



Faculty of Technology and Engineering

Chandubhai S. Patel Institute of Technology

Department of Computer Science & Engineering

Date: / /

Laboratory Manual Performa

Academic Year	:	2024-25	Semester	:	5 TH
Course code	:	CSE309	Course name	:	Mobile Application and Development

Practical - 5

Fetch any API data from the internet and display on List View Builder.

Introduction of relevant concepts used:

Code (Screenshot)

Main.dart

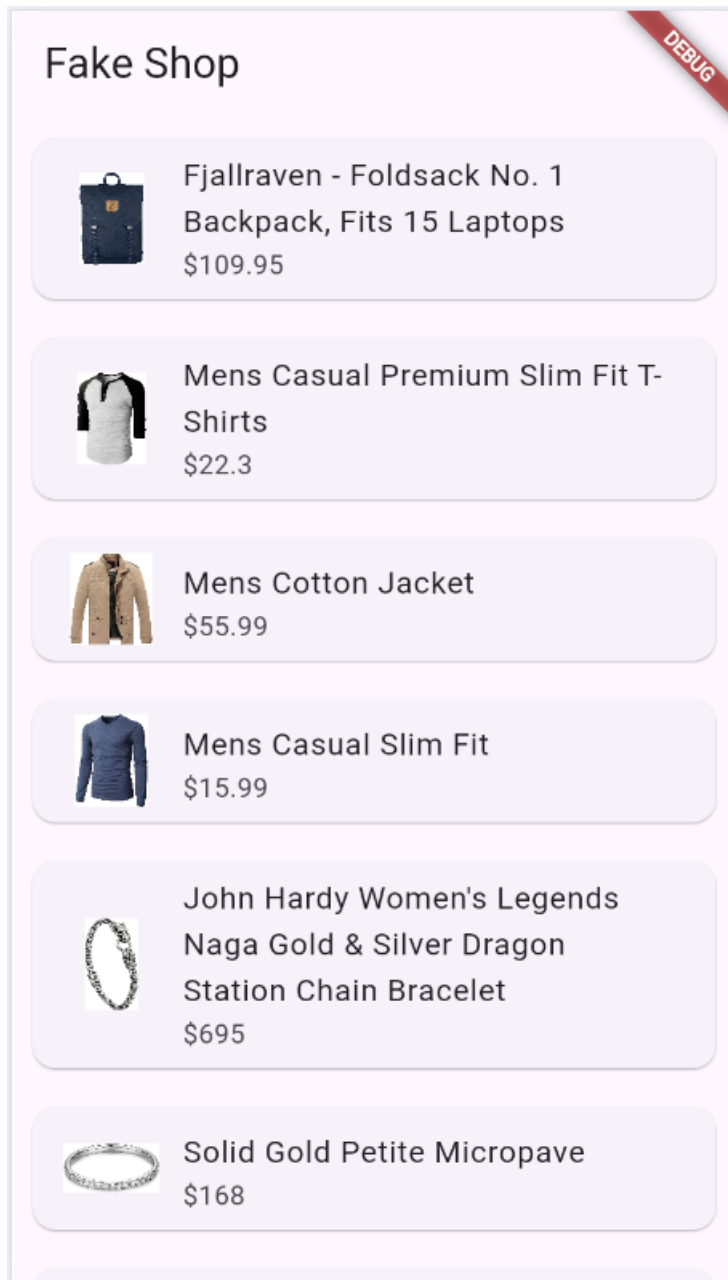
```
main.dart ×
lib > main.dart > ...
1 import 'package:flutter/material.dart';
2 import 'package:http/http.dart' as http;
3 import 'dart:convert';
4
5 void main() {
6   runApp(const MyApp());
7 }
8
9 class MyApp extends StatelessWidget {
10   const MyApp({Key? key}) : super(key: key);
11
12   @override
13   Widget build(BuildContext context) {
14     return MaterialApp(
15       title: 'Fake Shop',
16       theme: ThemeData(
17         primarySwatch: Colors.blue,
18       ), // ThemeData
19       home: const ProductListScreen(),
20     ); // MaterialApp
21   }
22 }
23
24 class ProductListScreen extends StatefulWidget {
25   const ProductListScreen({Key? key}) : super(key: key);
26
27   @override
28   _ProductListScreenState createState() => _ProductListScreenState();
29 }
```

```

30
31 class _ProductListScreenState extends State<ProductListScreen> {
32   List<dynamic> _products = [];
33   bool _isLoading = true;
34
35   @override
36   void initState() {
37     super.initState();
38     _fetchProducts();
39   }
40
41   Future<void> _fetchProducts() async {
42     final url = Uri.parse('https://fakestoreapi.com/products');
43     final response = await http.get(url);
44
45     if (response.statusCode == 200) {
46       final List<dynamic> products = json.decode(response.body);
47       setState(() {
48         _products = products;
49         _isLoading = false;
50       });
51     } else {
52       throw Exception('Failed to load products');
53     }
54   }
55
56   @override
57   Widget build(BuildContext context) {
58     return Scaffold(
59       appBar: AppBar(
60         title: const Text('Fake Shop'),
61       ), // AppBar
62       body: _isLoading
63         ? const Center(child: CircularProgressIndicator())
64         : ListView.builder(
65           itemCount: _products.length,
66           itemBuilder: (context, index) {
67             final product = _products[index];
68
69             itemBuilder: (context, index) {
70               final product = _products[index];
71               return Card(
72                 margin: const EdgeInsets.all(10),
73                 child: ListTile(
74                   leading: Image.network(
75                     product['image'],
76                     width: 50,
77                     height: 50,
78                     errorBuilder: (context, error, stackTrace) {
79                       return const Icon(Icons.error);
80                     },
81                   ), // Image.network
82                   title: Text(product['title']),
83                   subtitle: Text('\${product['price']}'),
84                 ), // ListTile
85               ); // Card
86             },
87           ), // ListView.builder
88         ); // Scaffold
89   }
90 }

```

Output (Screenshot)



Grade/Marks
(____ / 10)

Sign of Lab Teacher with Date