functionalities include-

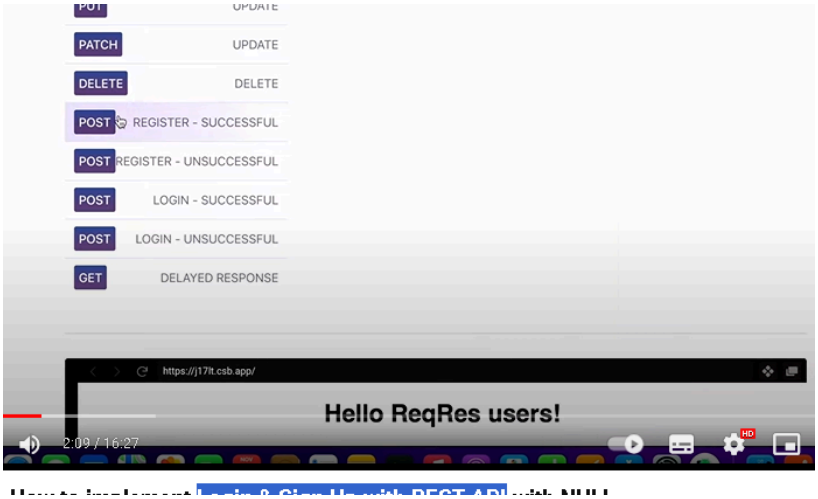
How to create account/sign up
How to sign in
How to upload images on server
How to send arrays on server

First we imported the following packages

- **cupertino_icons**: A package that provides a set of icons used in Cupertino (iOS) style apps.
- **modal_progress_hud_nsn**: A package that displays a modal progress indicator (HUD) with a spinning wheel and optional text, commonly used to show loading or progress states.
- **http**: A package that provides a set of high-level functions for making HTTP requests in Dart, allowing for easy interaction with web servers and APIs.

then created a new dart file SignUpScreen which we linked to our main.dart file

for sign up we will use the following api link
🌐 Reqres - A hosted REST-API ready to respond to your AJAX requests



Copy the link:
Copy the API link provided: https://reqres.in/api/register.

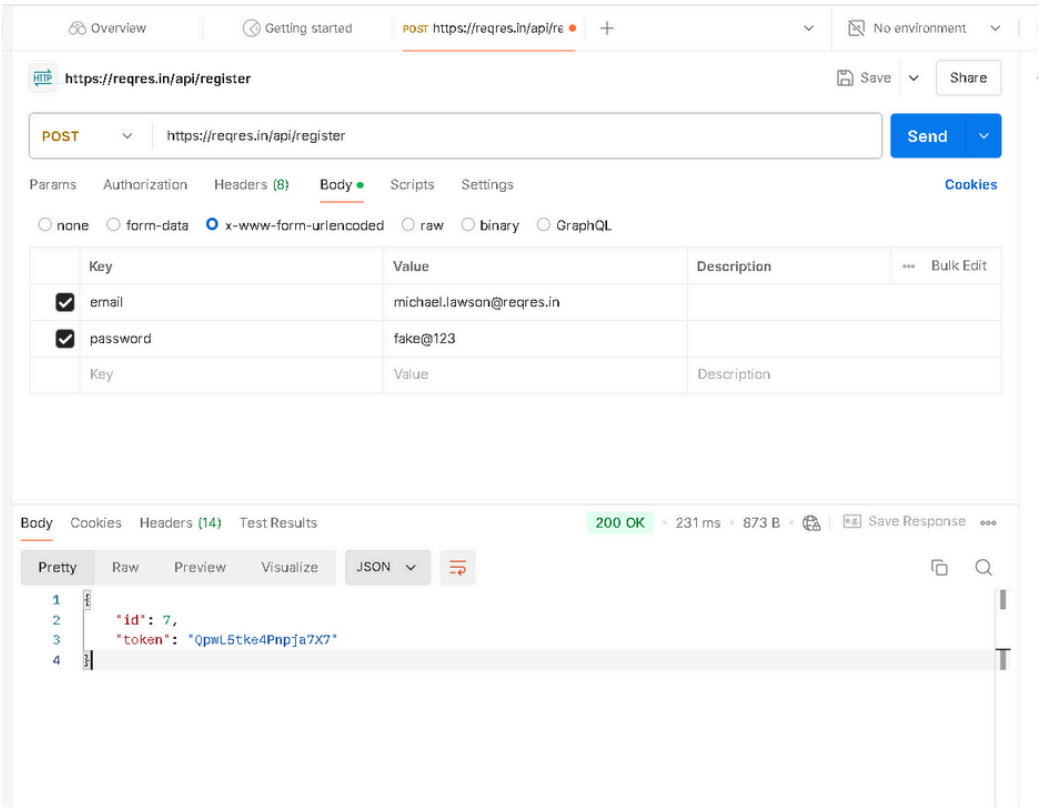
Open Postman:
Open Postman and paste the copied link into the request URL field.

