**STUDENT MANAGEMENT APP**

|  |
| --- |
| PERMISSION GRANTED IN MANIFEST FILE  <uses-permission android:name="android.permission.INTERNET" /> <uses-permission android:name="android.permission.WRITE\_EXTERNAL\_STORAGE" /> <uses-permission android:name="android.permission.READ\_EXTERNAL\_STORAGE" /> |
| Created Java Class:-Showdata.java,Update.java,Deletedata.java,Dataholder.java,Student.java. |
| Implementation added in BuildGradle:app module  implementation "androidx.recyclerview:recyclerview-selection:1.1.0-rc01"  implementation 'com.firebaseui:firebase-ui-database:0.4.0'  implementation 'com.google.firebase:firebase-messaging:20.2.1'  implementation 'com.google.firebase:firebase-messaging-directboot:20.2.1’ |

*File: activity\_main.xml*

<?xml version="1.0" encoding="utf-8"?>

<androidx.cardview.widget.CardView xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<LinearLayout

android:gravity="center"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:orientation="vertical"

tools:ignore="MissingConstraints" >

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:id="@+id/name"

android:hint="your name"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:id="@+id/rollno"

android:hint="your roll no"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:id="@+id/branch"

android:hint="your branch"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:id="@+id/email"

android:hint="your email"/>

<EditText

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:layout\_marginTop="10dp"

android:id="@+id/address"

android:hint="your address"/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/register"

android:text="REGISTER"

/>

<Button

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:id="@+id/storedata"

android:text="Show data"/>

<Button

android:id="@+id/button"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Branchwisedata" />

<Button

android:id="@+id/button3"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="UpdateData" />

<Button

android:id="@+id/button4"

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="DeleteData" />

</LinearLayout>

</androidx.cardview.widget.CardView>

*File: MainActivity.java*

package com.example.myapplication;

import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import com.google.firebase.database.DataSnapshot;

import com.google.firebase.database.DatabaseError;

import com.google.firebase.database.DatabaseReference;

import com.google.firebase.database.FirebaseDatabase;

import com.google.firebase.database.ValueEventListener;

public class MainActivity extends AppCompatActivity {

EditText name,roll\_no,branch,email,address;

Button reg,storedata,showpic,Branchwisedata,updatedata,deletedata;

FirebaseDatabase fd;

DatabaseReference dr;

int maxid=0;

Student s;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

name = findViewById(R.id.name);

roll\_no = findViewById(R.id.rollno);

branch = findViewById(R.id.branch);

email = findViewById(R.id.email);

address = findViewById(R.id.address);

reg = findViewById(R.id.register);

storedata = findViewById(R.id.storedata);

Branchwisedata=findViewById(R.id.button);

updatedata=findViewById(R.id.button3);

deletedata=findViewById(R.id.button4);

// showpic=findViewById(R.id.button);

s = new Student();

dr = FirebaseDatabase.getInstance().getReference().child("student");

dr.addValueEventListener(new ValueEventListener() {

@Override

public void onDataChange(@NonNull DataSnapshot snapshot) {

if (snapshot.exists()) {

maxid = (int) snapshot.getChildrenCount();

} else {

}

}

@Override

public void onCancelled(@NonNull DatabaseError error) {

}

});

reg.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

s.setRoll\_no(Integer.parseInt(roll\_no.getText().toString()));

s.setName(name.getText().toString());

s.setAdd(address.getText().toString());

s.setBranch(branch.getText().toString());

s.setEmail(email.getText().toString());

dr.child(String.valueOf(maxid + 1)).setValue(s);

//dr.setValue(s);

}

});

storedata.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Intent intent=new Intent(MainActivity.this,ShowData.class);

startActivity(intent);

}

});

updatedata.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Intent intent=new Intent(MainActivity.this,updatedata.class);

startActivity(intent);

}

});

deletedata.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Intent intent=new Intent(MainActivity.this,deletedata.class);

startActivity(intent);

}

});

}

}

*File: Deletedata.java*

import androidx.appcompat.app.AppCompatActivity

import android.os.Bundle

import android.text.TextUtils

import android.util.Log

import android.view.View

import android.widget.Toast

import com.google.firebase.auth.FirebaseAuth

import com.google.firebase.database.\*

import kotlinx.android.synthetic.main.activity\_upd\_del.\*

import kotlinx.android.synthetic.main.activity\_welcome.\*

import kotlinx.android.synthetic.main.activity\_welcome.email

class upd\_del : AppCompatActivity() {

    private var mFirebaseDatabase: DatabaseReference? = null

        private var mFirebaseInstance: FirebaseDatabase? = null

        private var userId: String? = null

        override fun onCreate(savedInstanceState: Bundle?) {

            super.onCreate(savedInstanceState)

            setContentView(R.layout.activity\_upd\_del)

            mFirebaseInstance = FirebaseDatabase.getInstance()

            // get reference to 'users' node

            mFirebaseDatabase = mFirebaseInstance!!.getReference("users")

            val user = FirebaseAuth.getInstance().getCurrentUser()

