**REGISTER ACTIVITY**

Mainactivity.java

package com.example.registeractivity;  
  
import androidx.annotation.NonNull;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.media.MediaPlayer;  
import android.os.Bundle;  
import android.text.InputFilter;  
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.database.FirebaseDatabase;  
  
public class MainActivity extends AppCompatActivity implements View.OnClickListener {  
 private TextView Register,Login;  
 private EditText editStudentNumber,editStudentEmail,editPassword,editConfirmPassword;  
 private ProgressBar progressBar;  
private FirebaseAuth mAuth;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 mAuth=FirebaseAuth.*getInstance*();  
Login=(TextView)findViewById(R.id.*alreadyHaveAccount*);  
Login.setOnClickListener(this);  
  
Register=(Button) findViewById(R.id.*btnRegister*);  
Register.setOnClickListener(this);  
  
  
  
editStudentNumber=(EditText) findViewById(R.id.*inputStudentNumber*);  
editStudentEmail=(EditText) findViewById(R.id.*inputStudentEmail*);  
editPassword=(EditText) findViewById(R.id.*inputPassword*);  
editConfirmPassword=(EditText)findViewById(R.id.*inputConfirmPassword*);  
  
progressBar=(ProgressBar) findViewById(R.id.*progressBar*);  
 }  
  
 @Override  
 public void onClick(View v) {  
 switch (v.getId())  
 {  
 case R.id.*alreadyHaveAccount*:  
 startActivity(new Intent(this,forgotPassword.class));  
 break;  
 case R.id.*btnRegister*:  
 Register();  
 break;  
  
  
 }  
  
 }  
  
 private void Register() {  
 String inputStudentNumber = editStudentNumber.getText().toString().trim();  
 String inputStudentEmail = editStudentEmail.getText().toString().trim();  
 String inputPassword = editPassword.getText().toString().trim();  
 String inputConfirmPassword = editConfirmPassword.getText().toString().trim();  
  
 if (inputStudentNumber.isEmpty()) {  
 editStudentNumber.setError("Student Number is required!");  
 editStudentNumber.requestFocus();  
 return;  
  
 }  
 if (inputStudentEmail.isEmpty()) {  
 editStudentEmail.setError("Student email is required!");  
 editStudentEmail.requestFocus();  
 return;  
 }  
 if (!Patterns.*EMAIL\_ADDRESS*.matcher(inputStudentEmail).matches()) {  
 editStudentEmail.setError("Please provide valid email");  
 editStudentEmail.requestFocus();  
 return;  
 }  
 if (inputPassword.isEmpty()) {  
 editPassword.setError("Password is required!");  
 editPassword.requestFocus();  
 return;  
 }  
 if (inputPassword.length() < 6) {  
 editPassword.setError("Password length should be 6 characters");  
 editPassword.requestFocus();  
 return;  
 }  
  
 if (inputConfirmPassword.isEmpty()) {  
 editConfirmPassword.setError("Confirm Password is required!");  
 editConfirmPassword.requestFocus();  
 return;  
 }  
 if (inputConfirmPassword.length() < 6) {  
 editConfirmPassword.setError("Password length should be 6 characters");  
 editConfirmPassword.requestFocus();  
 return;  
 }  
 progressBar.setVisibility(View.*VISIBLE*);  
 mAuth.createUserWithEmailAndPassword(inputStudentEmail, inputPassword)  
 .addOnCompleteListener(new OnCompleteListener<AuthResult>() {  
 @Override  
 public void onComplete(@NonNull Task<AuthResult> task) {  
 if (task.isSuccessful()) {  
 Users user = new Users(inputStudentNumber, inputStudentEmail, inputPassword);  
 FirebaseDatabase.*getInstance*().getReference("Users")  
 .child(FirebaseAuth.*getInstance*().getCurrentUser().getUid())  
 .setValue(user).addOnCompleteListener(new OnCompleteListener<Void>() {  
 @Override  
 public void onComplete(@NonNull Task<Void> task) {  
  
 if (task.isSuccessful()) {  
 Toast.*makeText*(MainActivity.this, "User has been registered successfully",  
 Toast.*LENGTH\_LONG*).show();  
 progressBar.setVisibility(View.*GONE*);  
*//redirect to login layout* } else {  
 Toast.*makeText*(MainActivity.this, "Failed to register try again", Toast.*LENGTH\_LONG*).show();  
 progressBar.setVisibility(View.*GONE*);  
 }  
 }  
 }  
 );  
 }  
 }  
 });  
  
