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	:	5TH
Course code	:	CSE309	Course name	:	Mobile Application and Development

Practical - 4

Create a to-do Application using Text field Button. On the button click event display data in List.

Introduction of relevant concepts used:

Code (Screenshot)

Main.dart

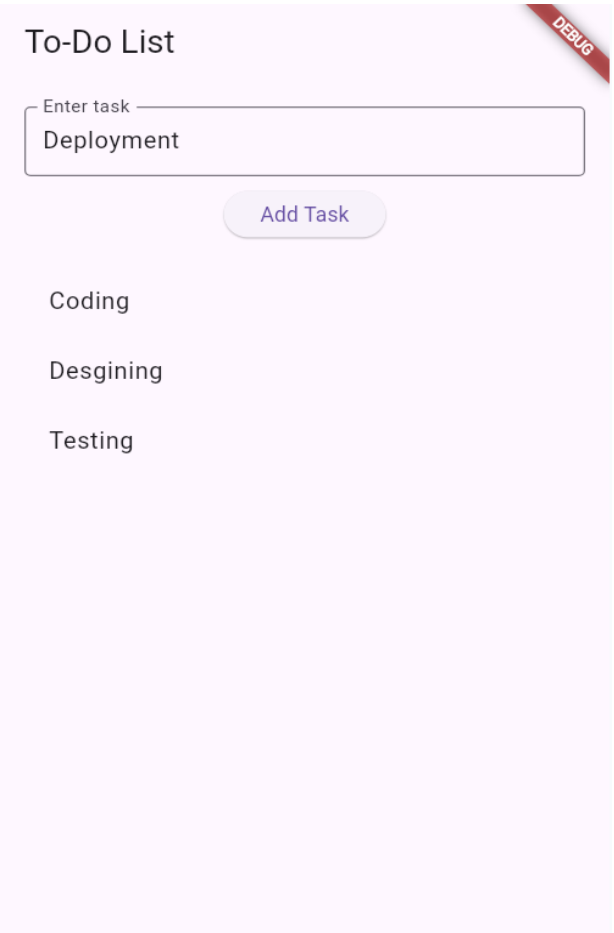
main.dart

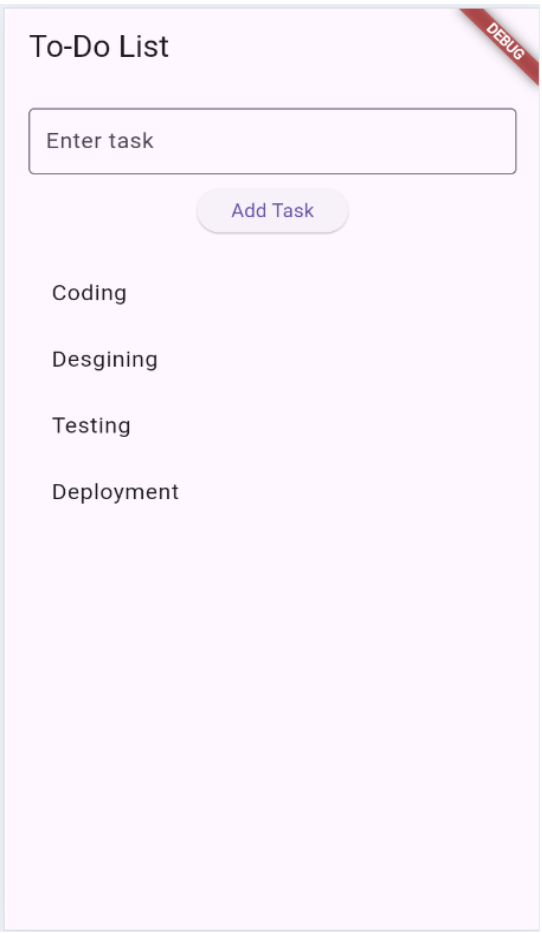
lib > main.dart > _TodoAppState > build

```dart
import 'package:flutter/material.dart';

Run | Debug | Profile
void main() {
  runApp(const MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({Key? key}) : super(key: key);

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'To-Do App',
      theme: ThemeData(
        primarySwatch: Colors.blue,
      ), // ThemeData
      home: const TodoApp(),
    ); // MaterialApp
  }
}

class TodoApp extends StatefulWidget {
  const TodoApp({Key? key}) : super(key: key);

  @override
  _TodoAppState createState() => _TodoAppState();
}
```

```dart
class _TodoAppState extends State<TodoApp> {
  final _taskController = TextEditingController();
  final List<String> _tasks = [];

  void _addTask() {
    String task = _taskController.text;
    if (task.isNotEmpty) {
      setState(() {
        _tasks.add(task);
        _taskController.clear();
      });
    }
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: const Text('To-Do List'),
      ), // AppBar
      body: Padding(
        padding: const EdgeInsets.all(16.0),
        child: Column(
          children: [
            TextField(
              controller: _taskController,
              decoration: const InputDecoration(
                labelText: 'Enter task',
                border: OutlineInputBorder(),
              ), // InputDecoration
            ), // TextField
            const SizedBox(height: 10),
            ElevatedButton(
              onPressed: _addTask,
              child: const Text('Add Task'),
            ), // ElevatedButton
            const SizedBox(height: 20),
            Expanded(
              child: ListView.builder(
                itemCount: _tasks.length,
                itemBuilder: (context, index) {
                  return ListTile(
                    title: Text(_tasks[index]),
                  ); // ListTile
                },
              ), // ListView.builder
            ), // Expanded
          ],
        ), // Column
      ), // Padding
    ); // Scaffold
  }
}
```

Output (Screenshot)





Grade/Marks
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Sign of Lab Teacher with Date