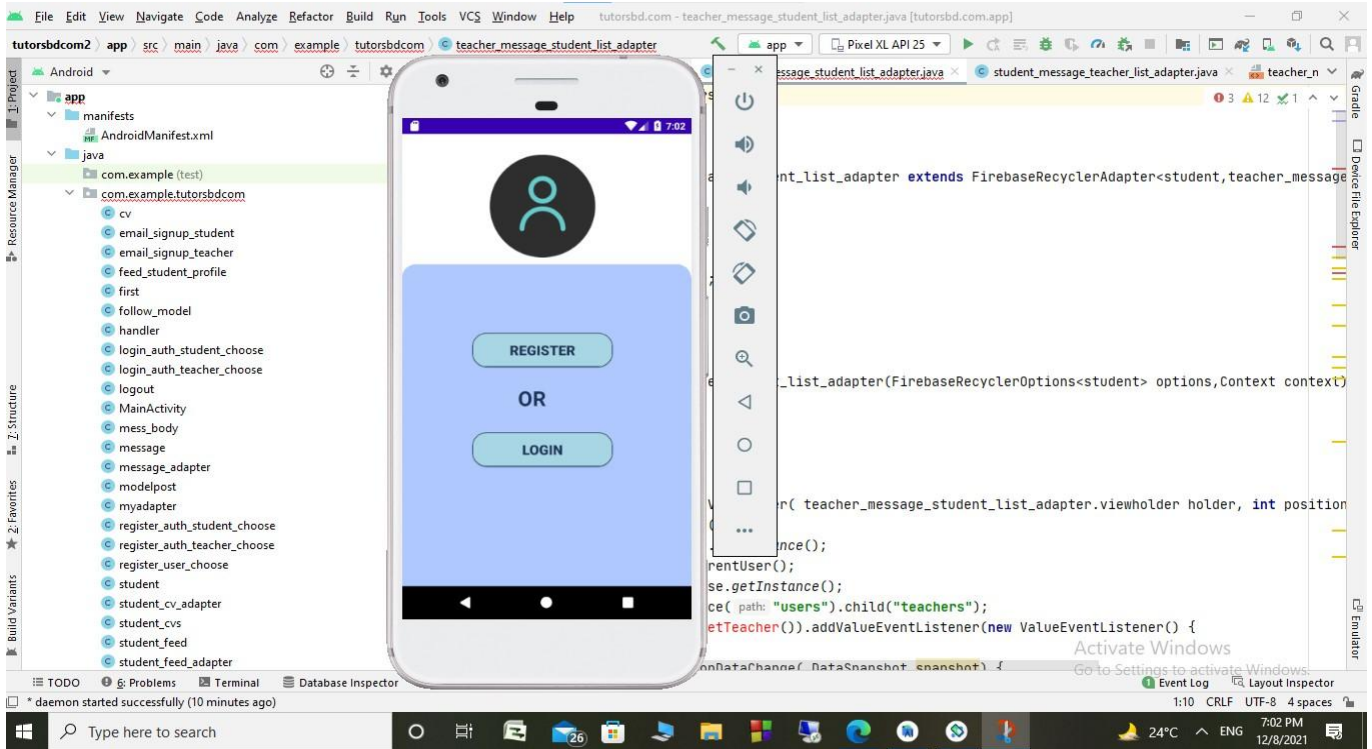


Figure: 4.1.2 User Login or register activity

Users can login or register to our application with clicking on these buttons. this is the second activity.

## 4.1.3 User Choose

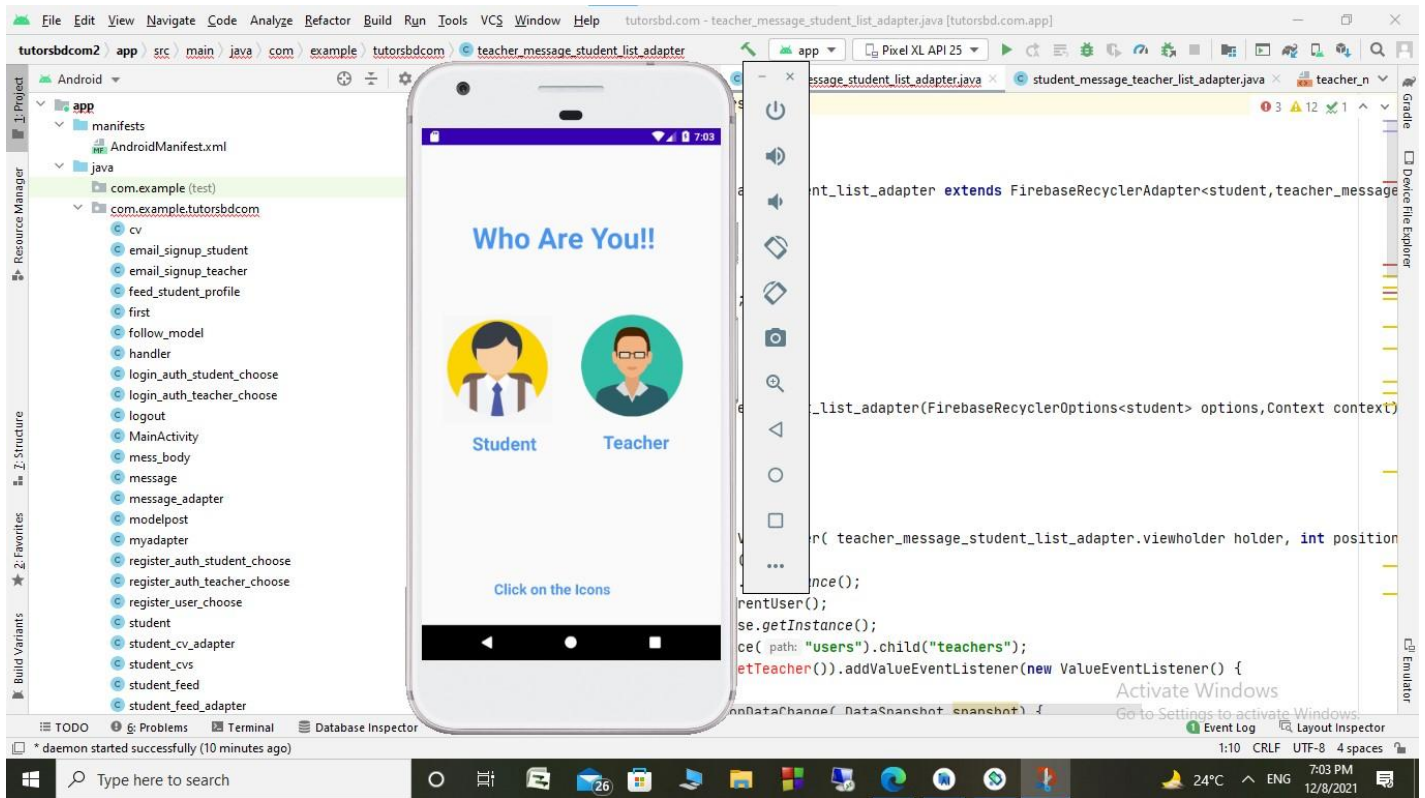


Figure: 4.1.3 User Choose activity

This tutorsbd application is for two module one is teacher other one is for the student Module.so clicking these buttons will direct the users to their module.

