

# ANDROID DEVELOPMENT - S2

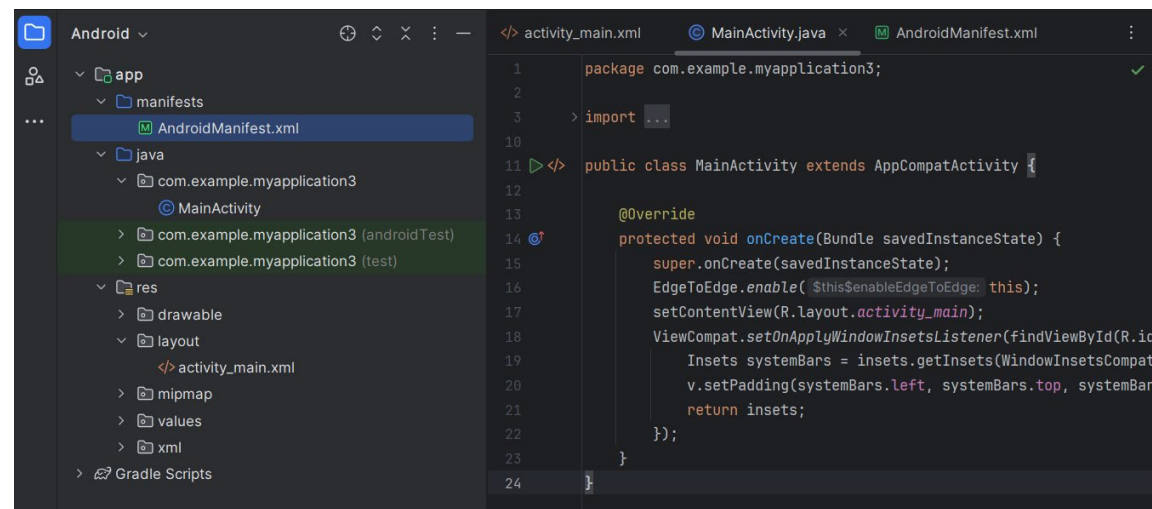
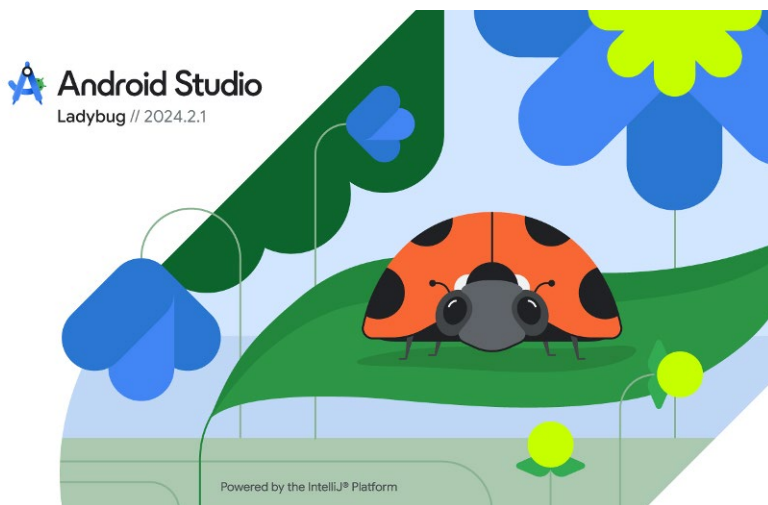
LISBON, FEBRUARY 2025

