

TUTOR FINDER APP

REPORT OF MAJOR PROJECT SUBMITTED FOR PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE OF

MASTERS OF COMPUTER APPLICATION

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UNIVERSITY ROLL NO: **11701015014**

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UNDER THE SUPERVISION OF

MRS.SATABDWI SARKAR

Assistant Professor



AT

RCC INSTITUTE OF INFORMATION TECHNOLOGY

Affiliated to Maulana Abul Kalam Azad University of Technology

RCC INSTITUTE OF INFORMATION TECHNOLOGY

Kolkata-700015, India



CERTIFICATE

The report of the Project titled "Tutor Finder" Submitted by **BISHAL MANDAL** (**Roll No – 11701015014** Of MCA 6th Semester of 2017-18) has been developed under my supervision for the partial fulfilment of the requirements for MCA degree in Maulana Abul Kalam Azad University Of Technology. The report is hereby forwarded.

Satabdwi Sarkar
Dept. Of CA
RCCIIT, KOLKATA

Countersigned By

(Arup Kumar Bhattacharjee)
Department of CA
RCCIIT, 700015, INDIA

RCC INSTITUTE OF INFORMATION TECHNOLOGY

Kolkata-700015, India



CERTIFICATE

The report of the Project titled "Tutor Finder" Submitted by **TANUSREE RUJ** (Roll No – **11701015053** Of MCA 6th Semester of 2017-18) has been developed under my supervision for the partial fulfilment of the requirements for MCA degree in Maulana Abul Kalam Azad University Of Technology. The report is hereby forwarded.

Satabdwi Sarkar
Dept. Of CA
RCCIIT, KOLKATA

Countersigned By

(Arup Kumar Bhattacharjee)
Department of CA
RCCIIT, 700015, INDIA

Acknowledgement

We express our sincere gratitude to Asst. Mrs Satabdwi Sarkar of Department Computer Application, RCCIIT and for extending his valuable time for us to take up this problem as a project.

Last but not the least I would like to express my gratitude to Mr. Falguni Adhikari of our department who helped us in their own way whenever needed.

Date:

(Signature of the Student)

Reg No: 151170510014 of 2015-2016

Roll No: 11701015014

MCA-6th semester

Session-2015-2018,RCCIIT

Date:

(Signature of the Student)

Reg No: 151170510054 of 2015-2016

Roll No: 11701015053

MCA-6th semester

Session-2015-2018,RCCIIT

RCC INSTITUTE OF INFORMATION TECHNOLOGY



CERTIFICATE OF ACCEPTANCE

The report of the project titled "Tutor Finder" submitted by **BISHAL MANDAL** (Roll No: **11701015014** Of MCA 6th semester of 2017-18) and **TANUSREE RUJ** (Roll No: **11701015053** Of MCA 6th semester of 2017-18), is hereby recommended to be accepted for the partial fulfilment of the requirements for MCA degree in Maulana Abul Kalam Azad University Of Technology.

Name of the Examiner(s)

Signature with Date

1. _____

2. _____

TUTOR FINDER APP

PURPOSE:

The purpose of “Tutor Finder” app is a tool to assist the students/parents to find private tutors in an interactive manner. It aims to complement the efforts of a student to find a desirable teacher.

SCOPE:

Scope of this project is very broad in terms of other manually finding teachers.

Few of them are:

- This can be used by parents to find teachers whenever needed.
- Can be used anywhere any time as it is a mobile application.
- This app can be used by many students who love teaching as a part time job.

FEATURES:

- Secure
- Easy to use
- Reliable and accurate
- No need to go to any places

OVERVIEW:

The online private tutor application is created for searching private tutors efficiently.

- ❖ Sign up
- ❖ Login
- ❖ Creating profile
- ❖ Sending request
- ❖ Chat

SIGN UP & LOGIN:

At first the teachers/students/parents need to register themselves. After registering, registered candidates can log in by giving username and password. Each and every user has their unique username and password.

CREATING PROFILE:

After logging in candidates needed to choose one category between teachers or students. And need to fill up the form accordingly.

SENDING REQUEST:

After choosing the suitable teacher students can send a request to the teacher. Teacher will have two options ACCEPT/REJECT.

CHAT:

If the teacher accept the request then teacher & student can communicate with each other in the inbuilt chat box and can exchange numbers.

TECHNOLOGY USED:

Database: Google Firebase.

Development Platform: Android Studio.

TOOLS USED:

Editor Used: Android Studio with Java, Google Firebase.

Operating System: Windows 10.

FEASIBILITY STUDY:

ECONOMIC FEASIBILITY:

Economic analysis is most frequently used for evaluation of the effectiveness of the system. More commonly known as cost/benefit analysis the procedure is to determine the benefit and saving that are expected from a system and compare them with costs, decisions is made to design implement the system.

This part of feasibility study gives the top management the economic justification for the new system. This is an important input to the management, because very often the top management does not like to get confounded by the various technicalities that bound to be associated with a project of this kind. A simple economic analysis that gives the actual comparison of costs and benefits is much more meaningful in such cases.

In the system, the organization is most satisfied by economic feasibility. Because, if the organization implements this system, it need not require any additional hardware resources as well as it will be saving a lot of time.

TECHNICAL FEASIBILITY:

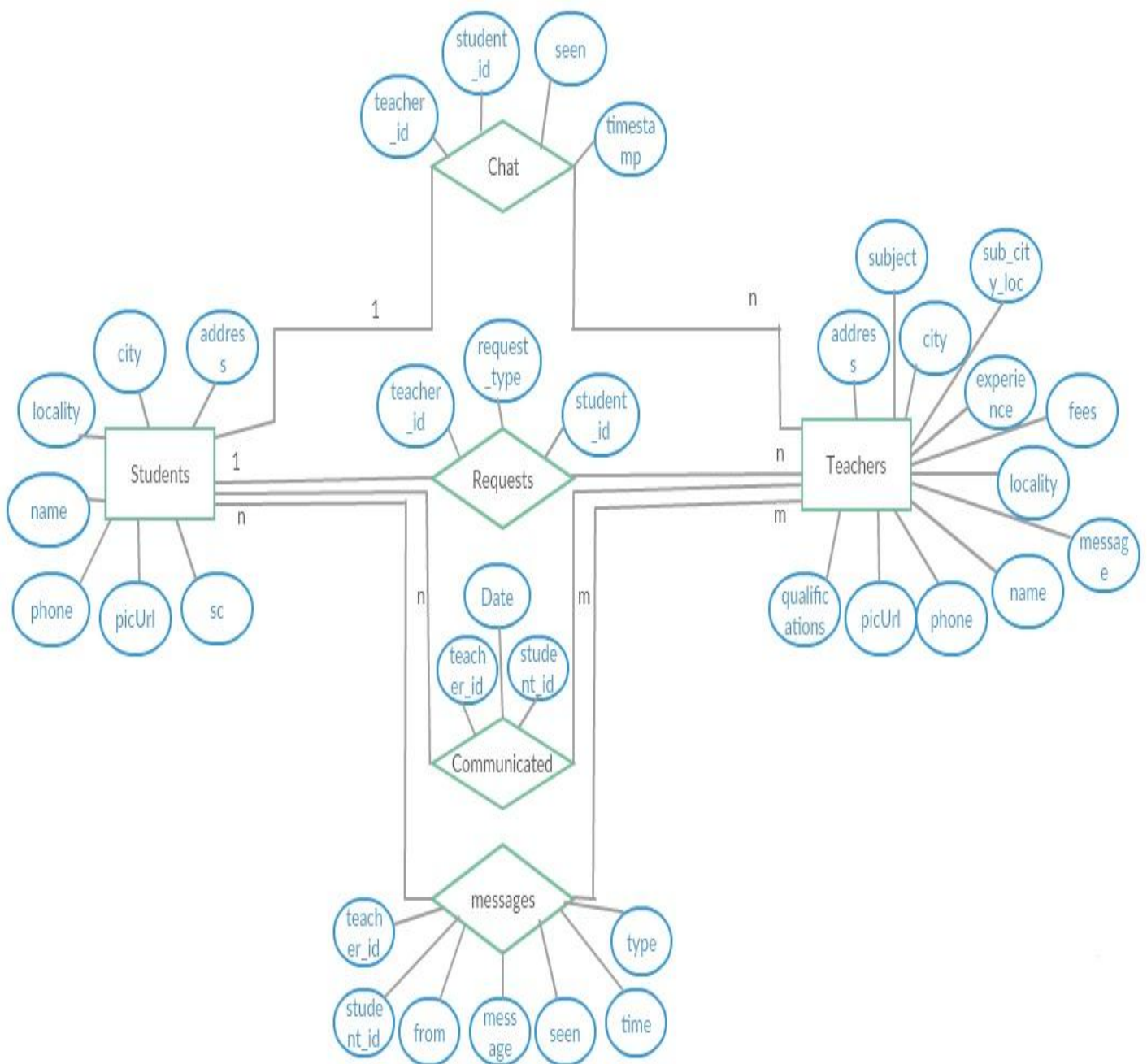
Technical feasibility centres on the existing manual system of the test management process and to what extent it can support the system. According to feasibility analysis procedure the technical feasibility of the system is analysed and the technical requirement such as software facilities, procedure, inputs is identified. It is also one of the important phases of the system development activities.