#### 4.1.4 Email or Phone Authentication

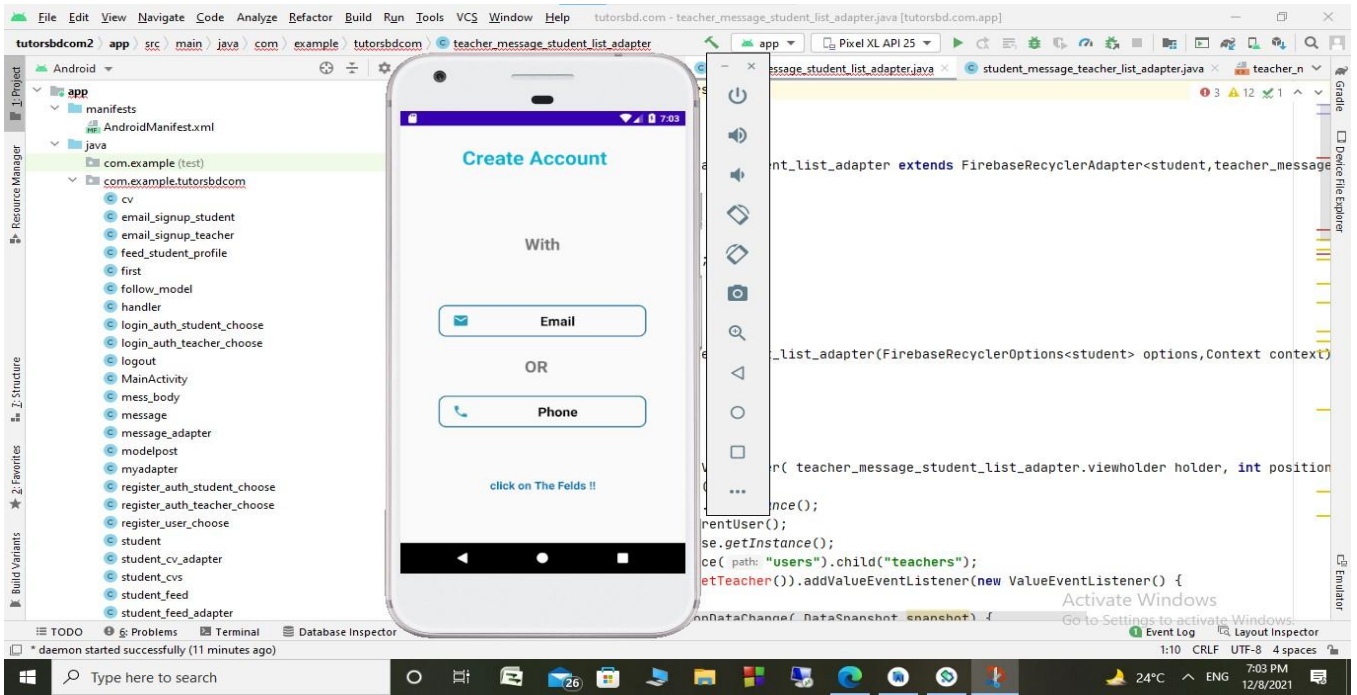


Figure: 4.1.4 Email or phone login activity

This is another option for the users to choose whether to login or register with email or phone.

### 4.1.5 Email Authentication

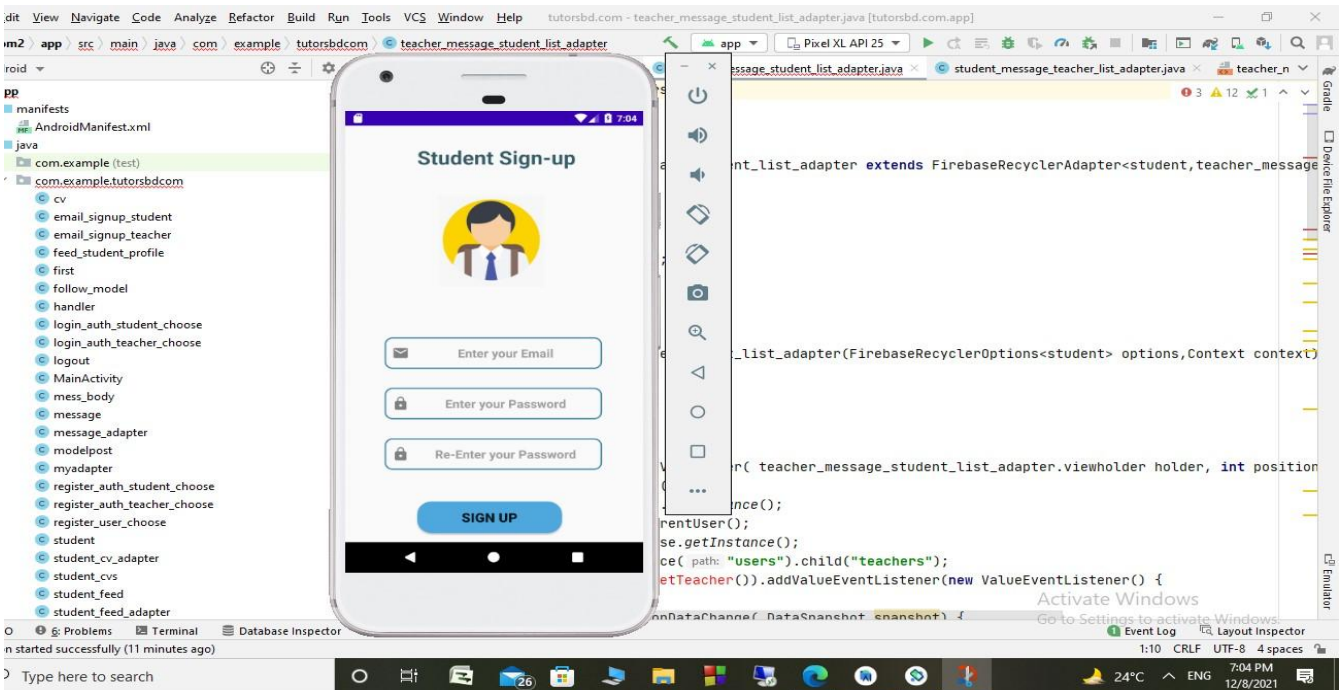


Figure: 4.1.5 Student sign-up activity

In this activity the user can sign up or login using email.

