



Faculty of Technology and Engineering

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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:

- **http package**: A Dart package used for making HTTP requests to fetch data from the internet, allowing interaction with web services and APIs.
- **ListView.builder**: A constructor in Flutter that builds a scrollable, efficient list of widgets on demand, suitable for displaying dynamic data fetched from APIs.

```
main.dart
import 'package:flutter/material.dart';
import 'screens/data screen.dart';
void main() {
runApp(MyApp());
class MyApp extends StatelessWidget {
 @override
 Widget build(BuildContext context) {
  return MaterialApp(
   title: 'Fetch Data Example',
   theme: ThemeData(
   primarySwatch: Colors.blue,
   home: DataScreen(),
  );
data screen.dart
import 'package:flutter/material.dart';
import 'package:http/http.dart' as http;
import 'dart:convert';
```

```
class DataScreen extends StatefulWidget {
 DataScreenState createState() => DataScreenState();
class _DataScreenState extends State<DataScreen> {
 List<dynamic> posts = [];
 bool isLoading = true;
 void initState() {
  super.initState();
  fetchPosts();
 }
 Future<void> fetchPosts() async {
  final response = await http.get(Uri.parse('https://jsonplaceholder.typicode.com/posts'));
  if (response.statusCode == 200) {
    setState(() {
     _posts = json.decode(response.body);
     isLoading = false;
   });
  } else {
   throw Exception('Failed to load posts');
 }
 Widget build(BuildContext context) {
  return Scaffold(
    appBar: AppBar(
     title: Text('Fetch Data Example'),),
   body: _isLoading
      ? Center(child: CircularProgressIndicator())
                                                                      Fetch Data Example
      : ListView.builder(
         itemCount: _posts.length,
                                                                      sunt aut facere repellat provident occaecati excepturi optio
                                                                      reprehenderit
         itemBuilder: (context, index) {
                                                                      quia et suscipit
          return ListTile(
                                                                      suscipit recusandae consequentur expedita et cum
                                                                      reprehenderit molestiae ut ut quas totam
           title: Text(_posts[index]['title']),
                                                                      nostrum rerum est autem sunt rem eveniet architecto
           subtitle: Text(_posts[index]['body']),
                                                                      qui est esse
          );
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        },
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                                   Output (Screenshot)
       ٦.
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  );
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                                                                      quis sunt voluntatem rerum illo velit
```