            // add it only if it is not saved to database

            userId = user?.getUid()

        }

        private fun updateUser(name: String, email: String) {

            // updating the user via child nodes

            if (!TextUtils.isEmpty(name) && !TextUtils.isEmpty(email)) {

                mFirebaseDatabase!!.child(userId!!).child("name").setValue(name)

                mFirebaseDatabase!!.child(userId!!).child("email").setValue(email)

    mFirebaseDatabase!!.child(userId!!).child("branch").setValue(email)

    mFirebaseDatabase!!.child(userId!!).child("rollno").setValue(email)

    mFirebaseDatabase!!.child(userId!!).child("address").setValue(email)

                Toast.makeText(applicationContext, "Successfully updated user", Toast.LENGTH\_SHORT).show()

            }

            else

                Toast.makeText(applicationContext, "Unable to update user", Toast.LENGTH\_SHORT).show()

        }

       fun onUpdateClicked(view: View) {

            val name = name.getText().toString()

            val email = email.getText().toString()

   val email = branch.getText().toString()

val email = rollno.getText().toString()

val email = add.getText().toString()

            //Calling updateUser function

            updateUser(name, email,branch,rollno,add)

        }

        fun onDeleteClicked(view: View) {

            //Remove value from child

            mFirebaseDatabase!!.child(userId!!).removeValue()

            Toast.makeText(applicationContext, "Successfully deleted user", Toast.LENGTH\_SHORT).show()

            // clear information

            txt\_user.setText("")

            email.setText("")

            name.setText("")

branch.setText("")

rollno.setText("")

address.setText("")

        }

        companion object {

            private val TAG = upd\_del::class.java.getSimpleName()

        }

    }

*File: Dataholder.java*

package com.example.myapplication;

import android.content.Context;

import android.view.View;

import android.widget.ImageView;

import android.widget.TextView;

import androidx.annotation.NonNull;

import androidx.recyclerview.widget.RecyclerView;

import com.squareup.picasso.Picasso;

public class DataHolder extends RecyclerView.ViewHolder {

View view;

public DataHolder(@NonNull View itemView) {

super(itemView);

view=itemView;

}

public void setView(Context context, String name,String rollno,String emailid,String address,String branch) {

TextView sname=view.findViewById(R.id.Name);

TextView srollno=view.findViewById(R.id.roll\_no);

TextView sbranch=view.findViewById(R.id.Branch);

TextView semailid=view.findViewById(R.id.email\_id);

TextView saddress=view.findViewById(R.id.Address);

sname.setText(name);

srollno.setText(String.valueOf(rollno));

sbranch.setText(branch);

semailid.setText(emailid);

saddress.setText(address);

}

}

*File: student.java*

package com.example.myapplication;

public class Student {

private String name;

private String email;

private String branch;

private String add;

private int roll\_no;

public String getName() {

return name;

}

public void setName(String name) {

this.name = name;

}

public String getRoll\_no() {

return String.valueOf(roll\_no);

}

public void setRoll\_no(int roll\_no) {

this.roll\_no = roll\_no;

}

public String getBranch() {

return branch;

}

public void setBranch(String branch) {

this.branch = branch;

}

public String getEmail() {

return email;

}

public void setEmail(String email) {

this.email = email;

}

public String getAdd() {

return add;

}

public void setAdd(String add) {

this.add = add;

}

/\* public String getRoll\_no() {

return String.valueOf(roll\_no);

}

public void setRoll\_no(int roll\_no) {

this.roll\_no = roll\_no;

}\*/

}

*File: Showdata.java*

package com.example.myapplication;

//import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import androidx.appcompat.app.AppCompatActivity;

//import android.support.v7.app.AppCompatActivity;

import androidx.recyclerview.widget.LinearLayoutManager;

import androidx.recyclerview.widget.RecyclerView;

import com.firebase.ui.database.FirebaseRecyclerAdapter;

import com.google.firebase.database.DatabaseReference;

import com.google.firebase.database.FirebaseDatabase;

public class ShowData extends AppCompatActivity {

RecyclerView rev;

DatabaseReference dr;

FirebaseDatabase fd;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_show\_data);

rev = findViewById(R.id.my\_recycler\_view);

rev.setHasFixedSize(true);

rev.setLayoutManager(new LinearLayoutManager(this));

fd = FirebaseDatabase.getInstance();

dr = fd.getReference("student");

}

@Override

protected void onStart() {

super.onStart();

FirebaseRecyclerAdapter<Student,DataHolder> fra=new FirebaseRecyclerAdapter<Student, DataHolder>(Student.class,R.layout.mycustomlayout,DataHolder.class,dr) {

@Override

protected void populateViewHolder(DataHolder dataHolder, Student student, int i) {

dataHolder.setView(getApplicationContext(),student.getName(),student.getRoll\_no(),student.getBranch(),student.getEmail(),student.getAdd());

}

};

rev.setAdapter(fra);

}

}

**OUTPUT**