## 4.1.6 Mobile Authentication

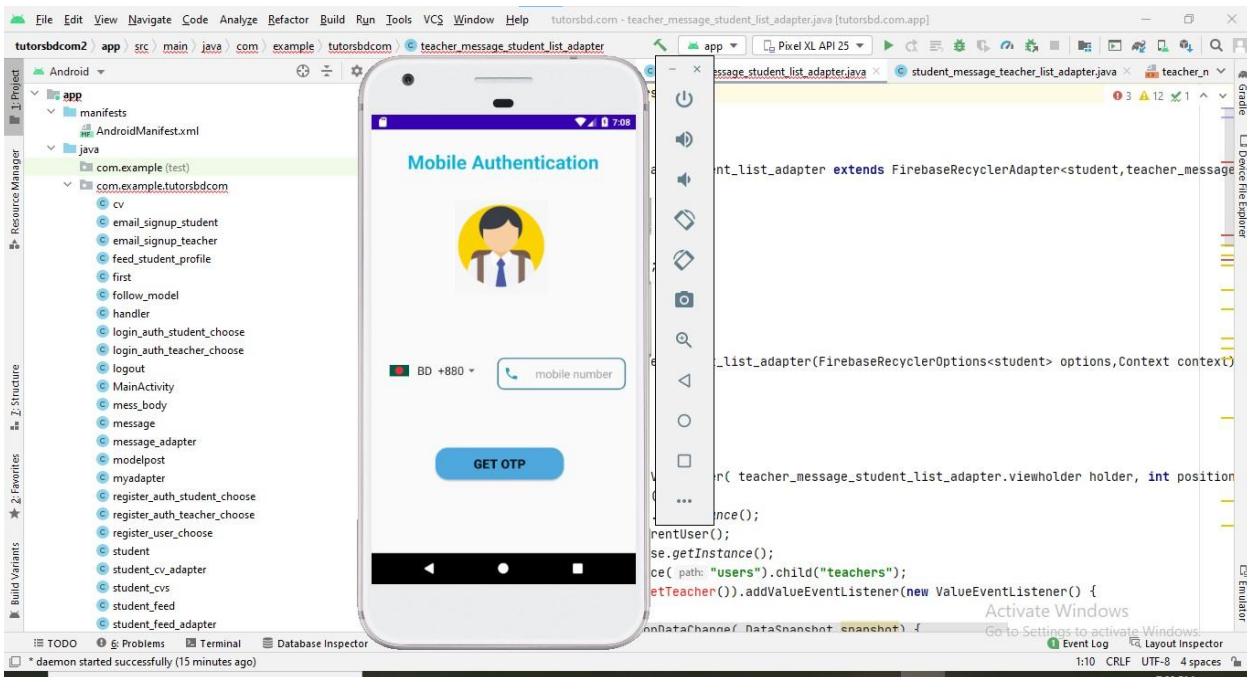


Figure: 4.1.6 User Login or registration with mobile

In this section the user will be able to login or register with their own mobile number. This is a very high security option. An otp is sent to user phone number and then the user will be able to login in this app.

## 4.1.7 Navigation bar

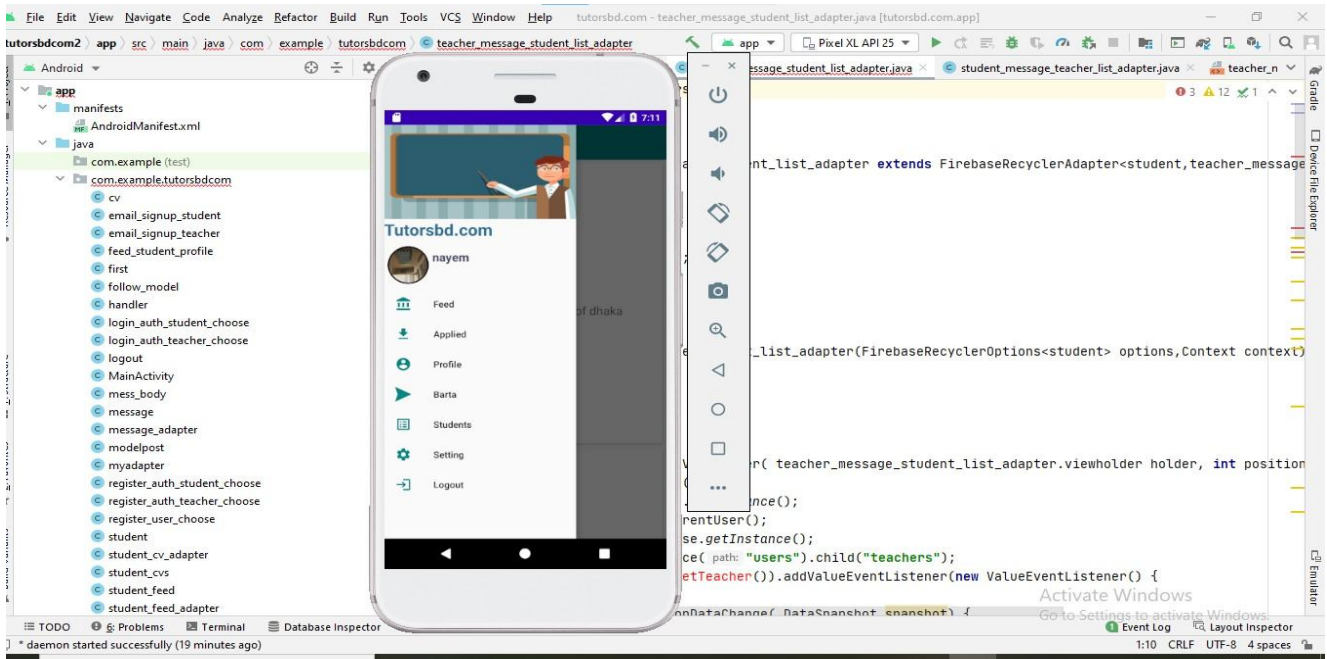


Figure: 4.1.7 Navigation bar for user interaction

In the navigation bar the user can see all the activities of this application.