Set the method to POST:
Select POST as the method since we are sending data to the server.

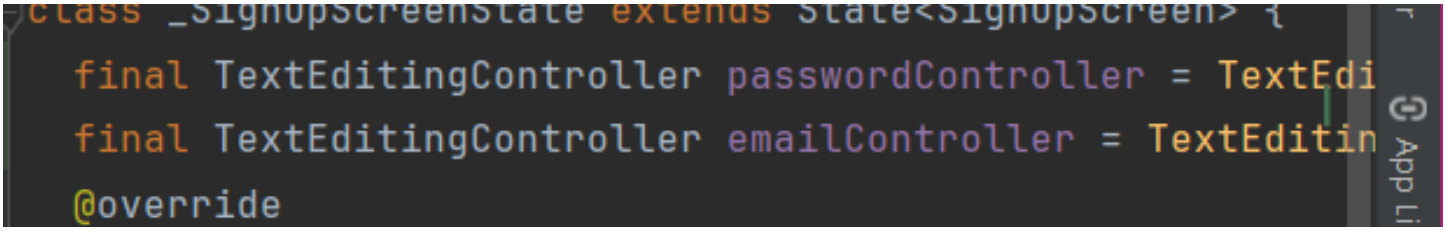
Input email and password:
Go to the **Body** tab, choose x-www-form-urlencoded as the format, and then manually enter the email and password fields with their corresponding values.

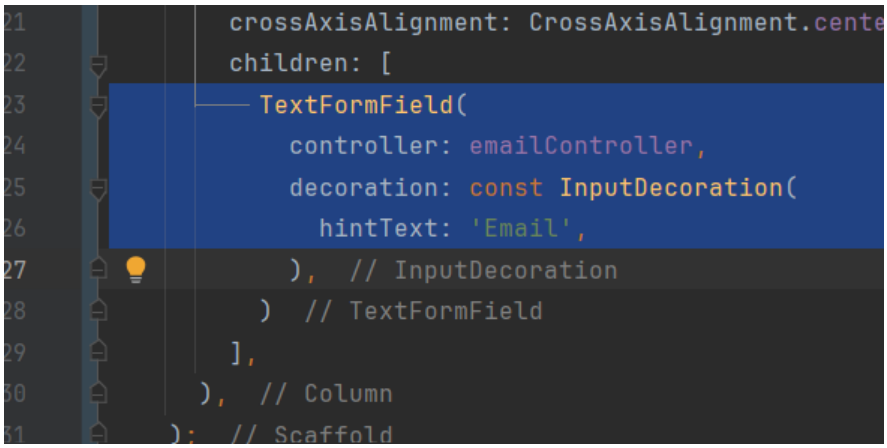
Send the request:
Click the Send button to hit the API.

View the response:
Once the request is sent, the response will be displayed in Postman, and it will be stored on the server as specified by the API.