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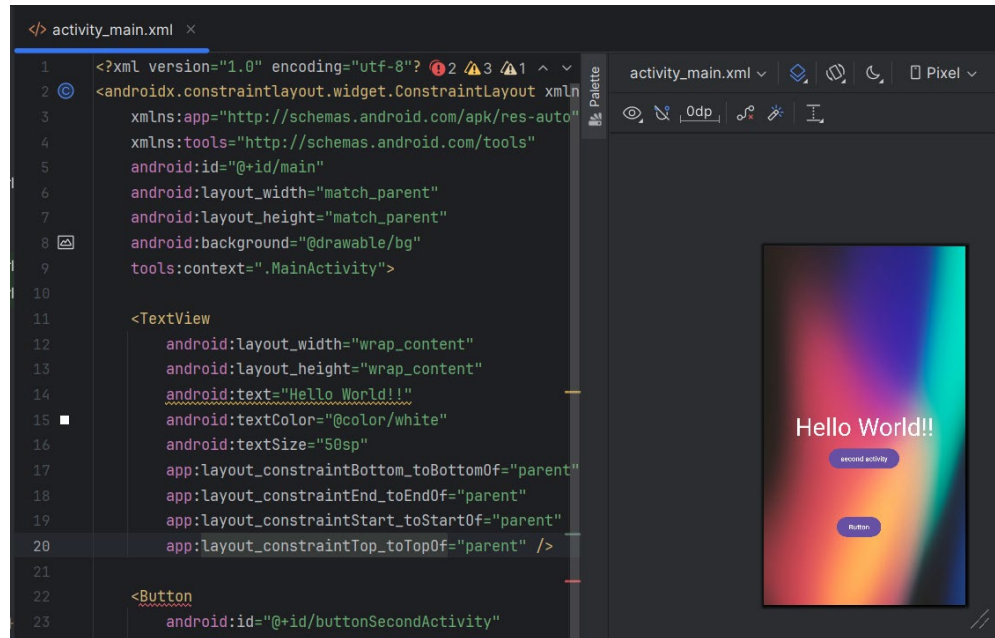


# ANDROID, ANDROID STUDIO, JAVA AND HELLO WORLD!

# Android



# ACTIVITIES, INTENTS AND TOASTS

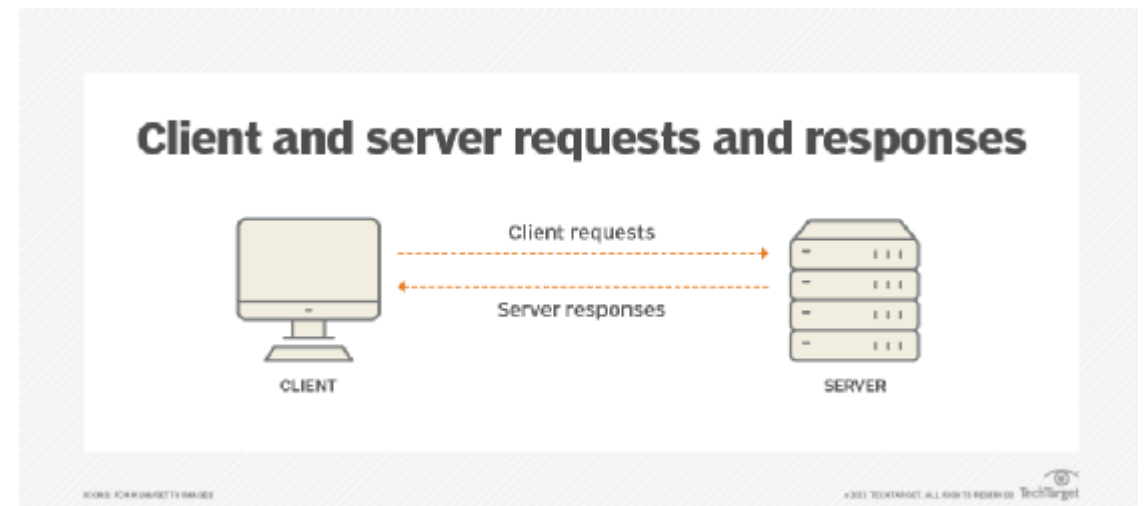


```
Button button=findViewById(R.id.buttonSecondActivity);
button.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        Intent intent=new Intent( packageContext: MainActivity.this, SecondActivity.class);
        startActivity(intent);

        Toast toast=Toast.makeText(getApplicationContext(), text: "Hello toast",Toast.LENGTH_SHORT);
        toast.show();
    }
});
```

# CLIENT SERVER

Client-server is a relationship in which one program, the client, requests a service or resource from another program, the server.



