

11. Develop an application that tracks our daily Expenses and get a report chart.

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

void main() {
  runApp(ExpenseTrackerApp());
}

class Expense {
  final String title;
  final double amount;
  final DateTime date;

  Expense({required this.title, required this.amount, required this.date});
}

class ExpenseTrackerApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Expense Tracker',
      theme: ThemeData(primarySwatch: Colors.indigo),
      home: ExpenseHomePage(),
    );
  }
}

class ExpenseHomePage extends StatefulWidget {
  @override
  _ExpenseHomePageState createState() => _ExpenseHomePageState();
}

class _ExpenseHomePageState extends State<ExpenseHomePage> {
  final List<Expense> _expenses = [];

  void _addExpense(String title, double amount) {
    final newExp = Expense(
      title: title,
      amount: amount,
      date: DateTime.now(),
    );
```

```

    setState(() {
      _expenses.add(newExp);
    });
  }

  void _openAddDialog() {
    String title = "";
    String amount = "";
    showDialog(
      context: context,
      builder: (_) => AlertDialog(
        title: Text('Add Expense'),
        content: Column(
          mainAxisAlignment: MainAxisAlignment.min,
          children: [
            TextField(
              decoration: InputDecoration(labelText: 'Title'),
              onChanged: (val) => title = val,
            ),
            TextField(
              decoration: InputDecoration(labelText: 'Amount'),
              keyboardType: TextInputType.number,
              onChanged: (val) => amount = val,
            ),
          ],
        ),
        actions: [
          TextButton(
            onPressed: () {
              if (title.isNotEmpty && double.tryParse(amount) != null) {
                _addExpense(title, double.parse(amount));
              }
              Navigator.of(context).pop();
            },
            child: Text('Add'),
          )
        ],
      ),
    );
  }
}

```

```

List<BarChartGroupData> _getChartData() {
  Map<String, double> dailyTotals = {};
  for (var exp in _expenses) {

```

```

String date = "${exp.date.day}/${exp.date.month}";
dailyTotals[date] = (dailyTotals[date] ?? 0) + exp.amount;
}

int index = 0;
return dailyTotals.entries.map((entry) {
  return BarChartData(
    x: index++,
    barRods: [
      BarChartRodData(toY: entry.value, color: Colors.indigo, width: 16)
    ],
    showingTooltipIndicators: [0],
  );
}).toList();
}

```

```

@override
Widget build(BuildContext context) {
  final chartData = _getChartData();
  return Scaffold(
    appBar: AppBar(title: Text('Expense Tracker')),
    floatingActionButton: FloatingActionButton(
      onPressed: _openAddDialog,
      child: Icon(Icons.add),
    ),
    body: Column(
      children: [
        SizedBox(
          height: 200,
          child: Padding(
            padding: const EdgeInsets.all(16.0),
            child: BarChart(
              BarChartData(
                titlesData: FITitlesData(show: false),
                barGroups: chartData,
              ),
            ),
          ),
        ),
      ],
    ),
    expanded(
      child: ListView.builder(
        itemCount: _expenses.length,
        itemBuilder: (ctx, i) => ListTile(
          title: Text(_expenses[i].title),

```

```
        subtitle: Text(_expenses[i].date.toString()),
        trailing: Text("₹$_expenses[i].amount.toStringAsFixed(2)"),
      ),
    ),
  ],
),
);
}
```

```
dependencies:
  flutter:
    sdk: flutter
  fl_chart: ^0.66.0
```