

Practical 11: Create and application Connecting REST API in Flutter.

Code :

```
import 'package:flutter/material.dart';
import 'package:resetapi/data_screen.dart';
void main() { runApp(MyApp()); } class
MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) { return
  MaterialApp(
    debugShowCheckedModeBanner: false,
    title: 'Flutter REST API Demo', theme:
    ThemeData( primarySwatch:
    Colors.blue, ), home: DataScreen(), ); }
} api_service.dart:
import 'dart:convert'; import
'package:http/http.dart' as http; class
Post { final int userId; final int id; final
String title; final String body; Post({
required this.userId, required this.id, required this.title, required this.body, });
factory Post.fromJson(Map<String, dynamic> json) { return Post(
userId: json['userId'], id: json['id'], title: json['title'], body:
json['body'], ); } }
class ApiService {
static const String baseUrl = 'https://jsonplaceholder.typicode.com/todos/1'; static
Future<List<Post>> fetchPosts() async {
final response = await http.get(Uri.parse('$baseUrl/posts'));
if (response.statusCode == 200) {
List<dynamic> jsonResponse = json.decode(response.body); return jsonResponse.map((post) =>
Post.fromJson(post)).toList(); } else { throw Exception('Failed to load posts'); } } }
data_screen.dart:
import 'package:flutter/material.dart'; import
'package:resetapi/api_service.dart'; class
DataScreen extends StatefulWidget {
  @override
  _DataScreenState createState() => _DataScreenState(); }
class _DataScreenState extends State<DataScreen> { late
Future<List<Post>> posts;
  @override
  void initState() { super.initState();
posts = ApiService.fetchPosts(); }

  @override
```

```
Widget build(BuildContext context) { return Scaffold( appBar: AppBar( title: Text('Posts'), ),
body: Center( child: FutureBuilder<List<Post>>( future: posts,
builder: (context, snapshot) {
if (snapshot.hasData) { return ListView.builder(
itemCount: snapshot.data!.length, itemBuilder:
(context, index) { return Card( elevation: 3,
margin: EdgeInsets.all(10), child:
Padding(
padding: EdgeInsets.all(10), child: Column(
crossAxisAlignment: CrossAxisAlignment.start, children: [ Text(
'Post ${index + 1}:', // Add label here style: TextStyle(
fontWeight: FontWeight.bold, fontSize: 16, ), ),
SizedBox(height: 5), Text( snapshot.data![index].title,
style: TextStyle( fontWeight: FontWeight.bold,
fontSize: 18, ), ),
SizedBox(height: 5), Text(snapshot.data![index].body), ), ), ); } else
if (snapshot.hasError) { return Text("${snapshot.error}"); }, ), ); }
```

• Output:

Posts

Post 10:

optio molestias id quia eum

quo et expedita modi cum officia vel magni
doloribus qui repudiandae
vero nisi sit
quos veni... n quod sed accusamus veritatis error.

Post 11:

et ea vero quia laudantium autem

delectus reiciendis molestiae occaecati non minima eveniet qui
voluptatibus
accusamus in eum beatae sit
vel qui neque voluptates ut commodi qui incidunt
ut animi commodi

Post 12:

in quibusdam tempore odit est dolore

Itaque id aut magnam
praesentium quia et es odit et ea voluptas et
sapiente quia nihil amet occaecati quia id voluptatem
incidunt ea est distinctio odio

Post 13:

dolorum ut in voluptas mollitia et saepe quo animi

aut dicta possimus sint mollitia voluptas commodi quo doloremque

Posts

Post 36:

fuga nam accusamus voluptas reiciendis itaque

ad mollitia et omnis minus architecto odit
voluptas doloremque maxime aut non ipsa qui alias veniam
blanditiis culpa aut quia nihil cumque facere et occaecati
qui aspernatur quia eaque ut aperiam inventore

Post 37:

provident vel ut sit ratione est

debitis et eaque non officia sed nesciunt pariatur vel
voluptatem iste vero et ea
nihilquam aut expedita ipsum nulla in
voluptates omnis consequatur aut enim officiis in quam qui

Post 38:

explicabo et eos deleniti nostrum ab id repellendus

animi esse sit aut sit nesciunt assumenda eum voluptas
quia voluptatibus provident quia necessitatibus ea
rerum repudiandae quia voluptatem delectus fugit aut id quia
ratione optio eos iusto veniam iure

Post 39:

eos dolore iste accusantium est eaque quam

corporis rerum ducimus vel eum accusantium