#### 4.1.8 Feed

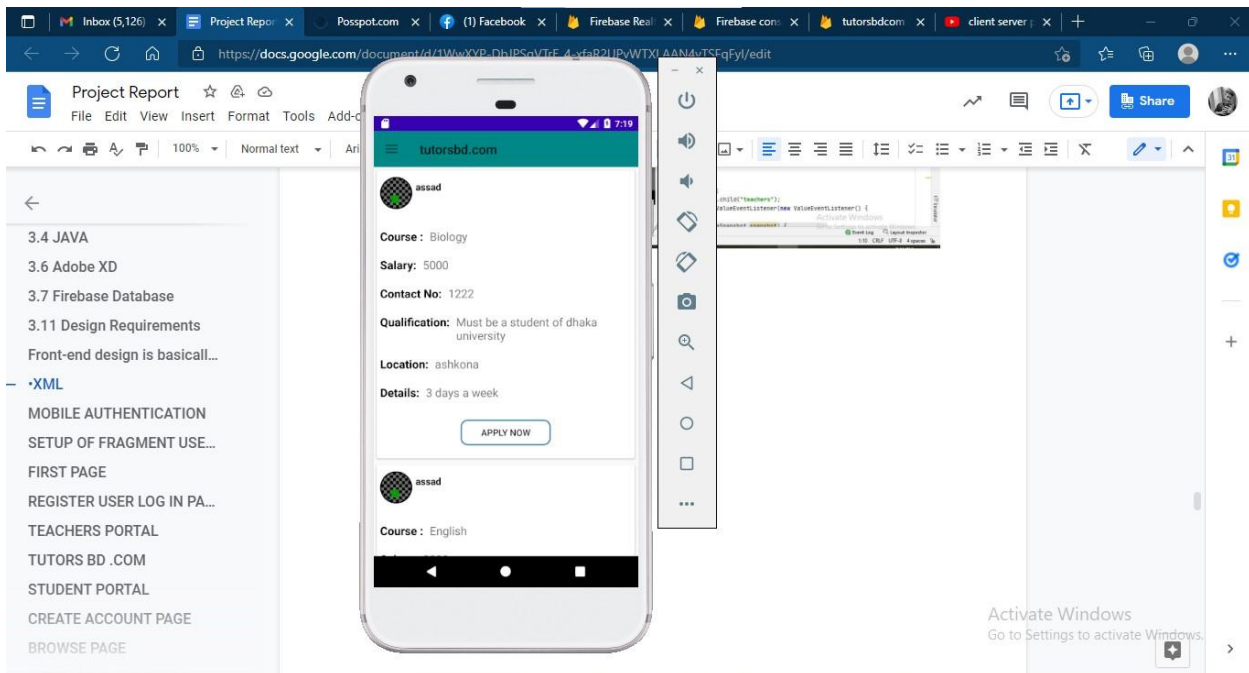


Figure: 4.1.8 User feed for job post

This is the user job feed activity where we can see many job post.

## 4.1.9 Applied Section

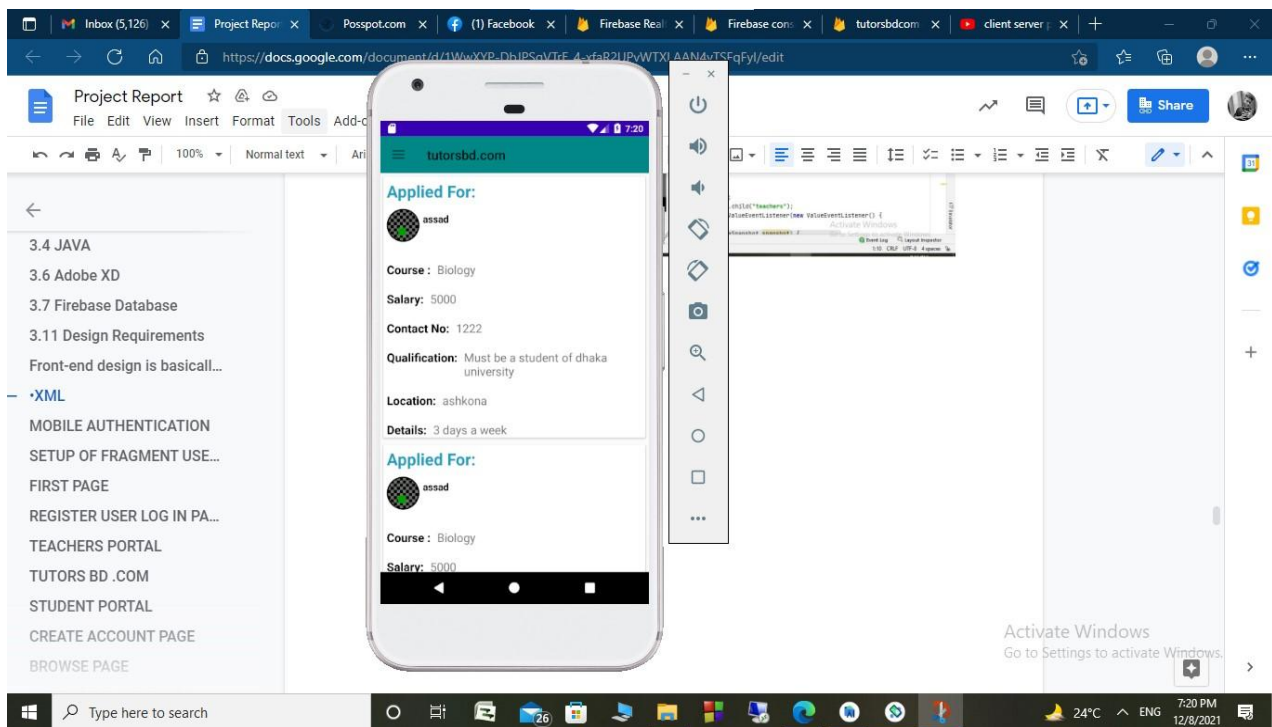


Figure: 4.1.9 teacher applied section

This Activity shows how many jobs you have applied for. This shows our history and can get track of the things done.

## 4.1.10 teacher and student list



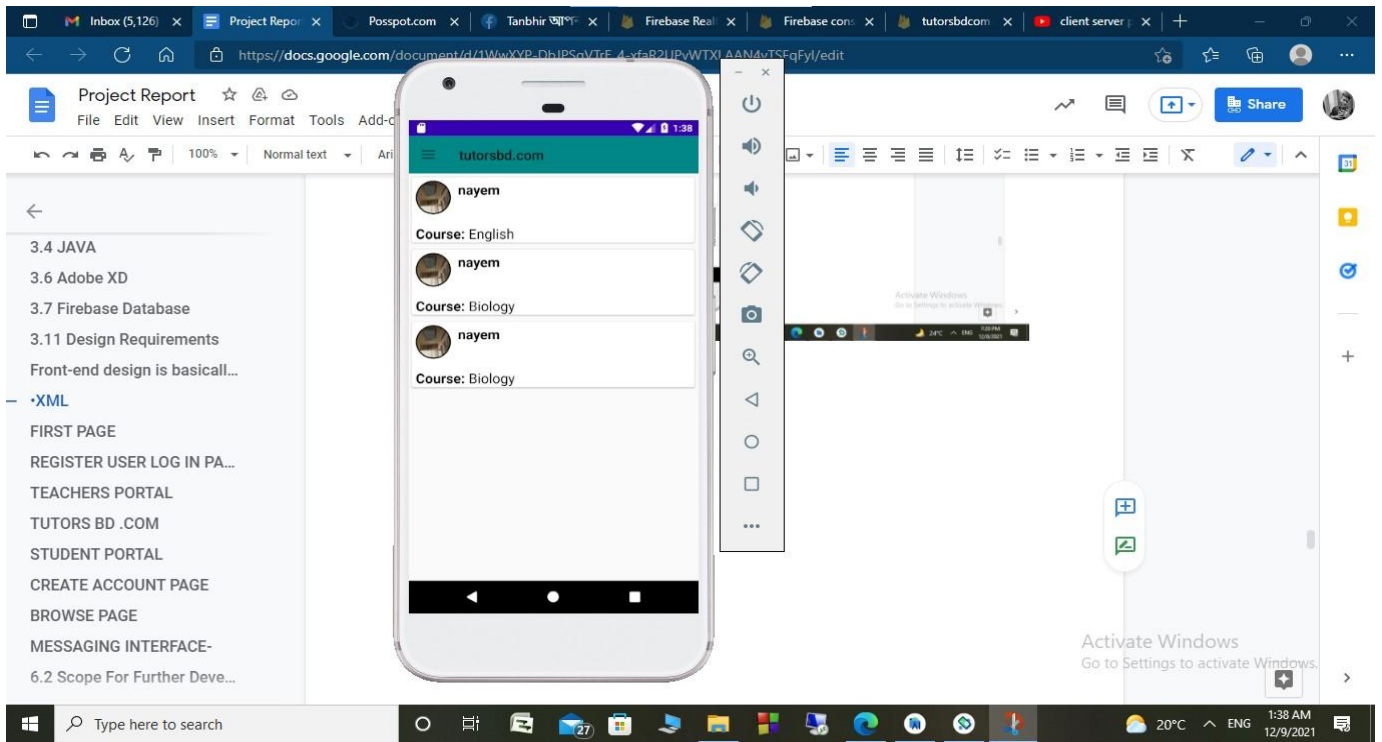


Figure: 4.1.10 teacher and student list

This fragment shows how many students and teachers you have in your profile.this is so useful