 }}

Activity\_register.xml

<**TextView  
 android:id="@+id/logo"  
 android:layout\_width="219dp"  
 android:layout\_height="68dp"  
 android:paddingLeft="20dp"  
 android:paddingTop="10dp"  
 android:paddingRight="10dp"  
 android:paddingBottom="10dp"  
 android:text="REGISTER"  
 android:textColor="@android:color/white"  
 android:textSize="36sp"  
 android:textStyle="bold"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="103dp"  
 tools:layout\_editor\_absoluteY="37dp"** />  
  
<**EditText  
 android:id="@+id/inputStudentNumber"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/input\_background"  
 android:drawableLeft="@drawable/ic\_person"  
 android:drawablePadding="10dp"  
 android:ems="10"  
 android:hint="Student Number"  
 android:inputType="textPersonName"  
 android:paddingLeft="20dp"  
 android:paddingTop="10dp"  
 android:paddingRight="10dp"  
 android:paddingBottom="10dp"  
 android:textColor="@android:color/white"  
 android:textColorHint="@android:color/white"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="109dp"  
 tools:layout\_editor\_absoluteY="150dp"** />  
  
<**EditText  
 android:id="@+id/inputStudentEmail"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/input\_background"  
 android:drawableLeft="@drawable/ic\_email"  
 android:drawablePadding="10dp"  
 android:ems="10"  
 android:hint="Student Email"  
 android:inputType="textPersonName"  
 android:paddingLeft="20dp"  
 android:paddingTop="10dp"  
 android:paddingRight="10dp"  
 android:paddingBottom="10dp"  
 android:textColor="@android:color/white"  
 android:textColorHint="@android:color/white"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="109dp"  
 tools:layout\_editor\_absoluteY="236dp"** />  
  
<**EditText  
 android:id="@+id/inputPassword"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/input\_background"  
 android:drawableLeft="@drawable/ic\_security"  
 android:drawablePadding="10dp"  
 android:ems="10"  
 android:hint="\*\*\*\*\*\*\*\*\*\*"  
 android:inputType="textPersonName"  
 android:paddingLeft="20dp"  
 android:paddingTop="10dp"  
 android:paddingRight="10dp"  
 android:paddingBottom="10dp"  
 android:textColor="@android:color/white"  
 android:textColorHint="@android:color/white"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="109dp"  
 tools:layout\_editor\_absoluteY="330dp"** />  
  
<**EditText  
 android:id="@+id/inputConfirmPassword"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/input\_background"  
 android:drawableLeft="@drawable/ic\_security"  
 android:drawablePadding="10dp"  
 android:ems="10"  
 android:hint="\*\*\*\*\*\*\*\*\*\*"  
 android:inputType="textPersonName"  
 android:paddingLeft="20dp"  
 android:paddingTop="10dp"  
 android:paddingRight="10dp"  
 android:paddingBottom="10dp"  
 android:textColor="@android:color/white"  
 android:textColorHint="@android:color/white"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="109dp"  
 tools:layout\_editor\_absoluteY="430dp"** />  
  
<**Button  
 android:id="@+id/btnRegister"  
 android:layout\_width="119dp"  
 android:layout\_height="44dp"  
 android:background="@drawable/btn\_background"  
 android:text="Register"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="151dp"  
 tools:layout\_editor\_absoluteY="515dp"** />  
  
<**TextView  
 android:id="@+id/alreadyHaveAccount"  
 android:layout\_width="162dp"  
 android:layout\_height="33dp"  
 android:text="Already have an account?"  
 android:textColor="@android:color/white"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="133dp"  
 tools:layout\_editor\_absoluteY="585dp"** />

<ProgressBar  
 android:id="@+id/progressBar"  
 style="?android:attr/progressBarStyleLarge"  
 android:layout\_width="5dp"  
 android:layout\_height="0dp"  
 android:layout\_centerInParent="true"  
 android:visibility="gone"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.596"

/>

Forgot Password.java

package com.example.registeractivity;  
  
import androidx.annotation.NonNull;  
import androidx.appcompat.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.Toast;  
  
import com.google.android.gms.tasks.OnCompleteListener;  
import com.google.android.gms.tasks.Task;  
import com.google.firebase.auth.FirebaseAuth;  
  
public class forgotPassword extends AppCompatActivity {  
private EditText StudentEmailReset;  
private Button resetPasswordButton;  
private ProgressBar progressBar;  
  
FirebaseAuth auth;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_forgot\_password*);  
  