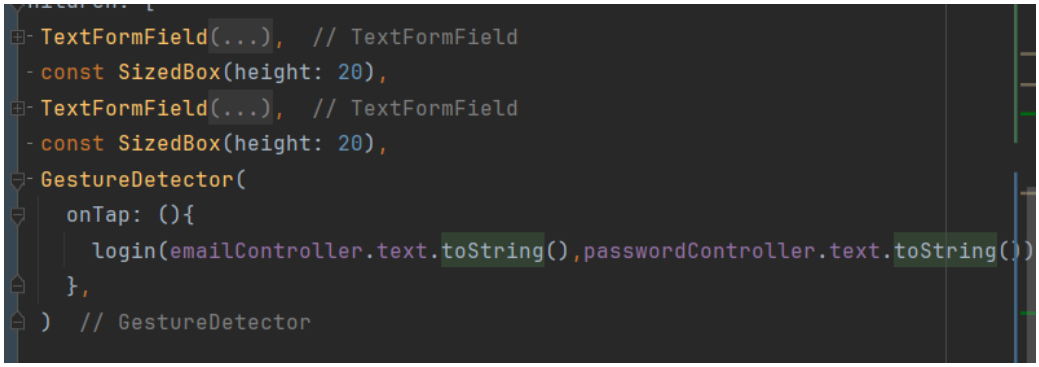
Now coming back to our app we will create an input text field to get the response. emailController is an instance of TextEditingController that is used to control the TextFormField where the user inputs their email address. The controller allows you to programmatically retrieve or modify the text in the field, as well as listen to changes in the text.