### 4.1.11 teacher and student profile

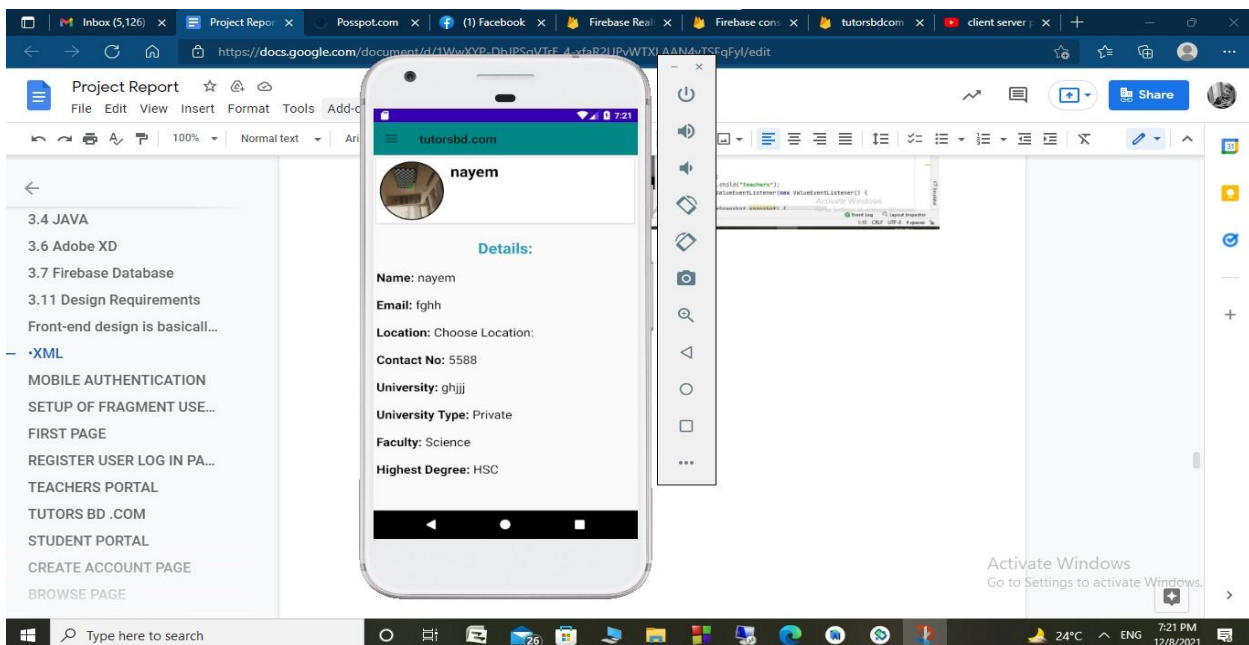


Figure: 4.1.11 teacher and student profile

This is the user profile area where you can see the details of users information.

## 4.1.12 CV

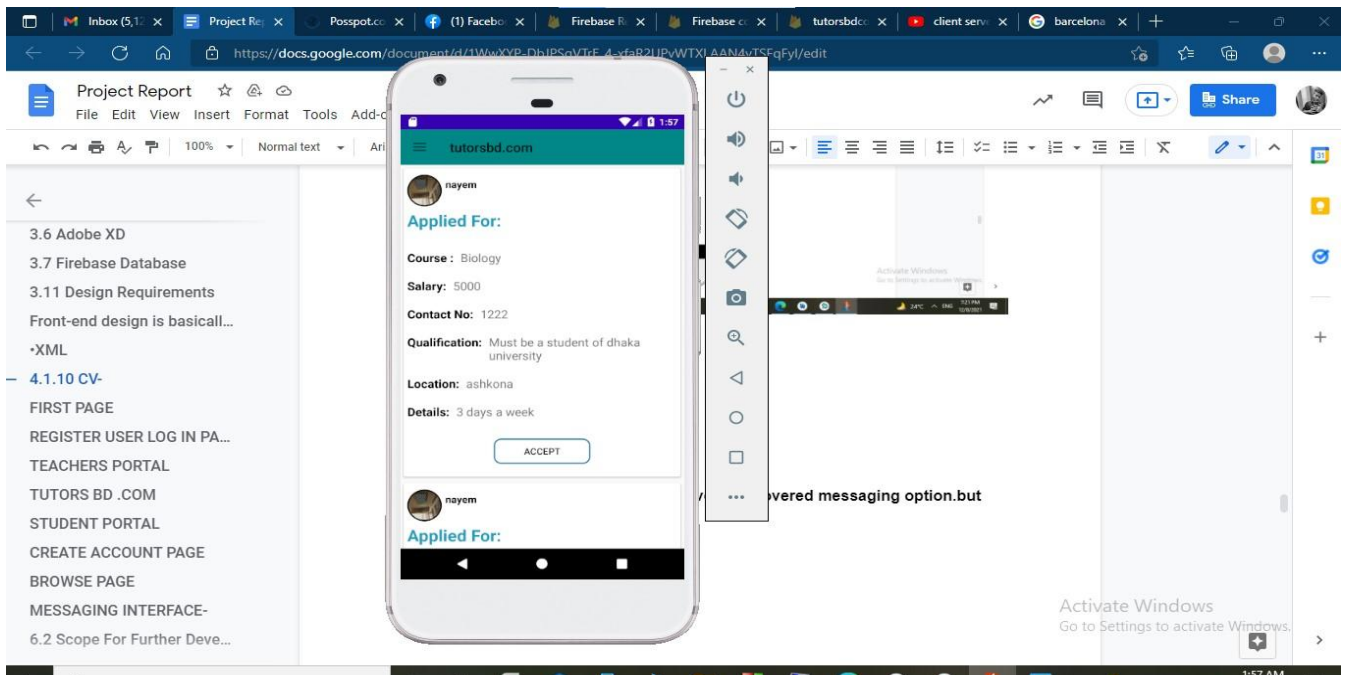


Figure: 4.1.12 students cv for applied teacher

In this section the student user will be able to check the teachers profile and who have applied.

