Date	14 November 2022
Team ID	PNT2022TMID31224
Project Name	IoT Based Safety Gadget for Child Safety Monitoring and Notification

Sprint 2 is about login with mail and password used for registration

Coding :

```java
package com.example.geofence;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import  android.os.Bundle;
import android.text.TextUtils;
import android.widget.Button;
import android.widget.TextClock;
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.textfield.TextInputEditText;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;

public class LoginActivity extends AppCompatActivity {


        TextInputEditText etLoginEmail;
        TextInputEditText etLoginPassword;
        TextView tvRegisterHere;
        Button btnLogin;

        FirebaseAuth mAuth;

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

            etLoginEmail = findViewById(R.id.etLoginEmail);
            etLoginPassword = findViewById(R.id.etLoginPass);
            tvRegisterHere = findViewById(R.id.tvRegisterHere);
            btnLogin = findViewById(R.id.btnLogin);

            mAuth = FirebaseAuth.getInstance();

            btnLogin.setOnClickListener(view ->
                { loginUser();
```

```java
            });
            tvRegisterHere.setOnClickListener(view -
                >{ startActivity(new
                Intent(LoginActivity.this,
RegisterActivity.class));
            });
        }

    private void loginUser(){
            String email = etLoginEmail.getText().toString();
            String  password = etLoginPassword.getText().toString();

            if
                (TextUtils.isEmpty(email)){ etLoginEmail.setErr
                or("Email cannot be empty");
                etLoginEmail.requestFocus();
            }else if
                (TextUtils.isEmpty(password)){ etLoginPassword.setErr
                or("Password cannot be empty");
                etLoginPassword.requestFocus();
            }else{

mAuth.signInWithEmailAndPassword(email,password).addOnCompleteListener(new
OnCompleteListener<AuthResult>() {
                    @Override
                    public void onComplete(@NonNull Task<AuthResult> task)
{
                        if
                            (task.isSuccessful()){ Toast.makeText(LoginActi
                            vity.this, "User logged
in successfully", Toast.LENGTH_SHORT).show();
                            startActivity(new Intent(LoginActivity.this,
MapsActivity.class));
                        }else{
                            Toast.makeText(LoginActivity.this, "Log in
Error: " + task.getException().getMessage(), Toast.LENGTH_SHORT).show();
                        }
                    }
                });
            }
        }


}
```
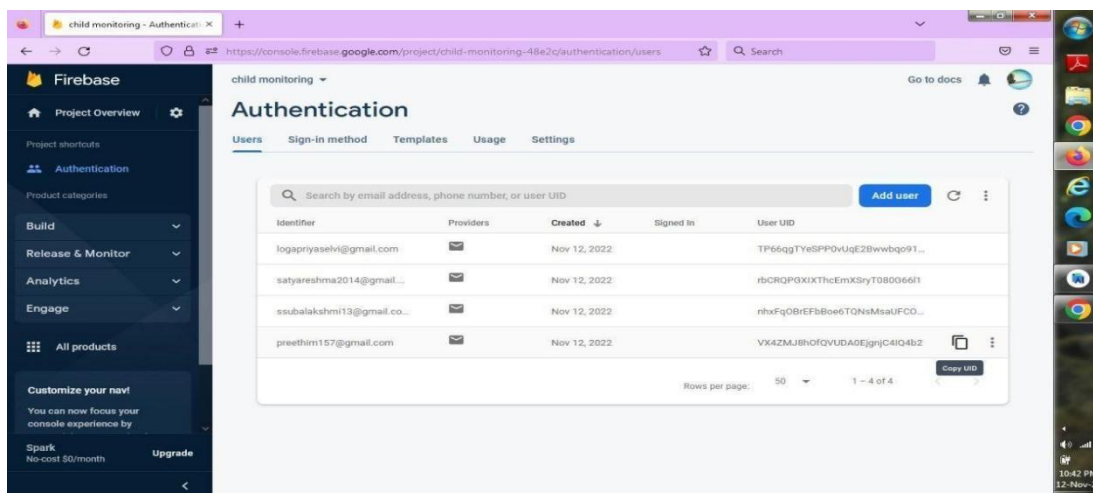
Output :

Login Page

Authentication (firebase) :

For storing the registered user details