The system offers greater levels of user friendliness combined with greater processing speed. Therefore, the cost of maintenance can be reduced. Since processing speed is very high and the work is reduced in the maintenance point of view management convince that the project is operationally feasible.

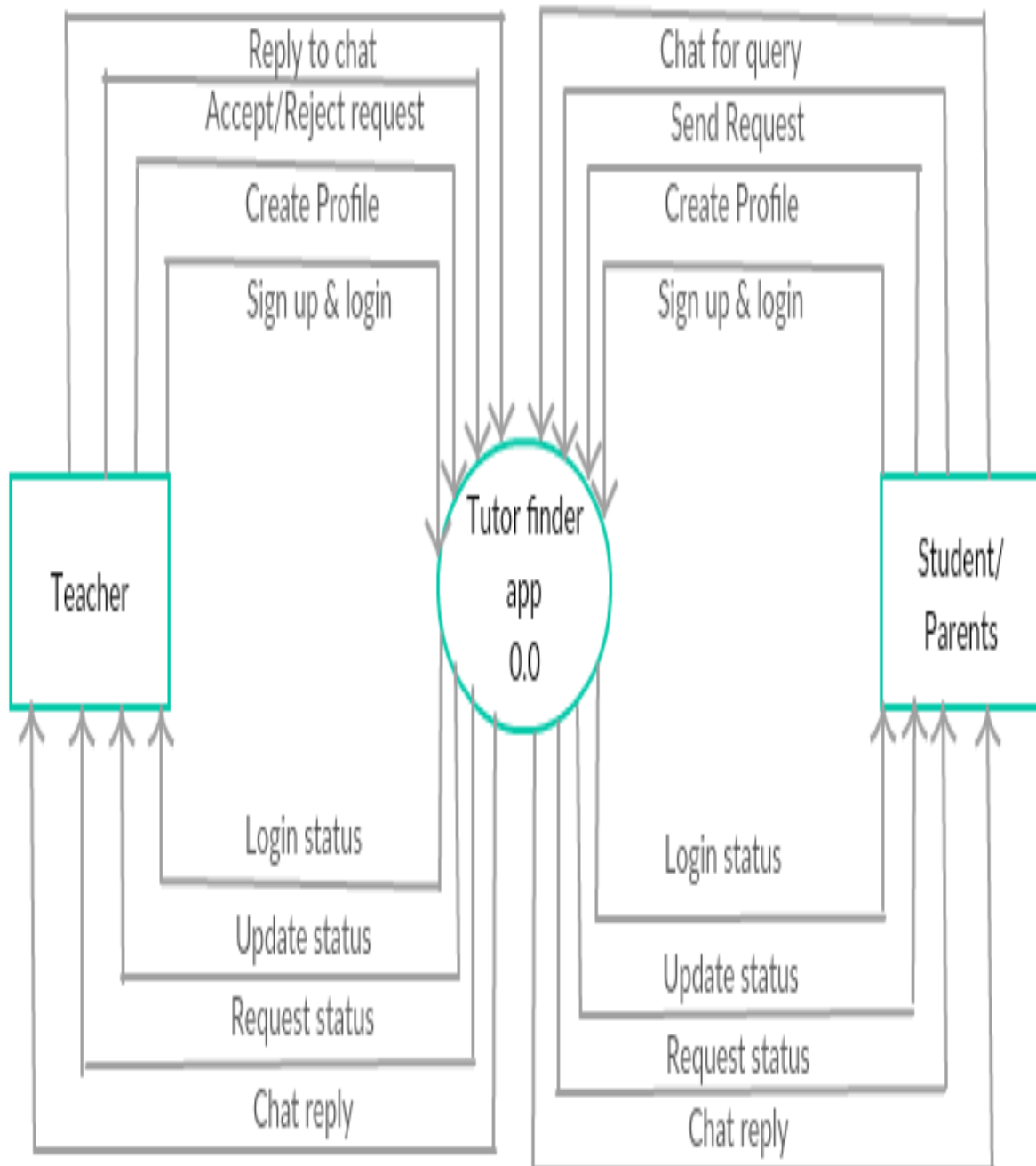
BEHAVIOURAL FEASIBILITY:

People are inherently resistant to change and computer has been known to facilitate changes. An estimate should be made of how strong the user is likely to move towards the development of computerized system. These are various levels of users in order to ensure proper authentication and authorization and security of sensitive data of the organization.

ENTITY-RELATIONSHIP DIAGRAM

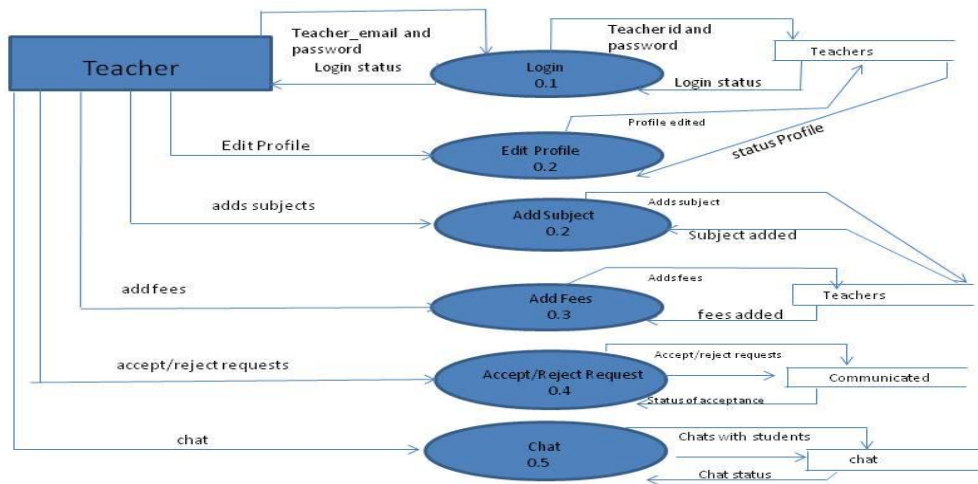


DATA-FLOW-DIAGRAM



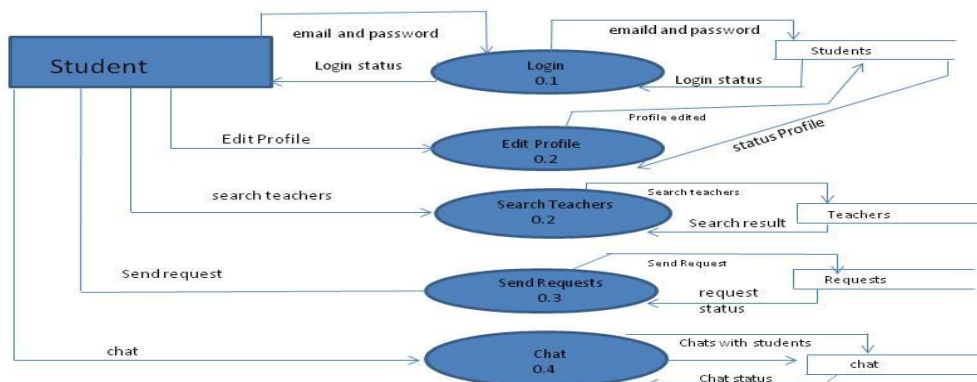
DATA FLOW DIAGRAM

Level 1 DFD



DFD Level 1

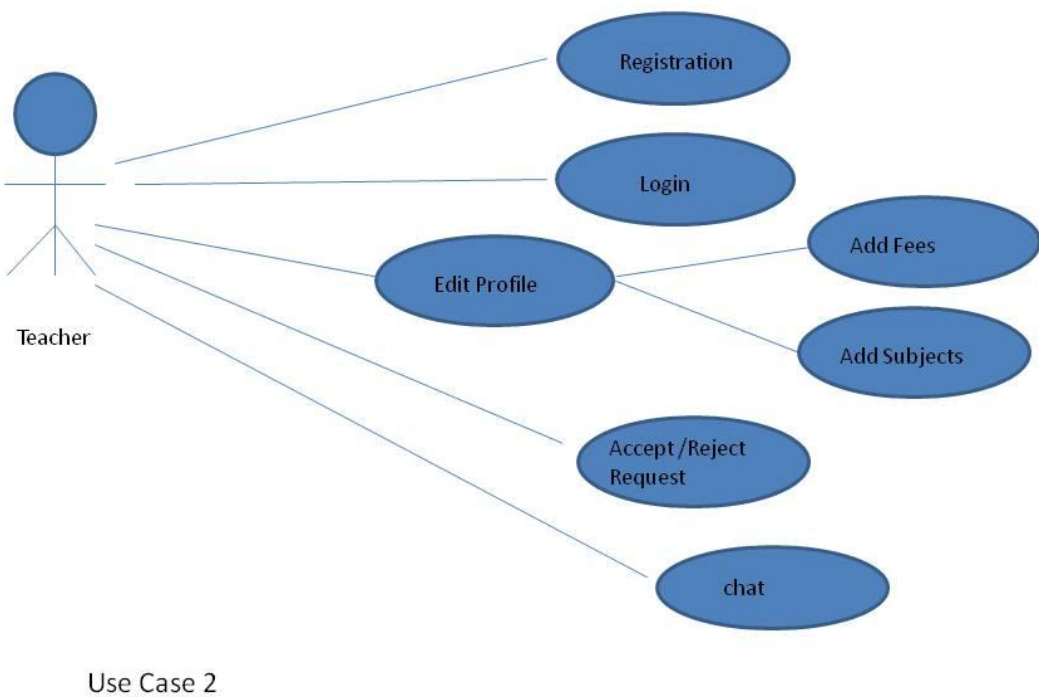
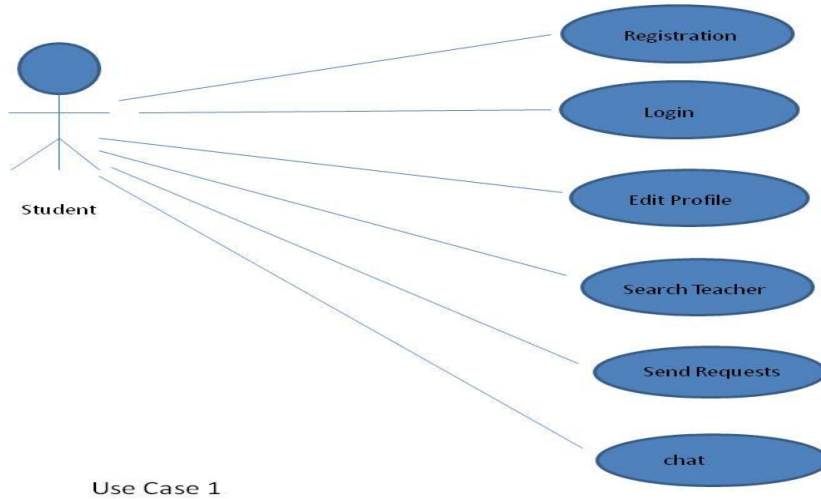
Teacher