## 4.1.13 Creating a post

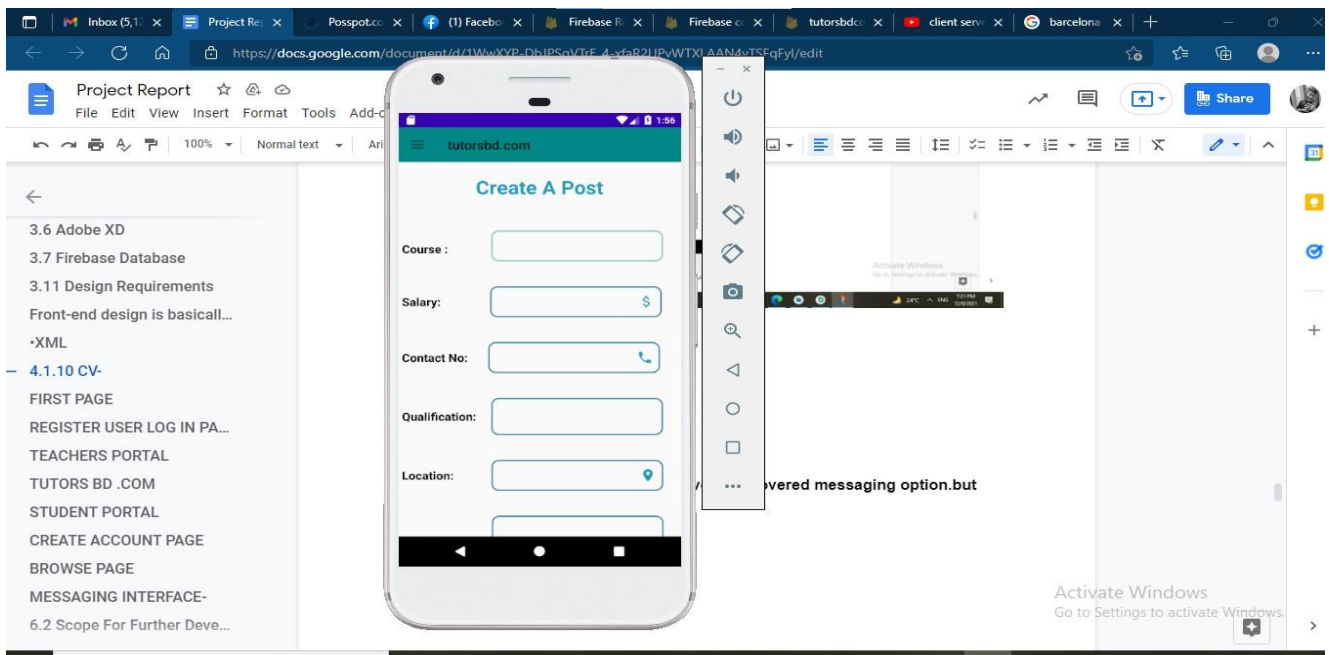


Figure: 4.1.13 student job post activity

This activity shows how to create a job post.this is a must activity for the student.



# CHAPTER 5

## IMPLEMENTATION AND TESTING

### 5.1 Implementation of database

Database plays a vital role for implementing any type of android and web project. In our project, we work with Firebase database for implementing the background task of the whole project. In our project, we store data of users and a lot of data. We also needed to store auth data to get proper results.

#### 5.1.1 Authentication

First step for implementing our project is that we need users who use our apps and for these users to be registered. And in this figure, this is the registered user lists who sign up in this app.

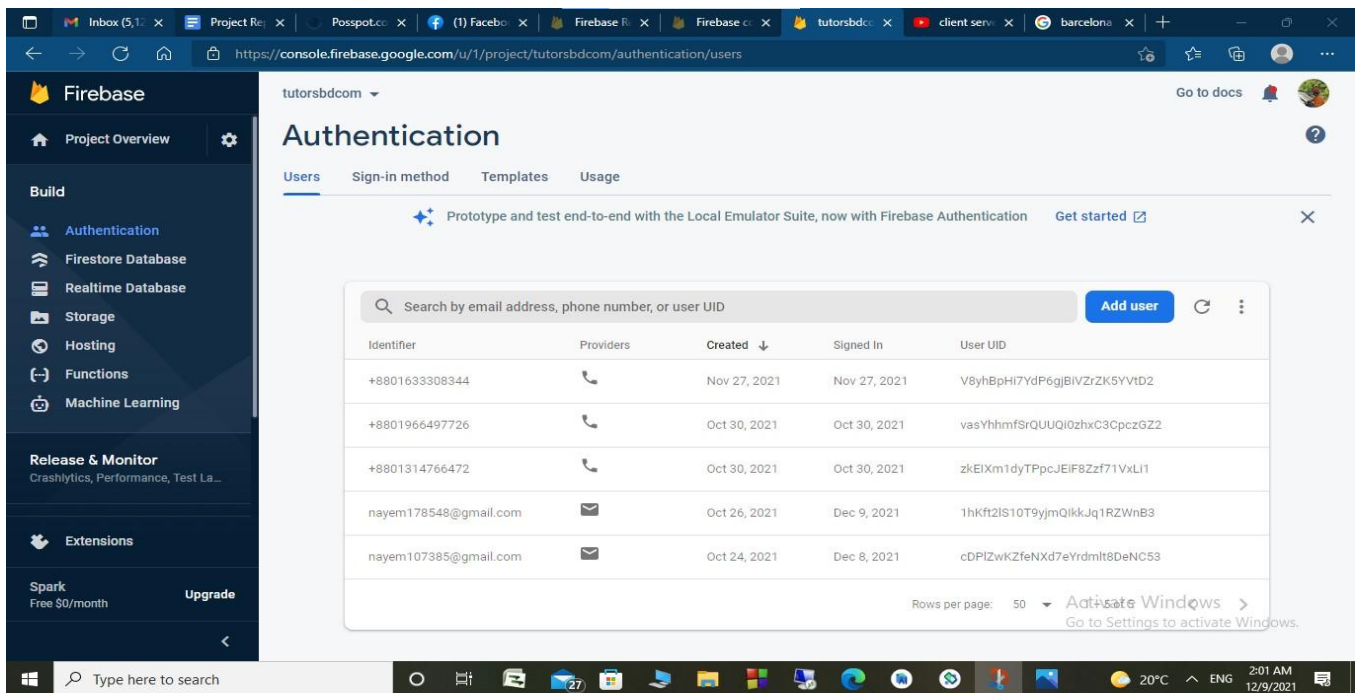


Figure: 5.1.1 user authentication

## 5.1.2 Database list of Branches

Here we have all the list of tables of our application.