# AUTHENTICATION WITH GOOGLE FIREBASE

- Create user interface
- Setup Google Firebase
- Code

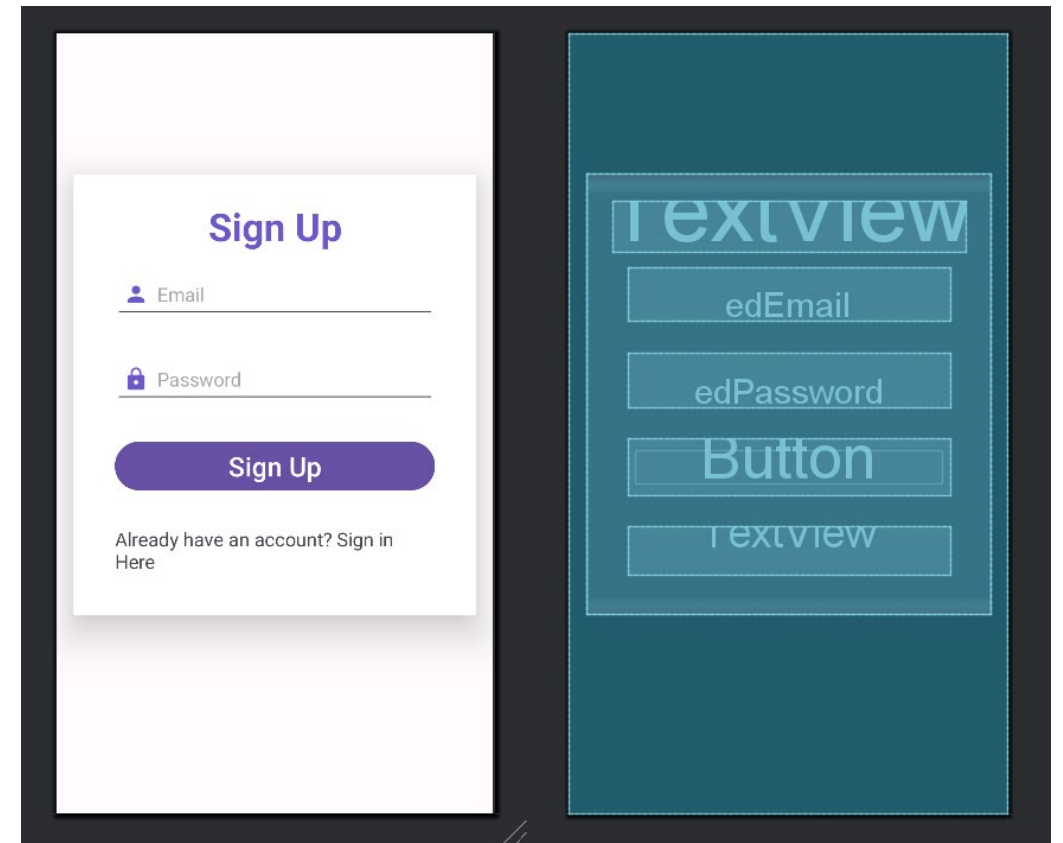
## Activities:

- Main (Sign up)
- Login
- User

# ON MAIN ACTIVITY CREATE A SIGN UP

## Create user interface (Sign Up)

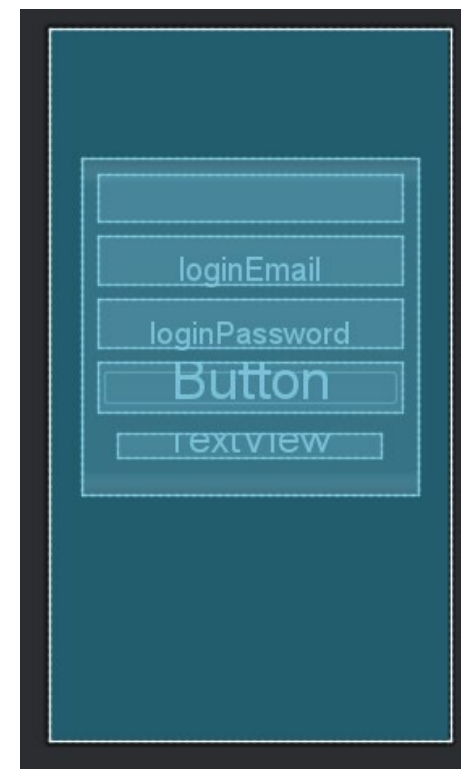
- Title (TextView)
- Email (EditText/email)
- Password (EditText)
- Sign up button (Button)
- Link to log in (TextView)