 StudentEmailReset=(EditText)findViewById(R.id.*inputStudentEmailReset*);  
 resetPasswordButton=(Button) findViewById(R.id.*btnResetPassword*);  
 progressBar=(ProgressBar)findViewById(R.id.*progressBar*);  
  
 auth=FirebaseAuth.*getInstance*();  
  
 resetPasswordButton.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 resetPassword();  
 }  
 });  
 }  
 private void resetPassword()  
 {  
 String inputStudentEmail=StudentEmailReset.getText().toString() .trim();  
  
 if(inputStudentEmail.isEmpty())  
 {  
 StudentEmailReset.setError("Email is required");  
 StudentEmailReset.requestFocus();  
 return;  
 }  
 if(!Patterns.*EMAIL\_ADDRESS*.matcher(inputStudentEmail).matches())  
 {  
 StudentEmailReset.setError("Please provide valid email!");  
 StudentEmailReset.requestFocus();  
 return;  
  
 }  
 progressBar.setVisibility(View.*VISIBLE*);  
 auth.sendPasswordResetEmail(inputStudentEmail).addOnCompleteListener(new OnCompleteListener<Void>() {  
 @Override  
 public void onComplete(@NonNull Task<Void> task) {  
 if(task.isSuccessful())  
 {  
 Toast.*makeText*(forgotPassword.this,"Check your email to reset your password!",Toast.*LENGTH\_LONG*).show();  
 }else  
 {  
 Toast.*makeText*(forgotPassword.this,"Try again! Something wrong happened!",Toast.*LENGTH\_LONG*).show();  
  
 }  
 }  
 });  
 }  
}

Activity\_forgot\_password.xml

<**TextView  
 android:id="@+id/logo2"  
 android:layout\_width="297dp"  
 android:layout\_height="65dp"  
 android:paddingLeft="20dp"  
 android:paddingTop="10dp"  
 android:paddingRight="10dp"  
 android:paddingBottom="10dp"  
 android:text="RESET PASSWORD"  
 android:textColor="@android:color/white"  
 android:textSize="30sp"  
 android:textStyle="bold"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="70dp"  
 tools:layout\_editor\_absoluteY="92dp"** />  
  
<**EditText  
 android:id="@+id/inputStudentEmailReset"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:background="@drawable/input\_background"  
 android:drawableLeft="@drawable/ic\_email"  
 android:drawablePadding="10dp"  
 android:ems="10"  
 android:hint="Student Email"  
 android:inputType="textPersonName"  
 android:paddingLeft="20dp"  
 android:paddingTop="10dp"  
 android:paddingRight="10dp"  
 android:paddingBottom="10dp"  
 android:textColor="@android:color/white"  
 android:textColorHint="@android:color/white"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="113dp"  
 tools:layout\_editor\_absoluteY="299dp"** />  
  
<**Button  
 android:id="@+id/btnResetPassword"  
 android:layout\_width="168dp"  
 android:layout\_height="50dp"  
 android:background="@drawable/btn\_background"  
 android:text="Reset Password"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="135dp"  
 tools:layout\_editor\_absoluteY="375dp"** />  
  
<**TextView  
 android:id="@+id/returntologin"  
 android:layout\_width="262dp"  
 android:layout\_height="43dp"  
 android:text="Do you want to return to the Login Page?"  
 android:textColor="@android:color/white"  
 tools:ignore="MissingConstraints"  
 tools:layout\_editor\_absoluteX="93dp"  
 tools:layout\_editor\_absoluteY="449dp"**

<ProgressBar  
 android:id="@+id/progressBar"  
 style="?android:attr/progressBarStyleLarge"  
 android:layout\_width="5dp"  
 android:layout\_height="0dp"  
 android:layout\_centerInParent="true"  
 android:visibility="gone"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.596"

/>

/>

Users.java

package com.example.registeractivity;  
  
public class Users {  
 public String studentNumber,studentEmail,password;  
  
 public Users(){  
  
 }  
 public Users(String studentNumber,String studentEmail,String password)  
 {  
 this.studentNumber=studentNumber;  
 this.studentEmail=studentEmail;  
 this.password=password;  
  
 }  
}

btn\_background.xml

<shape xmlns:android="http://schemas.android.com/apk/res/android">  
 <gradient android:startColor="#2Af958" android:endColor="#009EFD" android:type="linear"/>  
 <corners android:radius="50dp"/>  
</shape>

Input\_background.xml

<shape xmlns:android="http://schemas.android.com/apk/res/android">  
<stroke android:color="@color/white" android:width="2dp"/>  
 <corners android:radius="50dp"/>  
</shape>