

**LAPORAN TUGAS GUIDED
PEMROGRAMAN PERANGKAT BERGERAK**

**MODUL 5
ANTARMUKA PENGGUNA LANJUTAN**



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PROGRAM STUDI S1 REKAYASA PERANGKAT LUNAK

FAKULTAS INFORMATIKA

TELKOM UNIVERSITY PURWOKERTO

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GUIDED DAN UNGUIDED

A. Main.dart

```
import 'package:flutter/material.dart';
import 'package:praktikum5/flexible_expanded_screen.dart';
import 'package:praktikum5/jenis_list_view.dart';
import 'package:praktikum5/custom_scroll_view.dart';

void main() {
  runApp(const MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({super.key});

  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Demo',
      theme: ThemeData(
        colorScheme: ColorScheme.fromSeed(seedColor:
Colors.deepBlueAccent),
      ),
      home: CustomScreen()
      // FlexibleExpandedScreen()
      // JenisListView()
    );
  }
}

class MyHomePage extends StatefulWidget {
  const MyHomePage({super.key, required this.title});

  final String title;

  @override
  State<MyHomePage> createState() => _MyHomePageState();
}

class _MyHomePageState extends State<MyHomePage> {
  int _counter = 0;

  void _incrementCounter() {
    setState(() {
      _counter++;
    });
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        backgroundColor: Theme.of(context).colorScheme.inversePrimary,
        title: Text(widget.title),
      ),
      body: Center(
        child: Column(
          mainAxisAlignment: MainAxisAlignment.center,
          children: <Widget>[
            const Text(
              'You have pushed the button this many times:',
            ),
            Text(
              '$_counter',
              style: Theme.of(context).textTheme.headlineMedium,
            ),
          ],
        ),
      ),
      floatingActionButton: FloatingActionButton(
        onPressed: _incrementCounter,
        tooltip: 'Increment',
        child: const Icon(Icons.add),
      ),
    );
  }
}
```

B. CUSTOM SCROLL VIEW DART

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

class CustomScreen extends StatelessWidget {
  const CustomScreen({super.key});

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: const Text("Custom"),
        centerTitle: true,
        backgroundColor: Colors.amber,
      ),
      body: CustomScrollView(
        slivers: <Widget>[
          const SliverAppBar(
            pinned: true,
            expandedHeight: 250.0,
            flexibleSpace: FlexibleSpaceBar(
              title: Text('Custom Demo'),
            ),
          ),
          SliverGrid(
            delegate: SliverChildBuilderDelegate(
              (BuildContext context, int index) {
                return Container(
                  alignment: Alignment.center,
                  color: Colors.cyan[100 * (index % 9)],
                  child: Text('Grid item $index'),
                );
              },
            childCount: 20,
          ),
          gridDelegate: const
SliverGridDelegateWithMaxAxisExtent(
  mainAxisSpacing: 10,
  crossAxisSpacing: 10,
  childAspectRatio: 4,
),
],
),
);
}
```

C. Flexible Expanded Screen.dart

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

class FlexibleExpandedScreen extends StatelessWidget {
  const FlexibleExpandedScreen({super.key});

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text("Flexible vs Expanded"),
        backgroundColor: Colors.amber,
      ),
      body: Column(
        children: [
          Text(
            "Flexible",
            style: TextStyle(fontSize: 10),
          ),
          SizedBox(
            height: 8,
          ),
          Row(
            children: [
              Container(
                width: 50,
                height: 100,
                color: Colors.red,
              ),
              Flexible(
                child: Container(
                  height: 100,
                  color: Colors.amber,
                  child: const Text(
                    "This is flexible widget, it takes up remaining space but can shrink if
needed"),
                ),
              ),
              const Icon(Icons.sentiment_satisfied_alt_rounded)
            ],
          ),
          SizedBox(
            height: 10,
          ),
          Text(
            "Expanded",
            style: TextStyle(fontSize: 18),
          ),
          const SizedBox(
            height: 8,
          ),
          Row(
            children: [
              Container(
                width: 50,
                height: 100,
                color: Colors.red,
              ),
              Expanded(
                child: Container(
                  height: 100,
                  color: Colors.amber,
                  child: const Text(
                    "This is flexible widget, it takes up remaining space but can shrink if
needed"),
                ),
              ),
              const Icon(Icons.sentiment_satisfied_alt_rounded)
            ],
          ),
        ],
      ),
    );
  }
}
```

D. Jenis List View.dart

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

class JenisListView extends StatelessWidget {
  const JenisListView({super.key});