# CREATE A NEW ACTIVITY FOR LOGIN (LoginActivity)

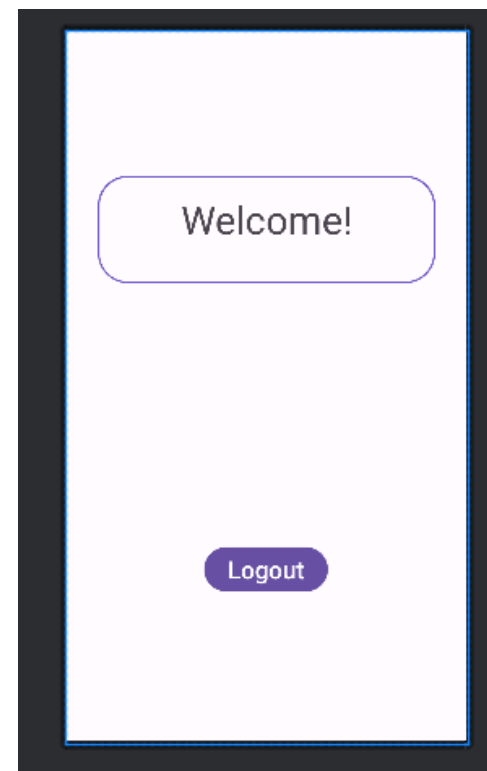
## Login Activity

- Copy the xml of the main activity and adapt



# CREATE NEW ATIVITY FOR USER LOGGED IN (UserActivity)

- Welcome text and logout button

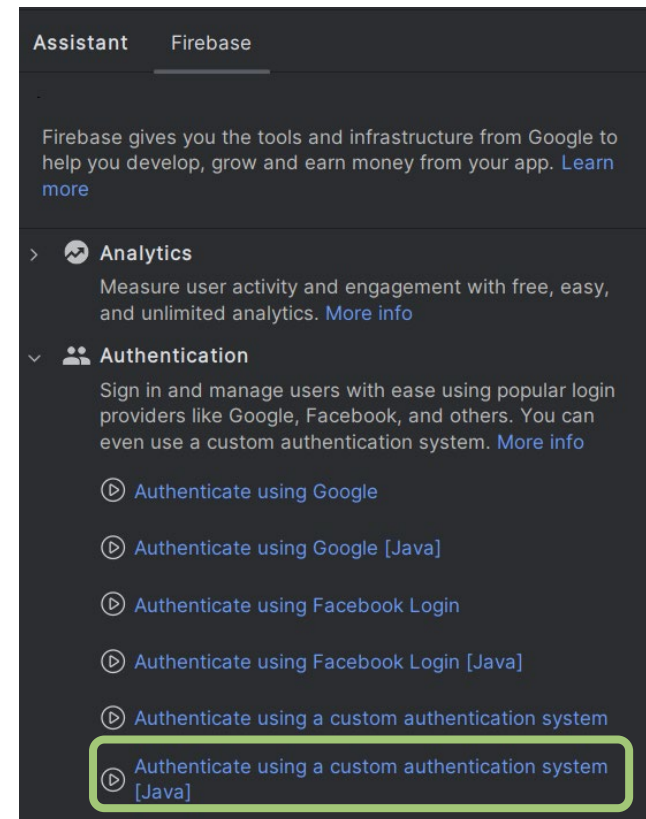
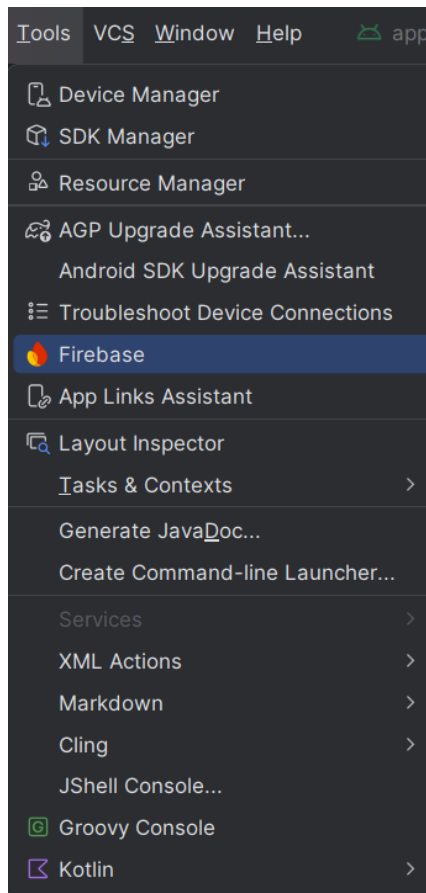


# FIREBASE

- Google Firebase is a platform designed to help you build, improve, and grow your mobile and web applications.