DFD Level 1

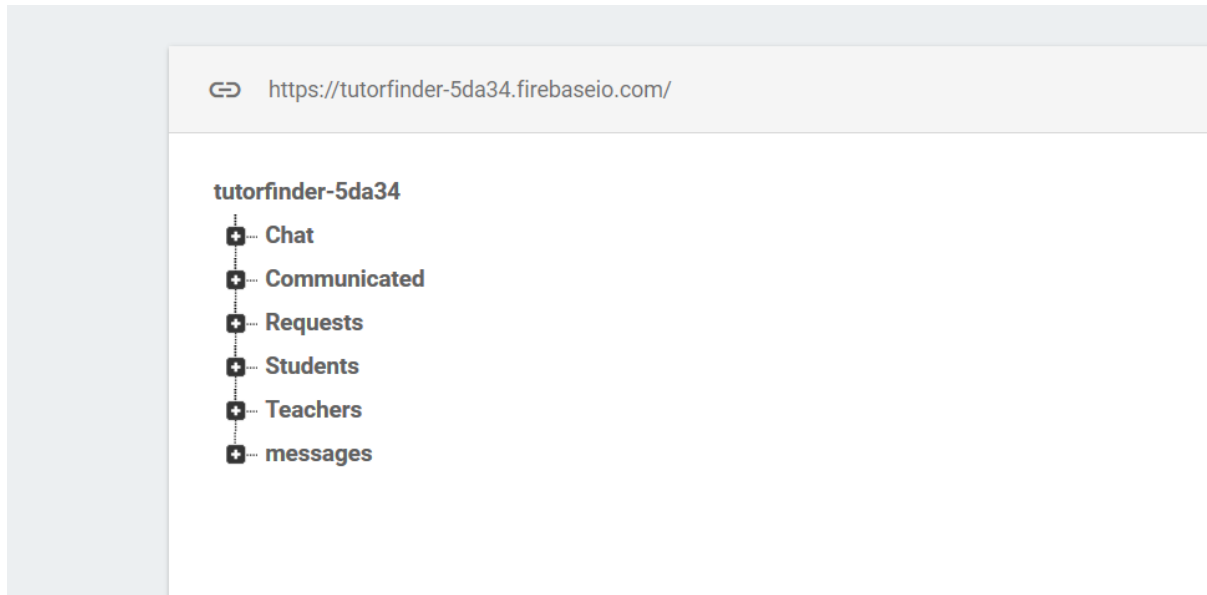
Student

USE CASE DIAGRAMS

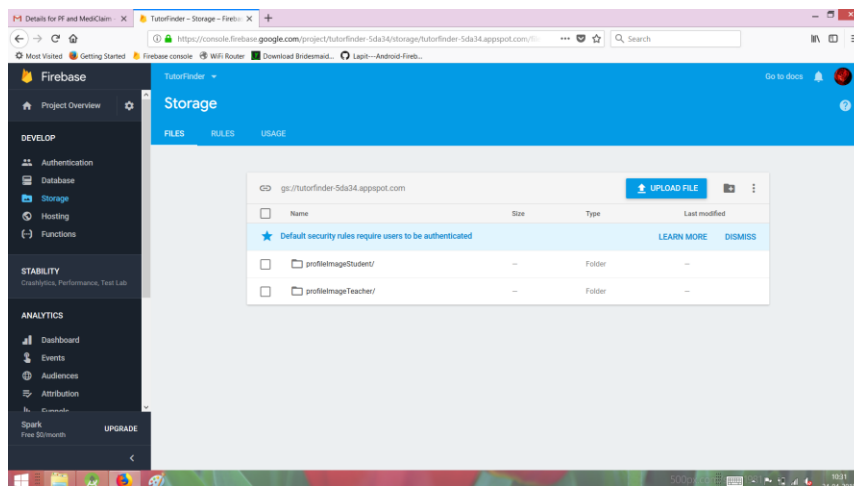


DATABASE STRUCTURE

Overall database



Overall storage



Database of Students

Students

9LwTkyxJInO8eKJaS6JtlzZrQ2I3

- address: "Basundhara Complex"
- city: "Kolkata"
- locality: "Chingrighata"
- name: "Tanusree Ruj"
- phone: "9966332255"
- picUrl: "https://firebasestorage.googleapis.com/v0/b/tut..."
- sc: "DAV Public School"

Database of Teachers

Teachers

RCxz3IFgy6fTEDrtBMMktFZHEA42

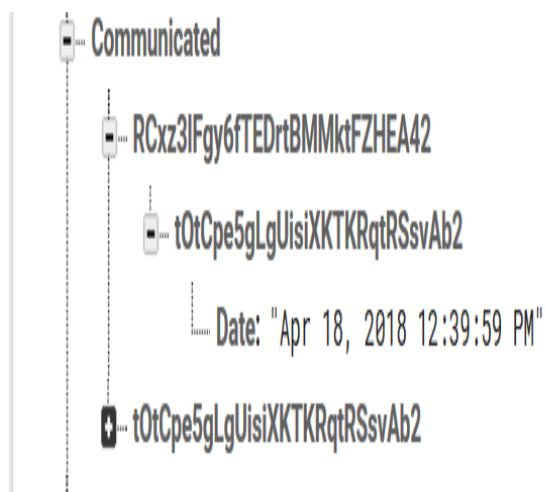
- address: "TR Road"
- city: "Kolkata"
- experience: "less than 1 year"
- fees: "600" ×
- locality: "Chingrighata"
- message: "hi"
- name: "Sayan Gupta"
- phone: "9955114477"
- picUrl: "https://firebasestorage.googleapis.com/v0/b/tut..."
- qualifications: "BCA"
- sub_city_loc: "c programming_kolkata_chingrighata"
- subject: "C Programming"