  @override
  Widget build(BuildContext context) {
    final List<String> entries = <String>['A', 'B', 'C', 'D', 'E'];
    final List<int> colorCodes = <int>[600, 500, 400, 300, 200];

    return Scaffold(
      appBar: AppBar(
        title: Text("Latihan Jenis ListView"),
        backgroundColor: Colors.amber,
      ),
      body: ListView.separated(
        itemBuilder: (BuildContext context, int index) {
          return Container(
            height: 50,
            color: Colors.amber[colorCodes[index]],
            child: Center(
              child: Text("Entry ${entries[index]}"),
            ),
          );
        },
        itemCount: entries.length,
        separatorBuilder: (BuildContext, int index) {
          return Container(
            height: 10,
            color: Colors.red,
          );
        },
      ),
    );
  }
}
```

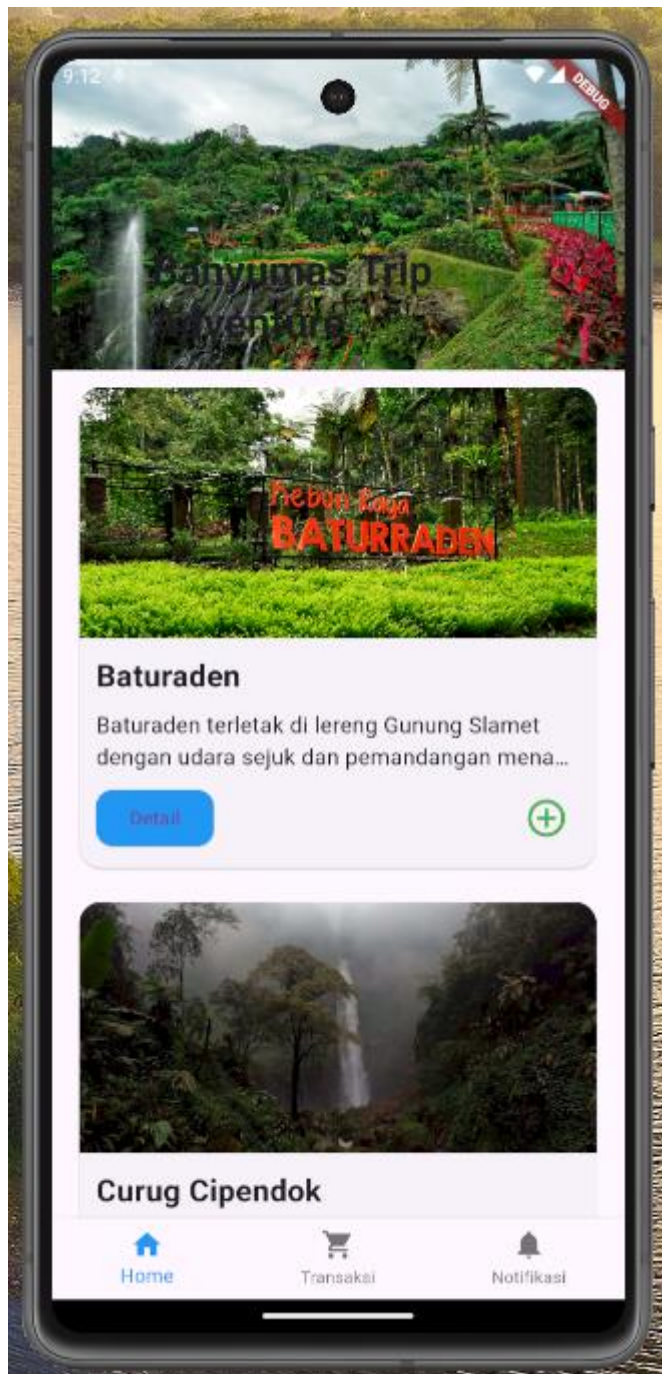
Output :

Custom

Custom Demo

Grid item 0	Grid item 1	Grid item 2	Grid item 3	Grid item 4	Grid item 5	Grid item 6
Grid item 7	Grid item 8	Grid item 9	Grid item 10	Grid item 11	Grid item 12	Grid item 13
Grid item 14	Grid item 15	Grid item 16	Grid item 17	Grid item 18	Grid item 19	

E. UNGUIDED



Deskripsi :

- **CustomScrollView:** Digunakan untuk menampung elemen-elemen dengan efek *scroll*.
- **SliverAppBar:** Membuat header yang bisa di-*scroll*, memiliki fitur seperti berubah ukuran saat di-*scroll* ke atas.
- **SliverList:** Digunakan untuk menampilkan daftar wisata secara dinamis dengan *scrolling*.
- **BottomNavigationBar:** Ditambahkan di bagian bawah halaman utama. Ketika pengguna mengetuk salah satu item (Home, Transaksi, atau Notifikasi), aplikasi akan menampilkan halaman yang sesuai.

Tampilan aplikasi akan lebih interaktif, dengan efek *scroll* yang lebih menarik serta tampilan aplikasi yang lebih fleksibel untuk data wisata.