# ANDROID STUDIO AND FIREBASE



## Connect to firebase and create project (in Firebase, Google account required)

1

Connect your app to Firebase

✓ Connected

2

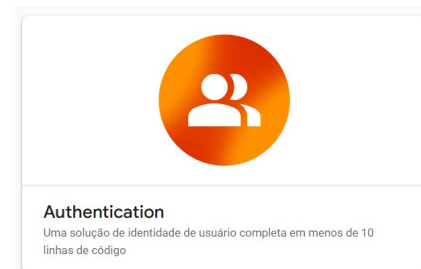
Add the Firebase Authentication SDK to your app

Add the Firebase Authentication SDK to your app

NOTE: After adding the SDK, here are some other helpful configurations to consider:

◦ Do you want an easier way to manage library versions?

You can use the [Firebase Android BoM](#) to manage your Firebase library versions and ensure that your app is always using compatible library versions.



Firebase

Visão geral do pr...

IA generativa

Build with Gemini

Atalhos do projeto

Authentication

Categorias dos produtos

Criação

Executar

Analytics

Todos os produtos

Ferramentas de desenvolvimento relacionadas

IDX

Login app

Authentication

Usuários

Método de login

Modelos

Uso

Configurações

Extensions

Provedores de login

Comece a usar o Firebase Auth ao adicionar seu primeiro método de login

Provedores nativos

E-mail/senha

Smartphone

Anônimo

Outros provedores

Google

Game Center

Microsoft

Facebook

Apple

Twitter

Play Games

GitHub

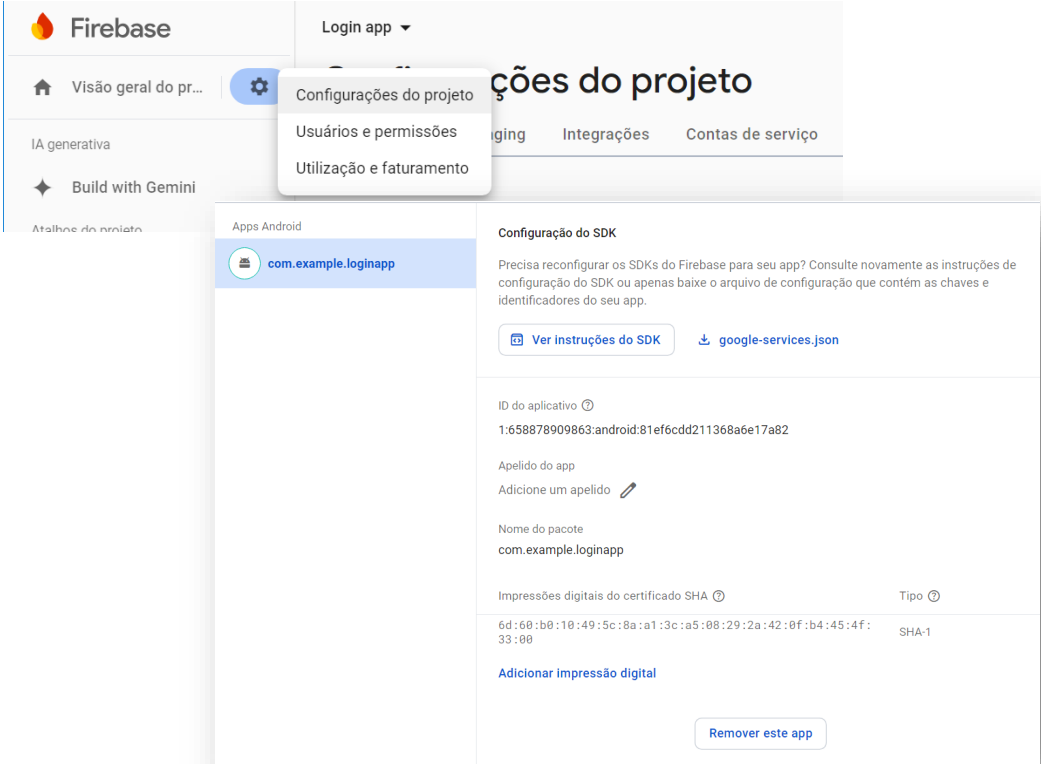
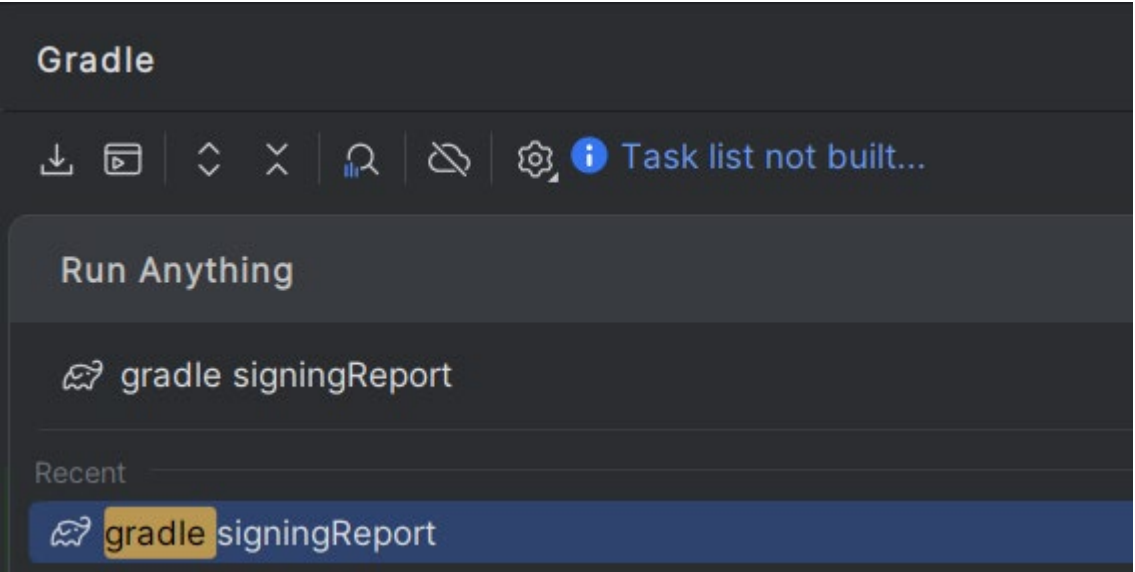
Yahoo