Database of requests



ids of teachers and students
who sent and received
requests with type

Database of communicated

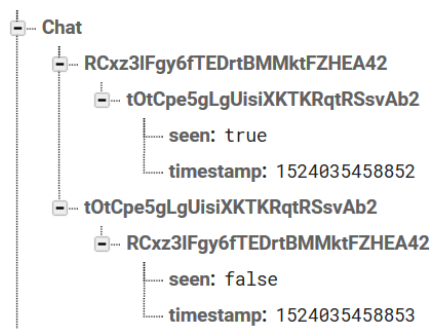


student/teacher ids with date

Database of messages



Database of chats



chats with seen and timestamp value

SAMPLE CODE

```
package onlinetutor.onlinetutorapp;

import android.app.ProgressDialog;
import android.content.DialogInterface;
import android.content.Intent;
import android.support.annotation.NonNull;
import android.support.v4.view.ViewPager;
import android.support.v7.app.AlertDialog;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Patterns;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.TextView;
import android.widget.Toast;

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseAuthUserCollisionException;
import com.google.firebase.auth.FirebaseUser;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;

import java.util.HashMap;
import java.util.Timer;
import java.util.TimerTask;

public class StartActivity extends AppCompatActivity {

    //Firebase
    private FirebaseAuth firebaseAuth;
    private DatabaseReference mRootRef;
    //Android
    private Button buttonRegister,buttonLogin;
    private EditText editTextEmail, editTextPassword,editTextEmail1,
editTextPassword1;
    private TextView
textViewContactUs, textViewForgotPassword, textViewSignUp, textViewSignin;
    private ProgressDialog progressDialog,progressDialog1,progressDialog2;
    private ViewPager viewPagerSlides;
    private ProgressBar progress;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_start);
        //Firebase
        firebaseAuth=FirebaseAuth.getInstance();
        mRootRef= FirebaseDatabase.getInstance().getReference();

        //Android
        progress=(ProgressBar) findViewById(R.id.progress);
        //Register
        buttonRegister = (Button) findViewById(R.id.buttonRegister);
        editTextEmail = (EditText) findViewById(R.id.editTextEmail);
        editTextPassword = (EditText) findViewById(R.id.editTextPassword);
        textViewSignin=(TextView) findViewById(R.id.textViewSignin);
        //Login
        buttonLogin = (Button) findViewById(R.id.buttonLogin);
        editTextEmail1 = (EditText) findViewById(R.id.editTextEmail1);
```

```

        editTextPassword1 = (EditText) findViewById(R.id.editTextPassword1);
        textViewForgotPassword=(TextView) findViewById(R.id.textViewForgotPassword);
        textViewSignUp=(TextView) findViewById(R.id.textViewSignUp);
//Slides
        viewPagerSlides=(ViewPager) findViewById(R.id.viewPagerSlides);
        ViewPagerSlidesAdapter viewPagerSlidesAdapter = new
ViewPagerSlidesAdapter (this);
        viewPagerSlides.setAdapter (viewPagerSlidesAdapter);

        Timer timer=new Timer();
        timer.scheduleAtFixedRate(new MyTimerTask(),1000,2000);
//Contact Us
        textViewContactUs=(TextView) findViewById(R.id.textViewContactUs);

        progressDialog=new ProgressDialog (this);
        progressDialog.setTitle ("Logging you in");
        progressDialog.setMessage ("Please Wait...");
        progressDialog.setCanceledOnTouchOutside (false);
//Register
        progressDialog1=new ProgressDialog (this);
        progressDialog1.setTitle ("Registering User...");
        progressDialog1.setMessage ("Please Wait...");
        progressDialog1.setCanceledOnTouchOutside (false);
//Login
        progressDialog2=new ProgressDialog (this);
        progressDialog2.setTitle ("Logging you in");
        progressDialog2.setMessage ("Please Wait...");
        progressDialog2.setCanceledOnTouchOutside (false);

        textViewSignUp.setOnClickListener (new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                progress.setVisibility(View.VISIBLE);
                editTextEmail1.setVisibility(View.GONE);
                editTextPassword1.setVisibility(View.GONE);
                buttonLogin.setVisibility(View.GONE);
                textViewSignUp.setVisibility(View.GONE);
                textViewForgotPassword.setVisibility(View.GONE);

                editTextEmail.setVisibility(View.VISIBLE);
                editTextPassword.setVisibility(View.VISIBLE);
                buttonRegister.setVisibility(View.VISIBLE);
                textViewSignin.setVisibility(View.VISIBLE);
                progress.setVisibility(View.GONE);
            }
        });

        textViewSignin.setOnClickListener (new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                progress.setVisibility(View.VISIBLE);
                editTextEmail.setVisibility(View.GONE);
                editTextPassword.setVisibility(View.GONE);
                buttonRegister.setVisibility(View.GONE);
                textViewSignin.setVisibility(View.GONE);

                editTextEmail1.setVisibility(View.VISIBLE);
                editTextPassword1.setVisibility(View.VISIBLE);
                buttonLogin.setVisibility(View.VISIBLE);
                textViewSignUp.setVisibility(View.VISIBLE);
                textViewForgotPassword.setVisibility(View.VISIBLE);
                progress.setVisibility(View.GONE);
            }
        });

```

```

        buttonRegister.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                registerUser();
            }
        });

        buttonLogin.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                loginUser();
            }
        });

        textViewForgotPassword.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                //finish();
                startActivity(new
Intent(StartActivity.this,ForgotPasswordActivity.class));
            }
        });

        textViewContactUs.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                startActivity(new
Intent(StartActivity.this,ContactActivity.class));
            }
        });
    }
    //Login User
    private void loginUser() {
        String email=editTextEmaill.getText().toString().trim();
        String password=editTextPasswordl.getText().toString().trim();

        //validations
        if(email.isEmpty()) {
            editTextEmaill.setError("Email is required!");
            editTextEmaill.requestFocus();
            return;
        }

        if(!Patterns.EMAIL_ADDRESS.matcher(email).matches()) {
            editTextEmaill.setError("Please enter a valid email!");
            editTextEmaill.requestFocus();
            return;
        }

        if(password.isEmpty()) {
            editTextPasswordl.setError("Password is required!");
            editTextPasswordl.requestFocus();
            return;
        }
        if(password.length()<6){
            editTextPasswordl.setError("Minimum length of password should be 6");
            editTextPasswordl.requestFocus();
            return;
        }
        //if everything is ok
        progressDialog2.show();
        firebaseAuth.signInWithEmailAndPassword(email,password)
            .addOnCompleteListener(this, new OnCompleteListener<AuthResult>() {
                @Override
                public void onComplete(@NonNull Task<AuthResult> task) {
                    progressDialog2.dismiss();
                }
            });
    }

```

```

        if(task.isSuccessful())
        {
            //start Profile Activity
            finish();
            Intent intent=new
Intent(getApplicationContext(),Home.class);
            intent.addFlags(Intent.FLAG_ACTIVITY_NEW_TASK |
Intent.FLAG_ACTIVITY_CLEAR_TOP);
            startActivity(intent);

        }
        else
        {
            //Wrong email or Password

Toast.makeText(getApplicationContext(),task.getException().getMessage(),Toast.LENGTH
H_SHORT).show();

            editTextPassword.setText("");
        }
    });
}
//Registering User
private void registerUser() {
    final String email = editTextEmail.getText().toString().trim();
    String password = editTextPassword.getText().toString().trim();
    //validations
    if(email.isEmpty()) {
        editTextEmail.setError("Email is required!");
        editTextEmail.requestFocus();
        return;
    }

    if(!Patterns.EMAIL_ADDRESS.matcher(email).matches()) {
        editTextEmail.setError("Please enter a valid email!");
        editTextEmail.requestFocus();
        return;
    }

    if(password.isEmpty()) {
        editTextPassword.setError("Password is required!");
        editTextPassword.requestFocus();
        return;
    }

    if(password.length()<6) {
        editTextPassword.setError("Minimum length of password should be 6");
        editTextPassword.requestFocus();
        return;
    }

    progressDialog1.show();
    firebaseAuth.createUserWithEmailAndPassword(email,password)
        .addOnCompleteListener(this, new OnCompleteListener<AuthResult>() {
            @Override
            public void onComplete(@NonNull Task<AuthResult> task) {
                progressDialog1.dismiss();
                if(task.isSuccessful())
                {
                    CharSequence options[]=new
CharSequence[]{"Student","Teacher"};
                    AlertDialog.Builder builder=new
AlertDialog.Builder(StartActivity.this);
                    builder.setTitle("Select your Profile");
                    builder.setCancelable(false);
                    builder.setItems(options, new
DialogInterface.OnClickListener() {
                        @Override
                        public void onClick(DialogInterface

```

```

dialogInterface, int i) {
    if(i==0){
        //start Profile student
        HashMap<String,String> studentMap=new
        studentMap.put("name","");
        studentMap.put("address","");
        studentMap.put("locality","");
        studentMap.put("city","");
        studentMap.put("phone","");
        studentMap.put("sc","");

        studentMap.put("picUrl","https://firebasestorage.googleapis.com/v0/b/tutorfinder-
5da34.appspot.com/o/profileImageStudent%2Fdefault.png?alt=media&token=b3edf519-
d33a-47a4-91f9-ab7bfa601a29");

        mRootRef.child("Students").child(firebaseAuth.getCurrentUser().getUid()).setValue(s
tudentMap);

        finish();
        Intent intent=new
Intent(getApplicationContext(),ProfileStudent.class);

intent.addFlags(Intent.FLAG_ACTIVITY_NEW_TASK | Intent.FLAG_ACTIVITY_CLEAR_TOP);
        startActivity(intent);
    }else if(i==1){
        //start profile Teacher
        HashMap<String,String> teacherMap=new

        teacherMap.put("name","");
        teacherMap.put("address","");
        teacherMap.put("locality","");
        teacherMap.put("city","");
        teacherMap.put("phone","");
        teacherMap.put("qualifications","");
        teacherMap.put("experience","");
        teacherMap.put("fees","");
        teacherMap.put("subject","");
        teacherMap.put("message","");
        teacherMap.put("sub_city_loc","");

        teacherMap.put("picUrl","https://firebasestorage.googleapis.com/v0/b/tutorfinder-
5da34.appspot.com/o/profileImageTeacher%2Fdefault.png?alt=media&token=ebcdbf5a-
0b8f-4f55-b4db-3a04577862dd");

        mRootRef.child("Teachers").child(firebaseAuth.getCurrentUser().getUid()).setValue(t
eacherMap);

        finish();
        Intent intent=new
Intent(getApplicationContext(),ProfileTeacher.class);

intent.addFlags(Intent.FLAG_ACTIVITY_NEW_TASK | Intent.FLAG_ACTIVITY_CLEAR_TOP);
        startActivity(intent);
    }
    });
    builder.show();
}
else
{
    if(task.getException() instanceof
FirebaseAuthUserCollisionException){
        Toast.makeText(getApplicationContext(), "Email
Already exists!", Toast.LENGTH_SHORT).show();
        editTextPassword.setText("");
    }
    else {
        Toast.makeText(getApplicationContext(),