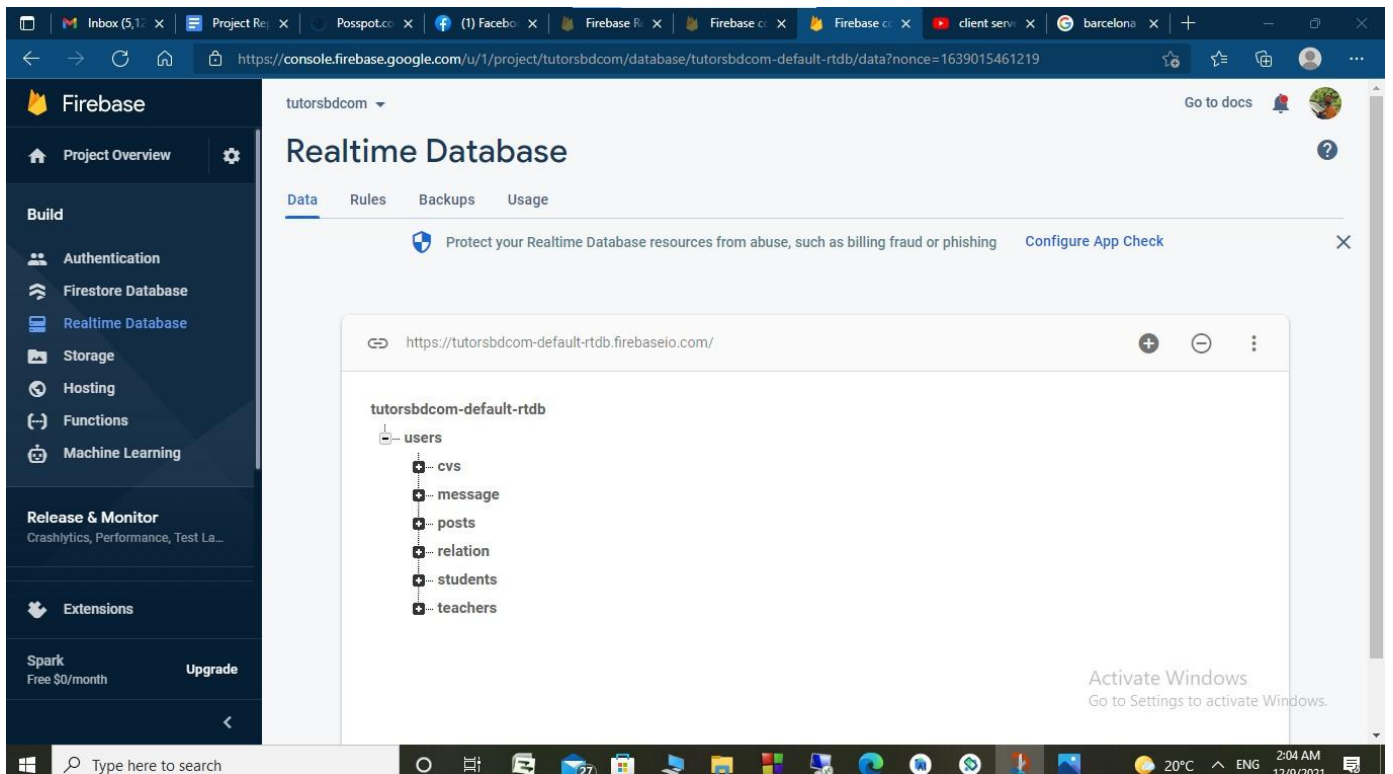


Figure: 5.1.2 All the table we have in our database

## 5.1.3 Students table

In this table we have our student users all the data. A unique key is given to each student.

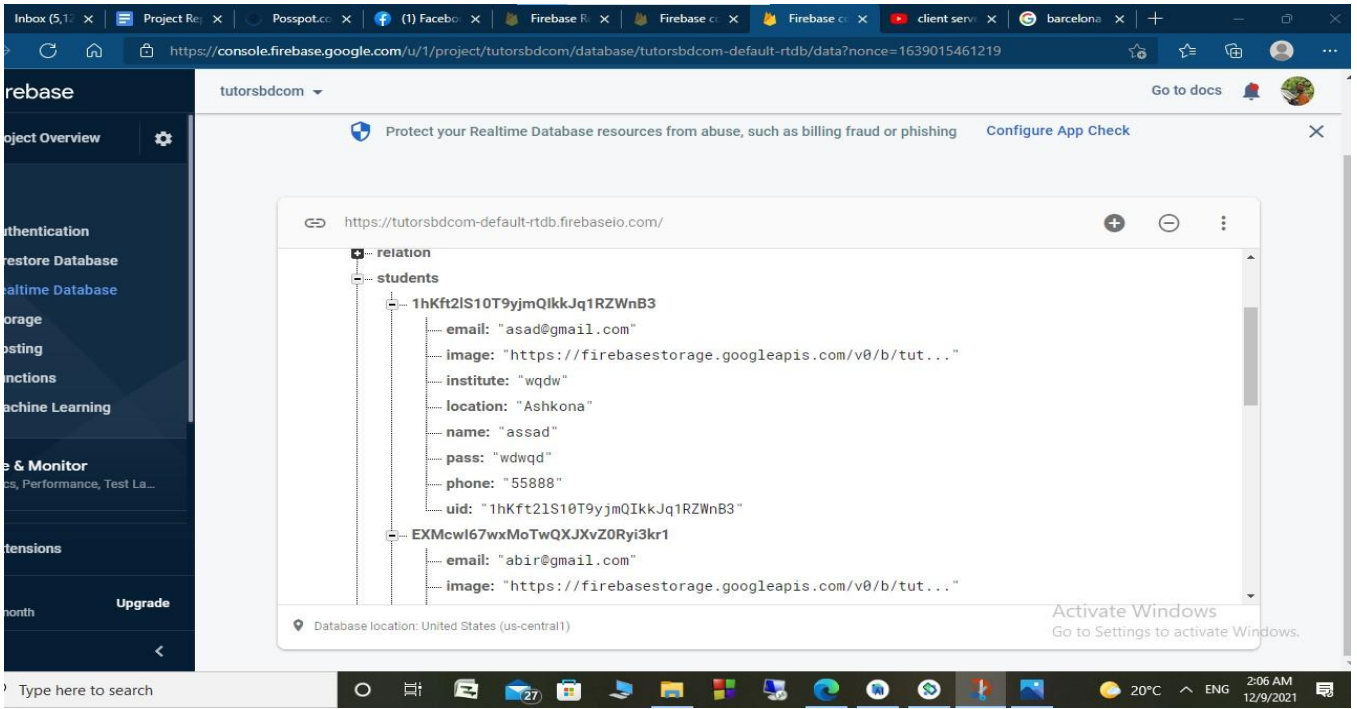


Figure: 5.1.3 students table

## 5.1.4 post table

In this table we have all the post information posted by the students.

