

Firebase Authentication



create email and password and send Verification mail to the user

email with firebase.

```
package com.example.bestnoteapp;

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 android.widget.TextView;
import android.widget.Toast;

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.android.material.snackbar.Snackbar;
import com.google.firebase.auth.AuthResult;
```

```

import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.auth.FirebaseUser;

public class signup extends AppCompatActivity {
    EditText email,password;
    Button signupbtn,loginbtn;
    TextView Logintext;
    private FirebaseAuth mAuth;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_signup);

        email = findViewById(R.id.signupemail);
        password = findViewById(R.id.signuppasword);
        loginbtn = findViewById(R.id.Login);
        signupbtn = findViewById(R.id.signup);
        Logintext = findViewById(R.id.Loginbtn);
        mAuth = FirebaseAuth.getInstance();

        loginbtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(signup.this,MainActivity.class);
                startActivity(intent);
            }
        });

        Logintext.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent = new Intent(signup.this,MainActivity.class);
                startActivity(intent);
            }
        });

        signupbtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String mail = email.getText().toString().trim();
                String pass = password.getText().toString().trim();

                if(mail.isEmpty()){
                    Toast.makeText(getApplicationContext(), "Email is not
Blank please enter email", Toast.LENGTH_SHORT).show();
                    Snackbar mysncackbar = Snackbar.make(loginbtn,"Email is
not Blank",Snackbar.LENGTH_SHORT);
                    mysncackbar.setAction("undo", new View.OnClickListener() {
                        @Override
                        public void onClick(View view) {
                            mysncackbar.dismiss();
                        }
                    })
                }
            }
        });
    }
}

```

```

        });
        mysnackbar.show();
    }else if(pass.isEmpty()){
        Toast.makeText(getApplicationContext(), "Password is not
Blank", Toast.LENGTH_SHORT).show();
    }else if(pass.length() < 5){
        Toast.makeText(signup.this, "Password char must be
greater then 5", Toast.LENGTH_SHORT).show();
    }else{
        // Intent intent = new
Intent(signup.this,MainActivity.class);
        // startActivity(intent);

mAuth.createUserWithEmailAndPassword(mail,pass).addOnCompleteListener(new
OnCompleteListener<AuthResult>() {
            @Override
            public void onComplete(@NonNull Task<AuthResult>
task) {
                if(task.isSuccessful()){
                    Toast.makeText(getApplicationContext(),
"successfully register", Toast.LENGTH_SHORT).show();
                    sendEmailVerification();
                }else{
                    Toast.makeText(getApplicationContext(),
"Failed to register", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}

});

}

//send email verification
private void sendEmailVerification() {
    FirebaseUser firebaseUser = mAuth.getCurrentUser();

    if(firebaseUser != null){
        firebaseUser.sendEmailVerification().addOnCompleteListener(new
OnCompleteListener<Void>() {
            @Override
            public void onComplete(@NonNull Task<Void> task) {
                Toast.makeText(getApplicationContext(), "verification
email is send and Login again", Toast.LENGTH_SHORT).show();
                mAuth.signOut();
                finish();
                startActivity(new
Intent(signup.this,MainActivity.class));
            }
        });
    }
}
}

```

```
}
```

SignIn with Email and Password

```
package com.example.bestnoteapp;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.view.Menu;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
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.FirebaseUser;
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 email,password;
    Button logins,signup;
    TextView forgotpassword;
    FirebaseAuth firebaseAuth;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        firebaseAuth = FirebaseAuth.getInstance();
        FirebaseUser firebaseUser = firebaseAuth.getCurrentUser();

        if(firebaseUser != null){
            startActivity(new
Intent(getApplicationContext(),notesactivity.class));
        }

        // Write a message to the database
        //      insert data into realtime database
        //      FirebaseDatabase firebaseDatabase = FirebaseDatabase.getInstance();
        //      DatabaseReference databaseReference =
firebaseDatabase.getReference();
        //      databaseReference.child("user").child("userId").setValue(1);
```

```

//      databaseReference.child("user").child("name").setValue("krishna");

        FirebaseDatabase firebaseDatabase =
FirebaseDatabase.getInstance();
        DatabaseReference databaseReference =
firebaseDatabase.getReference().child("Books");
//
databaseReference.child("user").child("email").setValue(email.getText().toString());
//
databaseReference.child("user").child("password").setValue(password.getText().toString());

        email = findViewById(R.id.login_email);
        password = findViewById(R.id.login_password);
        logins = findViewById(R.id.login_button);
        signup = findViewById(R.id.signupbtns);
        forgotpassword = findViewById(R.id.forgot_password);

        logins.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String emails = email.getText().toString().toString();
                String passwords = password.getText().toString().toString();
                if(emails.isEmpty() || passwords.isEmpty()){
                    Toast.makeText(MainActivity.this, "Email and password
most be field", Toast.LENGTH_SHORT).show();
                }else{
//                    Intent intent = new
Intent(MainActivity.this, forgot_password.class);
//                    startActivity(intent);

firebaseAuth.signInWithEmailAndPassword(emails, passwords).addOnCompleteListener(new OnCompleteListener<AuthResult>() {
                    @Override
                    public void onComplete(@NonNull Task<AuthResult>
task) {

                        if(task.isSuccessful()){
                            CheckMailVerified();
//                            Toast.makeText(MainActivity.this, "you are
Login", Toast.LENGTH_SHORT).show();
                        }else{
                            Toast.makeText(MainActivity.this, "Please
Enter a correct details", Toast.LENGTH_SHORT).show();
                        }
                    }
                });
            }
        });

        signup.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Intent intent = new Intent(MainActivity.this, signup.class);