```

```

task.getException().getMessage(), Toast.LENGTH_SHORT).show();
    }
    }
});
}

public class MyTimerTask extends TimerTask {

    @Override
    public void run() {
        StartActivity.this.runOnUiThread(new Runnable() {
            @Override
            public void run() {
                if(viewPagerSlides.getCurrentItem()==0){
                    viewPagerSlides.setCurrentItem(1);
                }else if(viewPagerSlides.getCurrentItem()==1){
                    viewPagerSlides.setCurrentItem(2);
                }else if(viewPagerSlides.getCurrentItem()==2){
                    viewPagerSlides.setCurrentItem(3);
                }else if(viewPagerSlides.getCurrentItem()==3){
                    viewPagerSlides.setCurrentItem(4);
                }else if(viewPagerSlides.getCurrentItem()==4){
                    viewPagerSlides.setCurrentItem(5);
                }else {
                    viewPagerSlides.setCurrentItem(0);
                }
            }
        });
    }

    @Override
    public void onStart() {
        super.onStart();
        // Check if user is signed in.
        progressDialog.show();
        FirebaseUser currentUser = firebaseAuth.getCurrentUser();
        if(currentUser!=null)
        {
            Intent intent=new Intent(getApplicationContext(),Home.class);
            startActivity(intent);

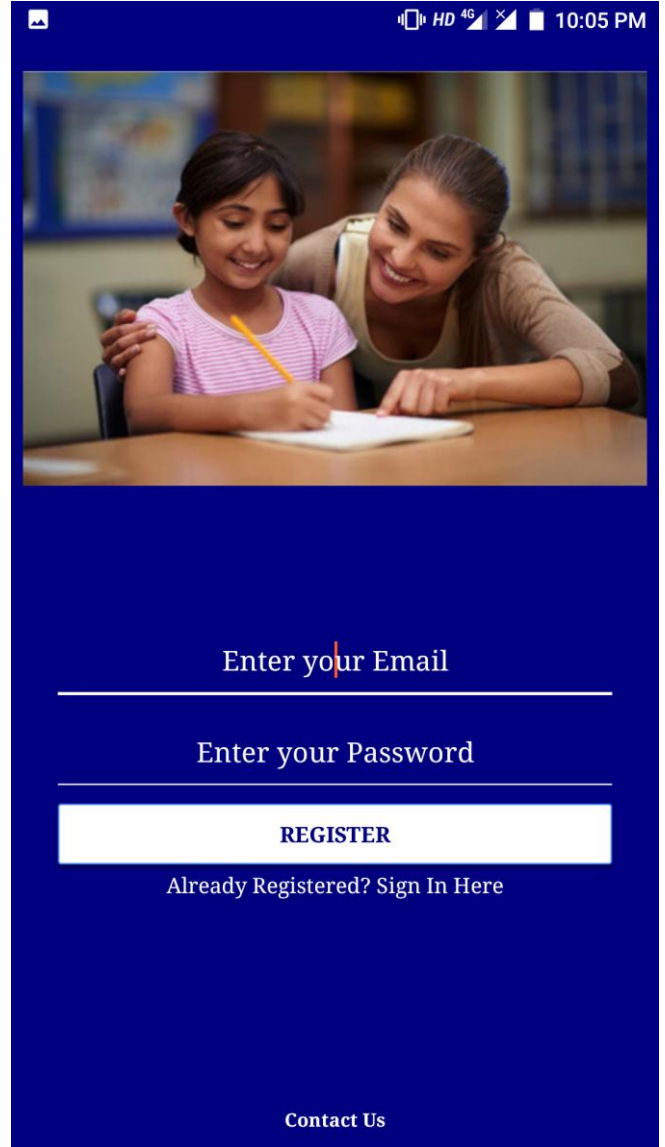
intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TASK|Intent.FLAG_ACTIVITY_NEW_TASK);
            finish();
            progressDialog.dismiss();
        }else if(currentUser==null){
            progressDialog.dismiss();
        }
    }
}
}
}