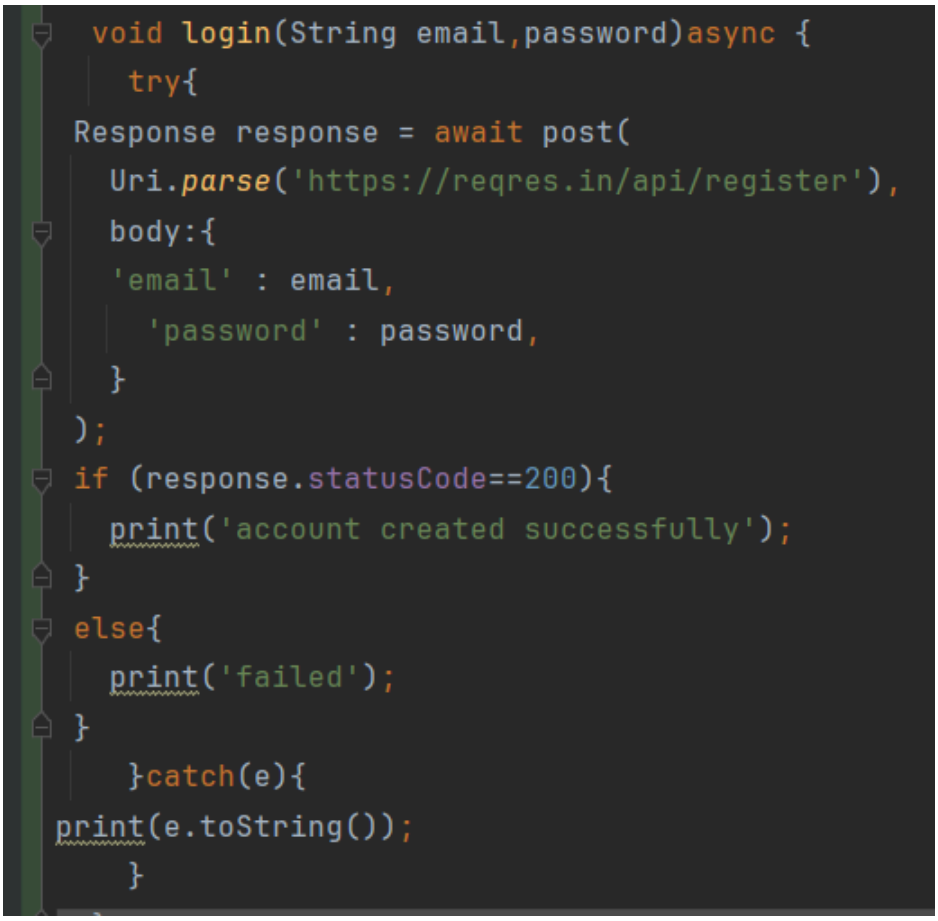
GestureDetector and login function

We created a GestureDetector that calls the login function when a gesture is detected. The login function takes two parameters: email and password, which are obtained from the TextFormField controllers emailController and passwordController respectively.



login function

The login function is an asynchronous function that sends a POST request to the API endpoint https://reqres.in/api/register with the email and password in the request body.



```
 void login(String email,password)async {
   try{
Response response = await post(
  Uri.parse('https://reqres.in/api/register'),
  body:{
  'email' : email,
    'password' : password,
  }
);
if (response.statusCode==200){
  print('account created successfully');
}
else{
  print('failed');
}
   }catch(e){
print(e.toString());
   }
```

- The function is marked as async to indicate that it returns a Future.
- The try block sends a POST request to the API endpoint using the post function from the http package.
- The request body is a JSON object with two fields: email and password, which are set to the values pass-ed as parameters to the login function.
- The await keyword is used to wait for the response from the API.
- If the response status code is 200, it prints "account created successfully" to the console.
- If the response status code is not 200, it prints "failed" to the console.
- The catch block catches any exceptions that occur during the execution of the try block and prints the error message to the console.

```
import 'dart:convert';

import 'package:flutter/material.dart';
import 'package:http/http.dart' as http;

class SignUpScreen extends StatefulWidget {
 const SignUpScreen({super.key});

 @override
 State<SignUpScreen> createState() => _SignUpScreenState();
```

```
}

class _SignUpScreenState extends State<SignUpScreen> {
 final TextEditingController passwordController = TextEditingController();
 final TextEditingController emailController = TextEditingController();

 void login(String email, String password) async {
  try {
   http.Response response = await http.post(
    //Uri.parse('https://reqres.in/api/register'), for sign up

    Uri.parse('https://reqres.in/api/login'), //for login
    body: {
     'email': email,
     'password': password,
    },
   );
   if (response.statusCode == 200) {
    var data = jsonDecode(response.body.toString());
    print(data['token']);
    print('Account created successfully');
   } else {
    print('Failed to create account');
   }
  } catch (e) {
   print(e.toString());
  }
 }


 @override
 Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(
    title: const Text('Sign Up API'),
   ),
   body: SingleChildScrollView(  // Wrap in SingleChildScrollView
    padding: const EdgeInsets.all(16.0),
    child: Column(
     mainAxisAlignment: MainAxisAlignment.center,
```

```
crossAxisAlignment: CrossAxisAlignment.stretch,
children: [
 TextFormField(
  controller: emailController,
  decoration: const InputDecoration(
   hintText: 'Email',
  ),
  keyboardType: TextInputType.emailAddress,
 ),
 const SizedBox(height: 20),
 TextFormField(
  controller: passwordController,
  decoration: const InputDecoration(
   hintText: 'Password',
  ),
  obscureText: true,
 ),
 const SizedBox(height: 20),
 GestureDetector(
  onTap: () {
   login(
    emailController.text.toString(),
    passwordController.text.toString(),
   );
  },
  child: Container(
   padding: const EdgeInsets.all(16.0),
   decoration: BoxDecoration(
    color: Colors.blue,
    borderRadius: BorderRadius.circular(8.0),
   ),
   child: const Center(
    child: Text(
     'Sign Up',
     style: TextStyle(color: Colors.white),
    ),
   ),
  ),
 ),
],
```

```
        ),
      ),
    );
  }
}
```