Provedores personalizados

OpenID Connect

SAML

View » Tool Windows » Gradle  
Execute



<https://github.com/BngDev212/>

[Android-Getting-started-with-Firebase-Authentication](#) / [app](#) / [src](#) / [main](#) / [java](#) / [com](#) / [tmdsimple](#) / [myfinancerecords](#) / 

 LoginActivity.java

 MainActivity.java

 UserActivity.java

```

public class LoginActivity extends AppCompatActivity {

    public EditText loginEmail, loginPassword; 4 usages
    Button btnLogin; 2 usages
    Button btnSignup; 2 usages
    FirebaseAuth firebaseAuth; 3 usages

    private FirebaseAuth.AuthStateListener authStateListener; 2 usages

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_login);

        firebaseAuth = FirebaseAuth.getInstance();
        loginEmail = findViewById(R.id.loginEmail);
        loginPassword = findViewById(R.id.loginPassword);
        btnLogin = findViewById(R.id.btnLogin);
        btnSignup = findViewById(R.id.signup);

        authStateListener = new FirebaseAuth.AuthStateListener() {
            @Override no usages
            public void onAuthStateChanged(@NonNull FirebaseAuth firebaseAuth) {...}
        };

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

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

    @Override
    protected void onStart() {
        super.onStart();
        firebaseAuth.addAuthStateListener(authStateListener);
    }
}

```

```

btnLogin.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        String userEmail = loginEmail.getText().toString();
        String userPassword = loginPassword.getText().toString();
        if (userEmail.isEmpty()) {
            loginEmail.setError("Provide your Email first!");
            loginEmail.requestFocus();
        } else if (userPassword.isEmpty()) {
            loginPassword.setError("Enter Password!");
            loginPassword.requestFocus();
        } else if (userEmail.isEmpty() && userPassword.isEmpty()) {
            Toast.makeText(context: LoginActivity.this, text: "Fields Empty!", Toast.LENGTH_SHORT).show();
        } else if (!(userEmail.isEmpty() && userPassword.isEmpty())) {
            firebaseAuth.signInWithEmailAndPassword(userEmail, userPassword).addOnCompleteListener(activity: LoginActivity.this, new OnCompleteListener() {
                @Override no usages
                public void onComplete(@NonNull Task task) {
                    if (!task.isSuccessful()) {
                        Toast.makeText(context: LoginActivity.this, text: "Not successful", Toast.LENGTH_SHORT).show();
                    } else {
                        startActivity(new Intent(packageContext: LoginActivity.this, UserActivity.class));
                    }
                }
            });
        } else {
            Toast.makeText(context: LoginActivity.this, text: "Error", Toast.LENGTH_SHORT).show();
        }
    }
});

```





MULȚUMESC

THANK YOU

OBRIGADO

SEE YOU TOMORROW!