```

```

        startActivity(intent);
    }
});

forgotpassword.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        Intent intent = new
Intent(MainActivity.this, forgot_password.class);
        startActivity(intent);
    }
});
}

private void CheckMailVerified(){
    FirebaseUser currentUser = firebaseAuth.getCurrentUser();
    if(currentUser.isEmailVerified() == true){
        Toast.makeText(getApplicationContext(), "Logged In",
Toast.LENGTH_SHORT).show();
        finish();
        startActivity(new Intent(MainActivity.this, signup.class));
    }else{
        Toast.makeText(getApplicationContext(), "Verified your mail
first", Toast.LENGTH_SHORT).show();
        firebaseAuth.signOut();
        startActivity(new Intent(MainActivity.this, notesactivity.class));
    }
}
}
}

```

Forgot Password

```

package com.example.bestnoteapp;

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 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.FirebaseAuth;

public class forgot_password extends AppCompatActivity {

    EditText email;
    Button recover;
}

```

```

TextView gobacktoLogin;
FirebaseAuth firebaseAuth;

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_forgot_password);
    email = findViewById(R.id.email);
    recover = findViewById(R.id.recover);
    gobacktoLogin = findViewById(R.id.gobacktoLogin);
    firebaseAuth = FirebaseAuth.getInstance();

    recover.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            String emailtext = email.getText().toString().trim();
            if(emailtext.isEmpty()){
                Toast.makeText(forgot_password.this, "Email Can't be blank",
                    Toast.LENGTH_SHORT).show();
            }else{
                FirebaseAuth.getInstance().sendPasswordResetEmail(emailtext)
                    .addOnCompleteListener(new
                        OnCompleteListener<Void>() {
                            @Override
                            public void onComplete(@NonNull Task<Void>
                                task) {
                                if (task.isSuccessful()) {
                                    Toast.makeText(forgot_password.this,
                                        "your password is Forgot successfully", Toast.LENGTH_SHORT).show();
                                    finish();
                                    Intent intent = new
                                        Intent(forgot_password.this,signup.class);
                                    startActivity(intent);
                                }else{
                                    Toast.makeText(forgot_password.this,
                                        "Email is wrong,Account doesn't Exist", Toast.LENGTH_SHORT).show();
                                }
                            }
                        })
                    );
            }
        }
    });

    gobacktoLogin.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            Intent intent = new Intent(forgot_password.this,
                MainActivity.class);
            startActivity(intent);
        }
    });
}
}

```

How to insert data into firebase database:

First create a java class file inside the class create constructor, Geter and setter.

```
package com.example.androidtutorial;

public class student {
    String name;
    String desc;
    String Address;

    public student(String name, String desc, String address) {
        this.name = name;
        this.desc = desc;
        this.Address = address;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getDesc() {
        return desc;
    }

    public void setDesc(String desc) {
        this.desc = desc;
    }

    public String getAddress() {
        return Address;
    }

    public void setAddress(String address) {
        this.Address = address;
    }
}
```

inside mainpage: call the constructor

```
private void Submitdata() {
    submit.setOnClickListener(v->{
        String yname = name.getText().toString();
        String yaddress = address.getText().toString();
        String ydesc = desc.getText().toString();

        if(yname.isEmpty() || yaddress.isEmpty() || ydesc.isEmpty()){
            Toast.makeText(this, "All Field are available",
                Toast.LENGTH_SHORT).show();
        }
    });
}
```



```

        }else{
            Intent intent = new Intent(this,GetuserDataIntent.class);
            intent.putExtra("name",yname);
            intent.putExtra("address",yaddress);
            intent.putExtra("desc",ydesc);
            intent.putExtra("image",R.drawable.ic_launcher_background);

            startActivity(intent);
            Toast.makeText(this, "submit data", Toast.LENGTH_SHORT).show();

            student = firebaseDatabase.getReference().child("student");
            // creating a constructor and set value
            student data = new student(yname,ydesc,yaddress);
            student.push().setValue(data);
        }
    });
}

```

Insert only one data in firbase Realtime database

```

private void insertdata() {
    DatabaseReference name =
firebaseDatabase.getReference("UserData").child("UserId").child("name");
    DatabaseReference desc =
firebaseDatabase.getReference("UserData").child("UserId").child("desc");
    DatabaseReference address =
firebaseDatabase.getReference("UserData").child("UserId").child("address");
    name.setValue("Krishna");
    desc.setValue("Hello world");
    address.setValue("Walling 13");
}

```