```

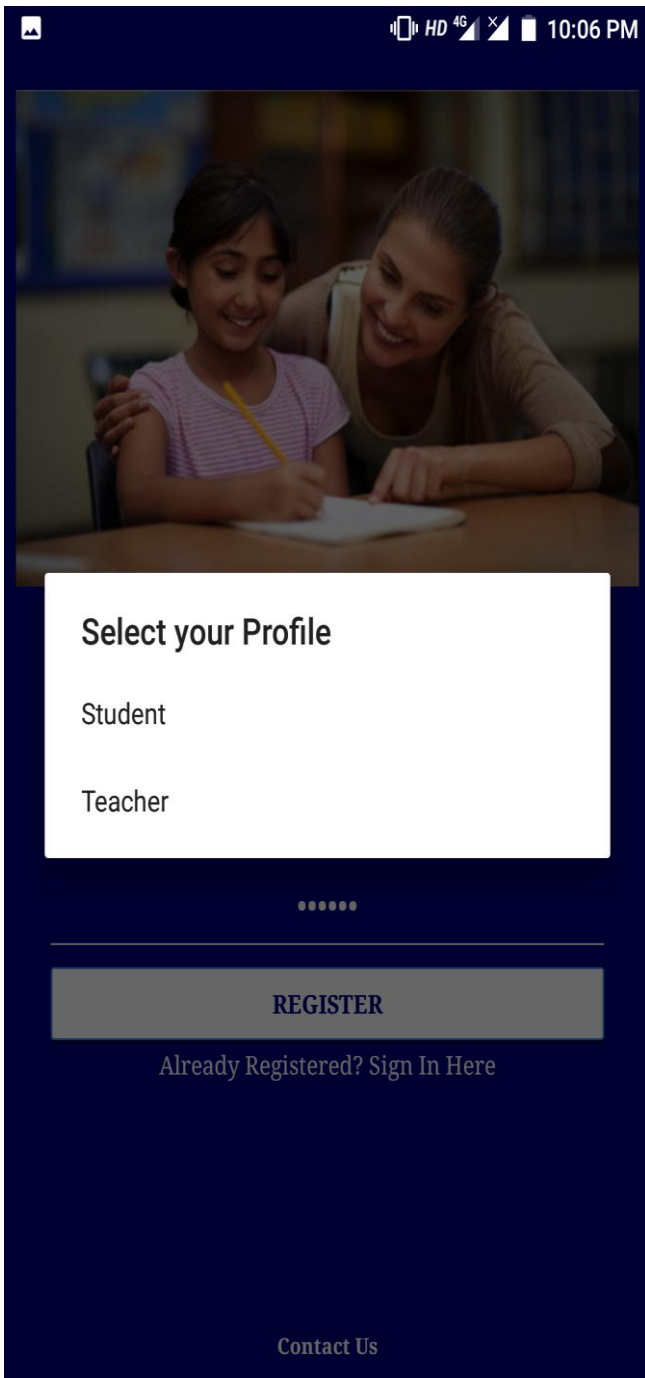

SCREENSHOTS



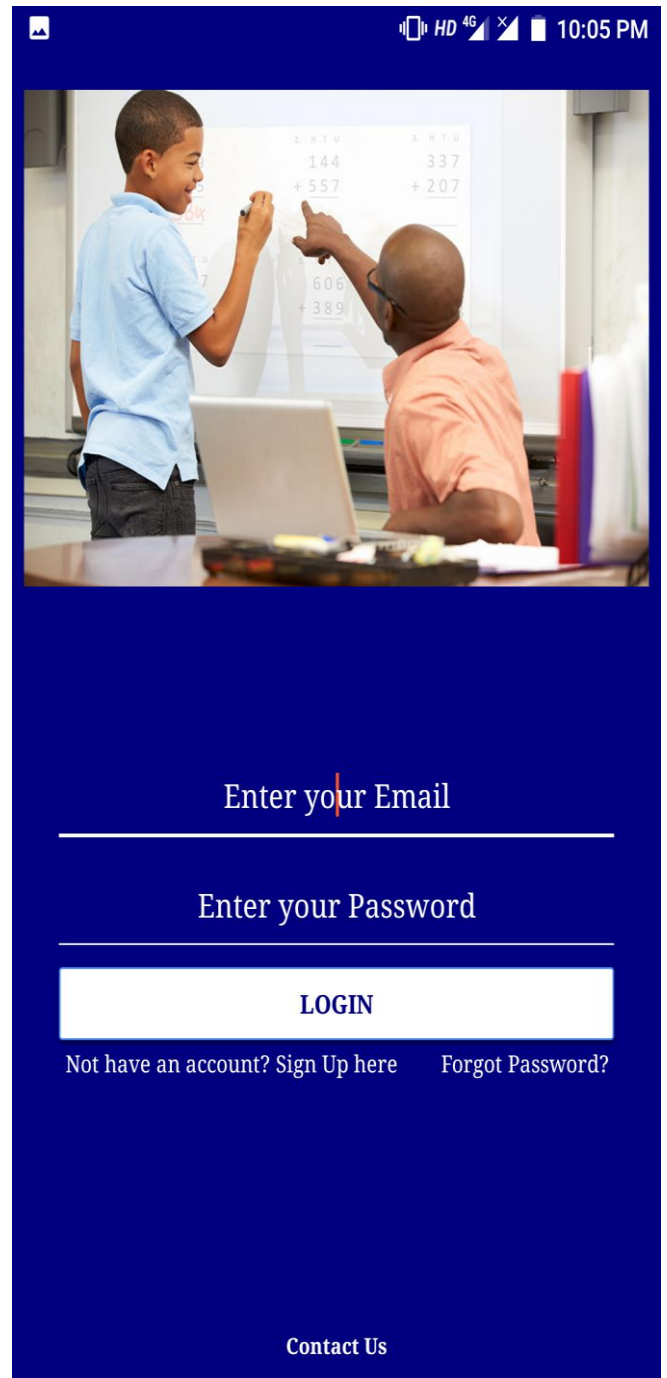
Main page



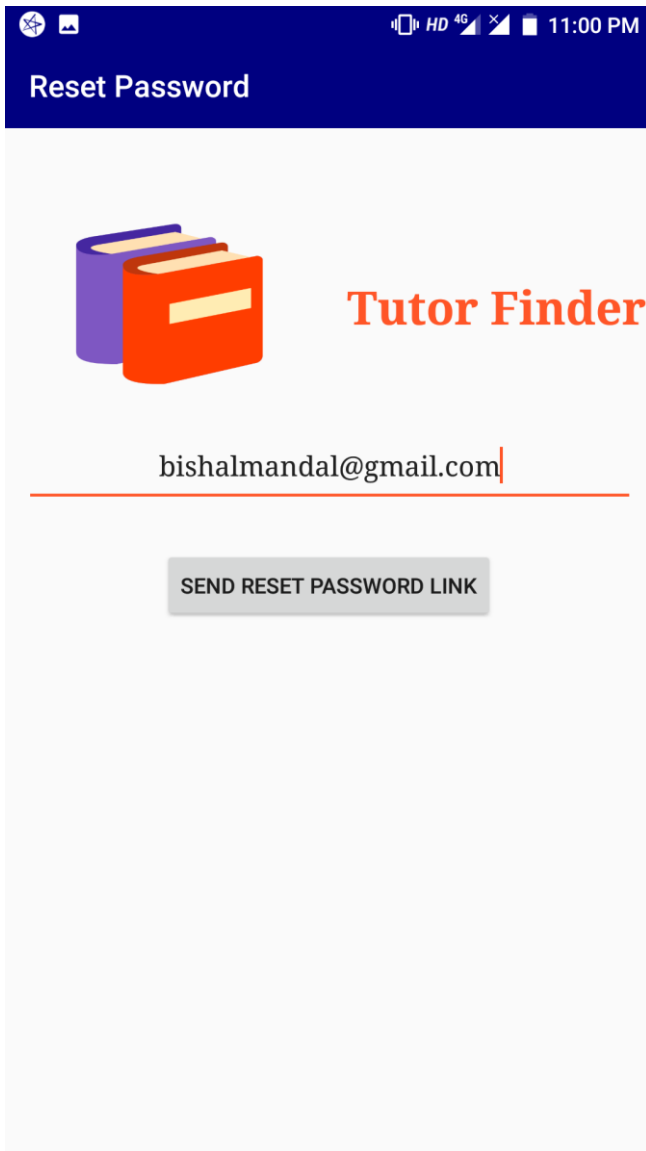
Registration Page



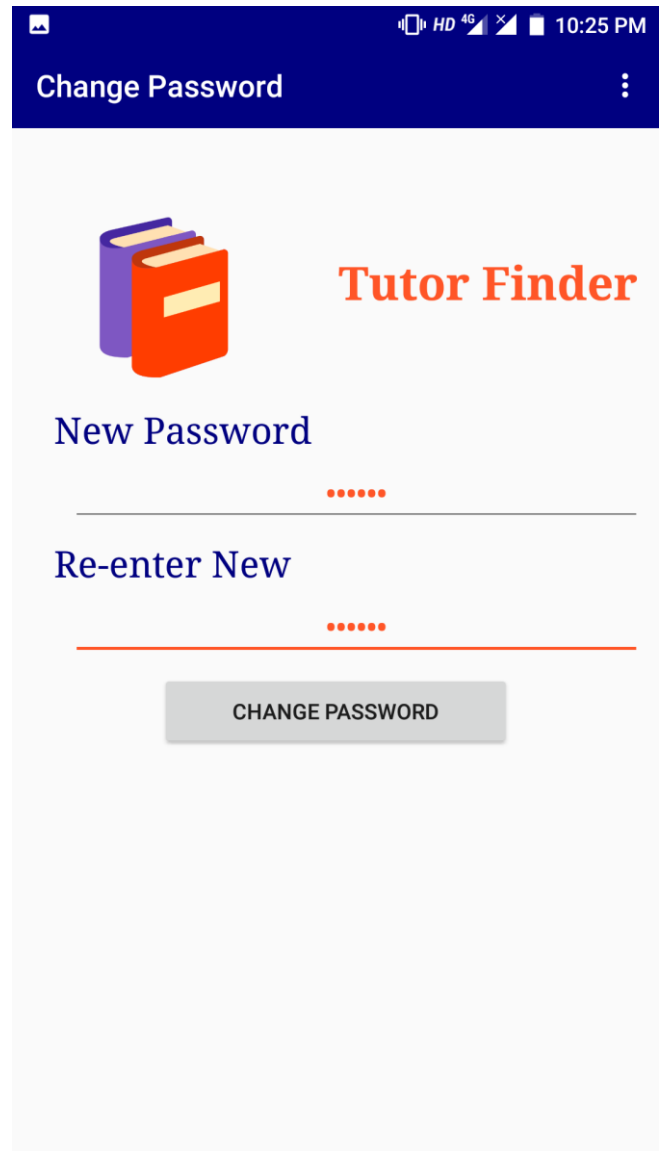
Choosing Profile



Login page



Reset password



Changing Password

HD 4G 10:06 PM

Contact Us

YOUR NAME
Tanusree

YOUR EMAIL
rujtanusree@gmail.com


SUBJECT
Abcd


MESSAGE
abcd efgh ijkl

[SEND FEEDBACK](#)

Sending Feedback

HD 4G 10:05 PM



rujtanusree 

Please enter a valid email!

.....

[REGISTER](#)

[Already Registered? Sign In Here](#)


Contact Us

E-mail Validation check

HD 4G 10:24 PM

Edit Profile

Hello, rujtanusree@gmail.com
Email Not Verified. Click to verify. EDIT



Tanusree Ruj

Address Basundhara Complex

Locality Chingrighata

City Kolkata

Phone 9955118844

Qualification MCA

Experience No Experience No Experience

Fees 600

Subject C Programming


Message Hello Students.