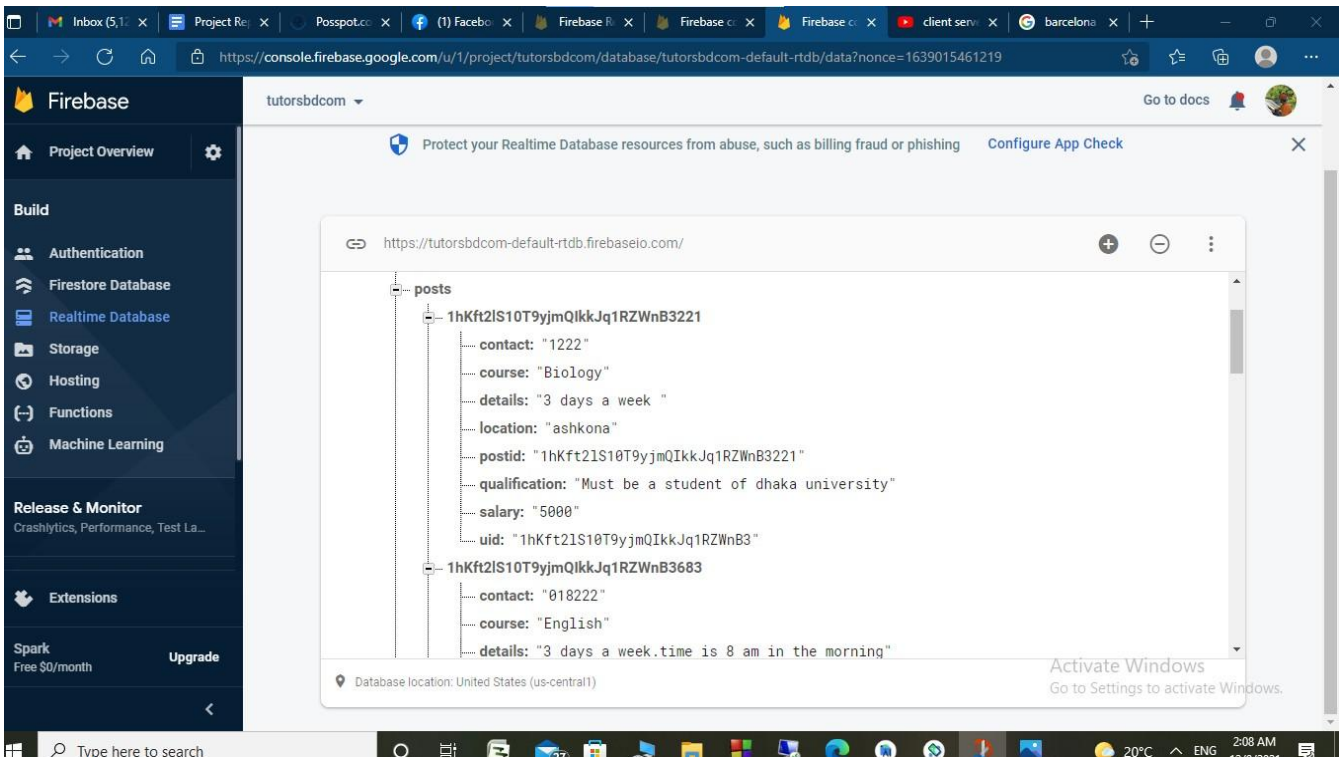


Figure: 5.1.4 post table

## 5.1.5 Message table

Message table contains the messages between the users.

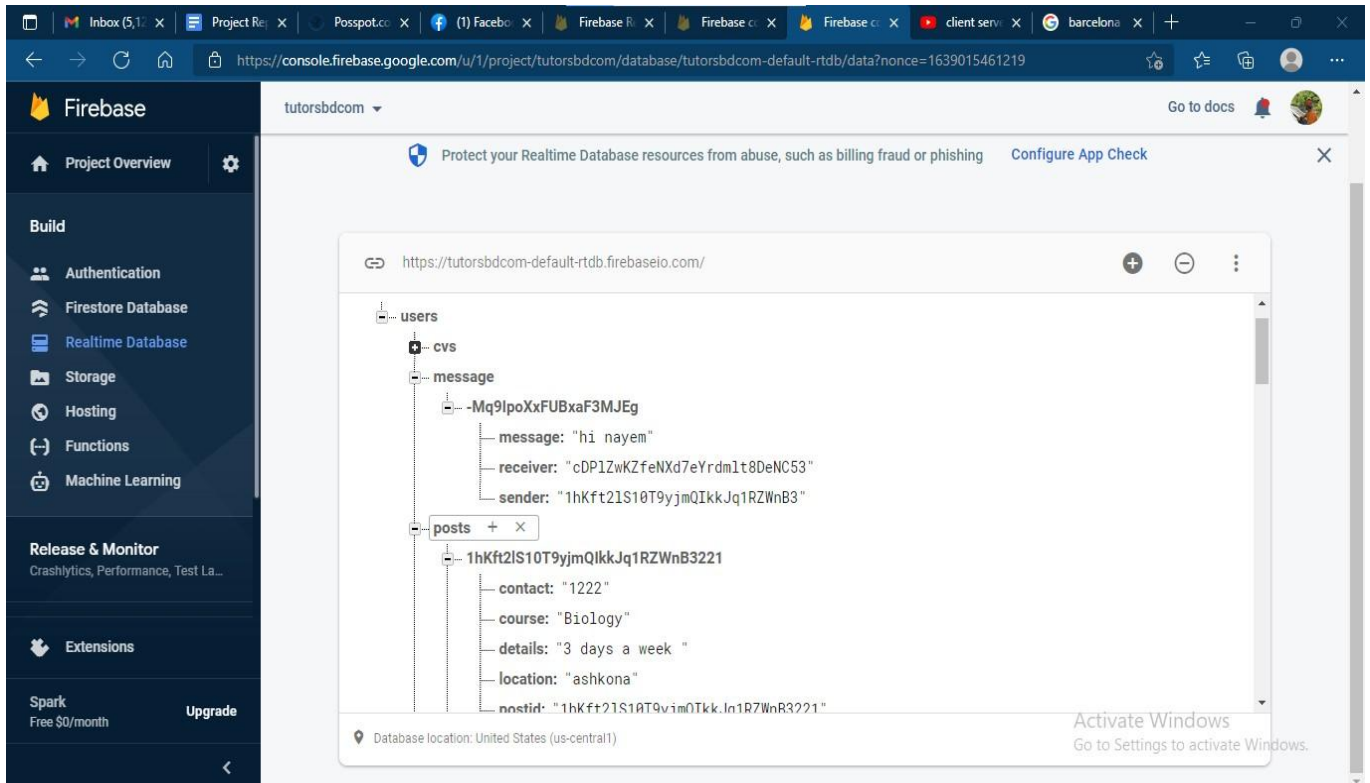


Figure: 5.1.5 Message table

## CHAPTER 6

### CONCLUSION AND FUTURE SCOPE

#### 6.1 Discussion and Conclusion

In today's lifestyle, people are moving faster to achieve a smart lifestyle. In this world we can see most of the people are using smartphones and doing their daily activities using smartphones. We see everything is common using smartphones but finding a teacher is something else. Hence, to make it familiar to everybody we are developing a feed bases app. By using this app every parent will be beneficial and the work rate will increase dramatically. And I must say that we are very blessed as our app is working fine . Our app helps them to keep their good work going, as here they easily maintain

#### 6.2 Scope For Further Development

Despite the fact that we needed to finish the tasks in a reasonable period of time, we were plainly unable to achieve our whole objective. So, what exactly is the point that we need to create in order to expand our scope? For this tutorsbd system, we can incorporate a website also. Because some people choose to utilize an application rather than a website. However, we are attempting to include a chat to the system. As a result, users will be able to discover what they require. Our AI bot will respond and save the user's information for future queries. As a result, the bot can provide an immediate and informative response to the user. Another restriction of the system is that it does not now support money payment methods; however, we will add other types of payment methods to this program in the future. So that's everything there is to know about our project and its long-term goals. If all of these procedures are followed, this may be the finest tutors app ever.

#### 6.3 Limitations

This app will help to communicate with teachers and students easily. some limitations are here. but in the future we will overcome these problems



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# Plagiarism Report

Plagiarism Report of our is–