CHANGE PASSWORD
SAVE

HD 4G 10:32 PM

Edit Profile

Hello, divya@gmail.com
Email Not Verified. Click to verify. EDIT



Divya Agarwal

Address G/2 Road

Locality Chingrighata

City Kolkata

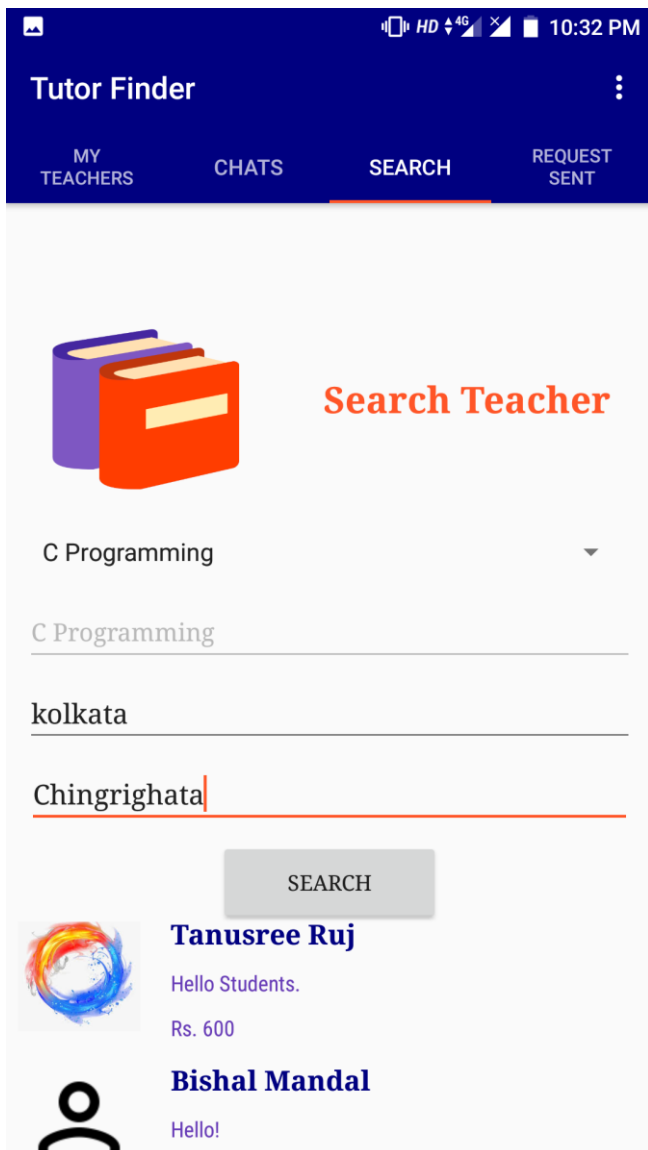
Phone 9955118844

School/College Abc College

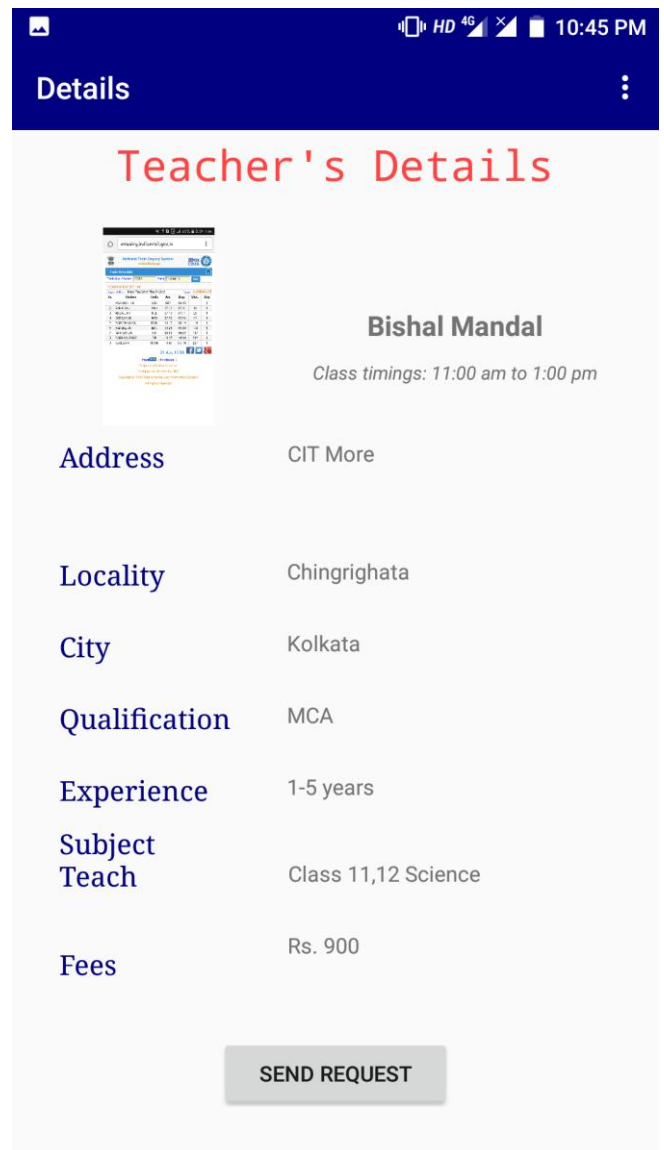
CHANGE PASSWORD
SAVE

Teacher profile fill up

Student profile fill up



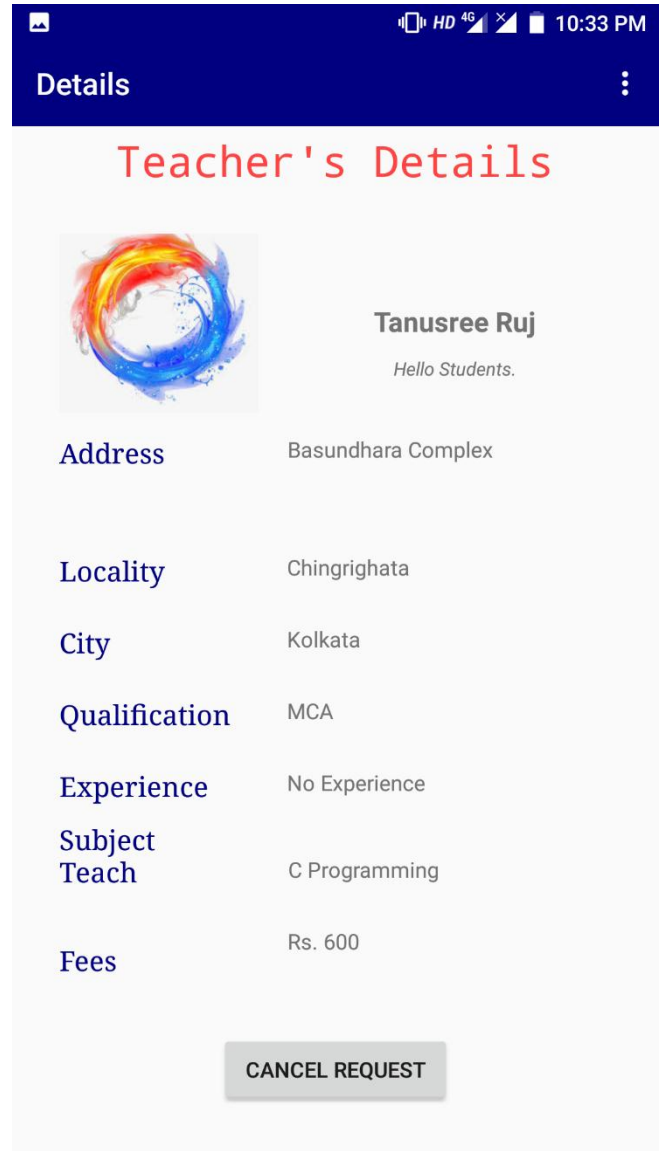
Searching teachers



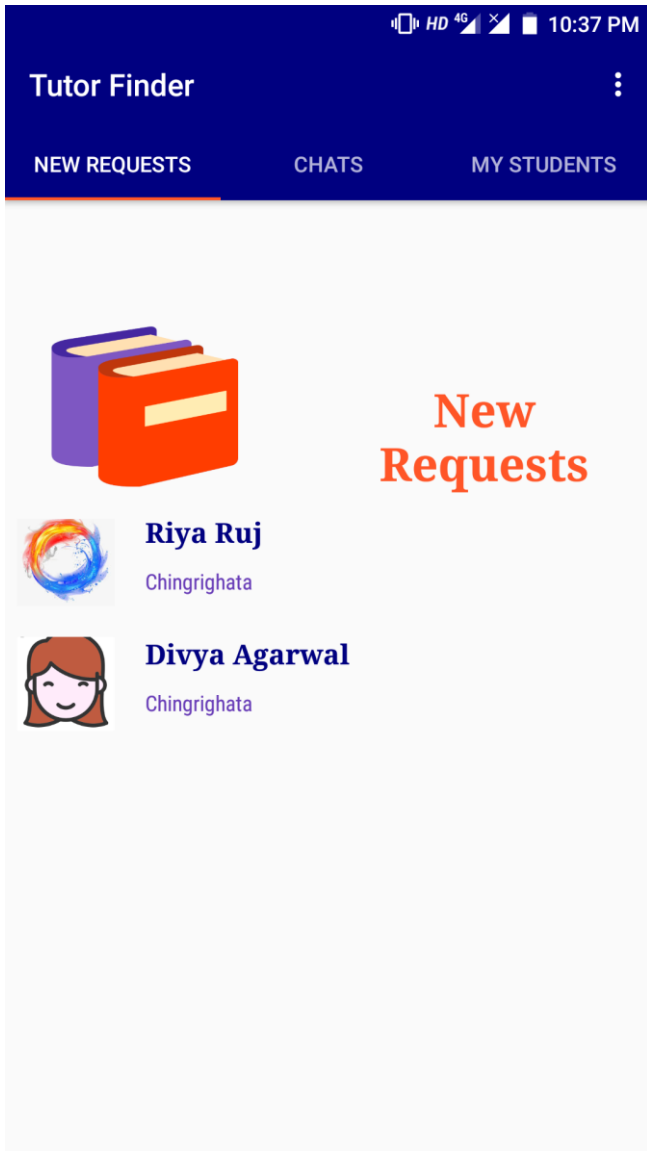
Sending request



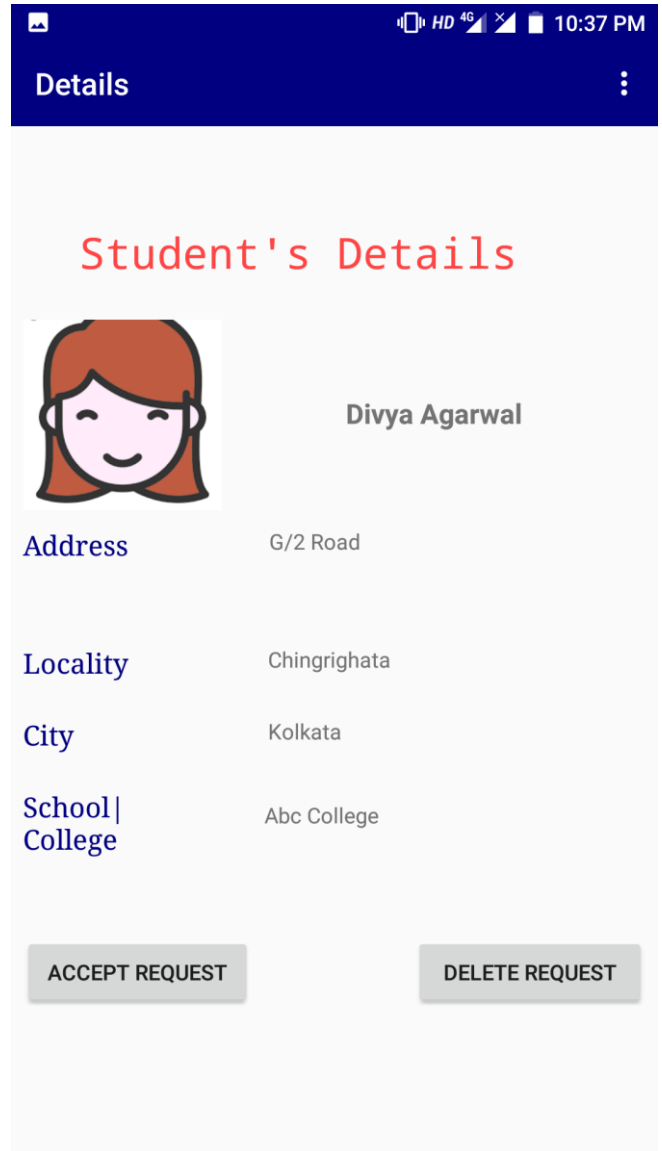
Sent list



Status of request



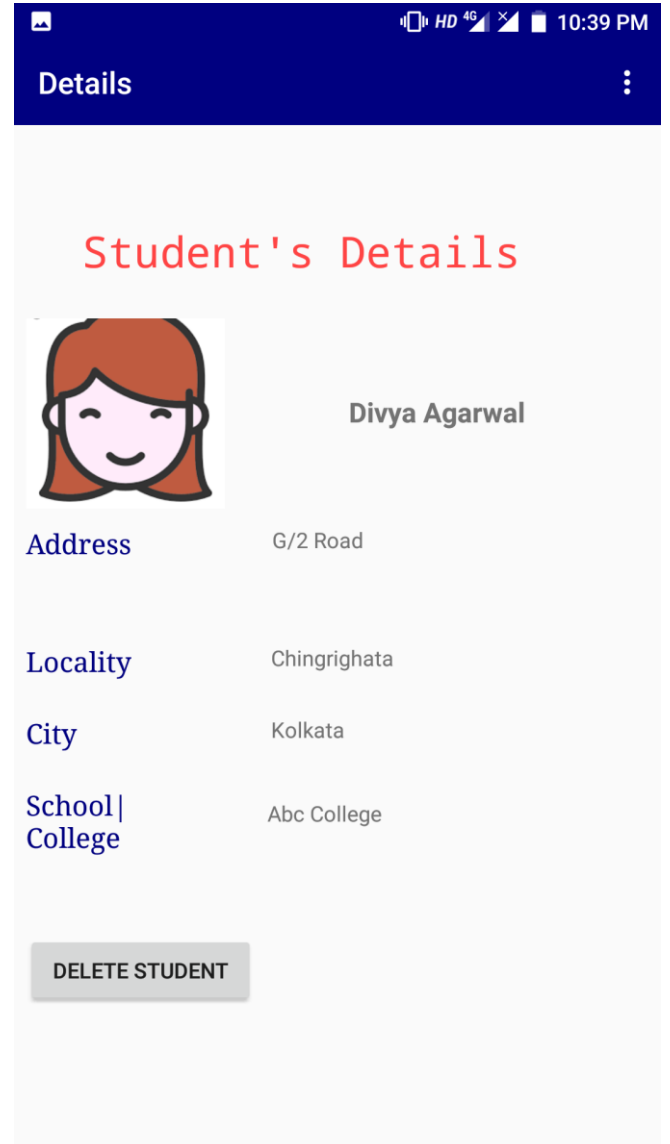
Request list of teacher



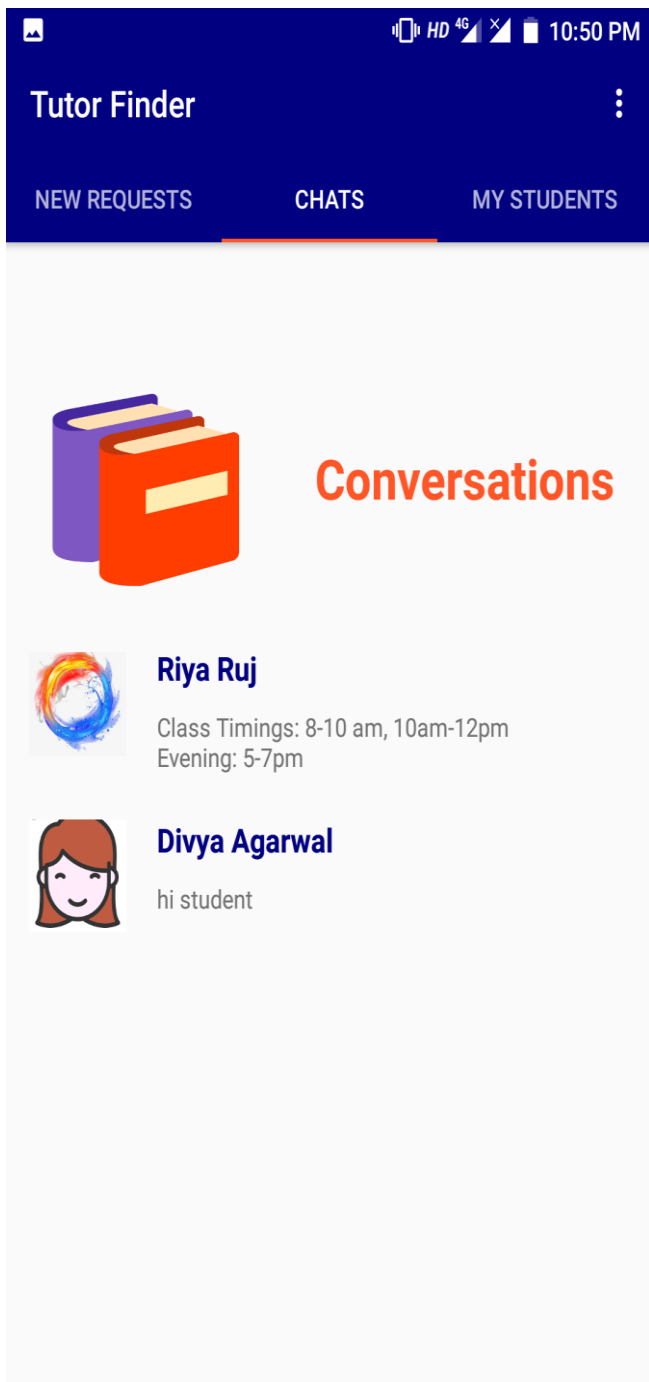
Accept/Reject Request



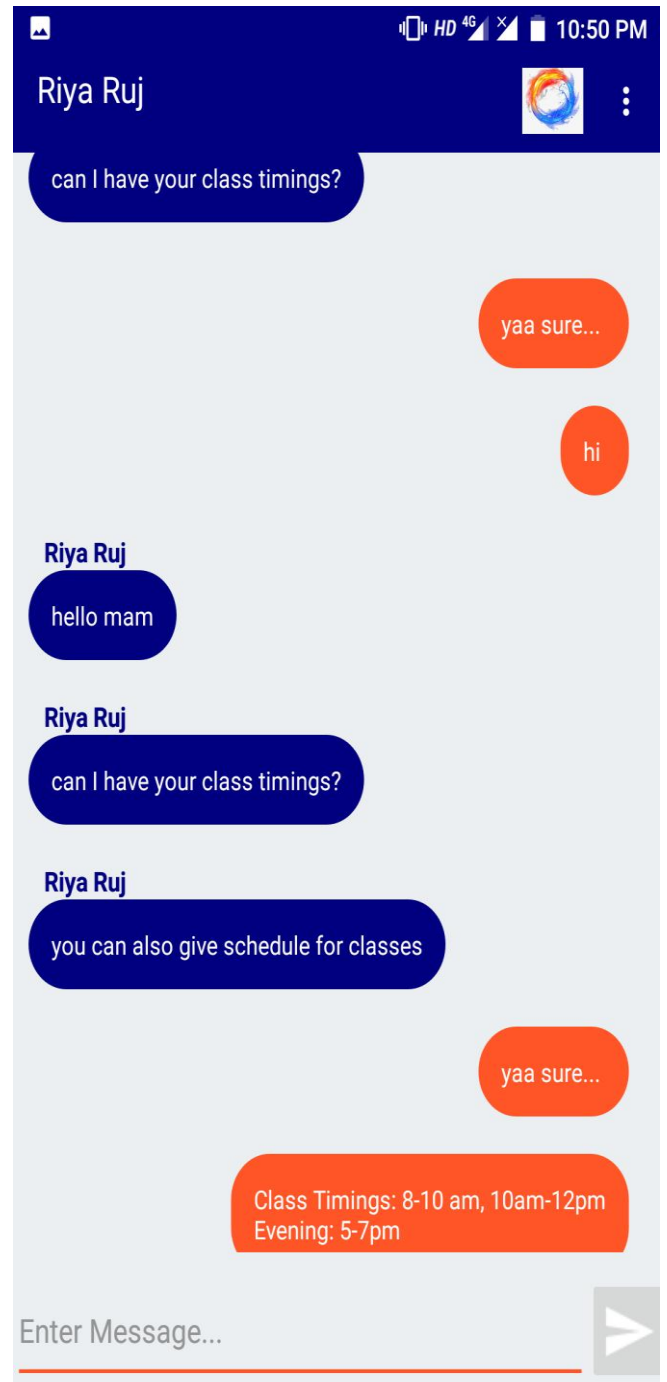
Teacher list of a student



Teacher can delete student



Chat list



Conversation

TESTING

A simple scenario has been made since the main idea behind to cover and test all possible combinations of students or teachers in different modules, find the faults and fix them.

FEASIBILITY CHECKS:

The system is feasible because the student can easily log in and find suitable teachers, send request, chat with the teachers.

VALIDITY CHECKS ON INPUT DATA:

Checks are performed on entering wrong email id, password.

FUTURE SCOPE AND EVALUATION:

Any student can give exam and get the result.

A payment method can be added.

Can add new features as and when require.

CONCLUSION

Fast processing and results shows immediately.
Minimize human effort and cost efficient database.