UNGUIDED
PEMROGRAMAN PERANGKAT BERGERAK

MODUL XIII
NETWORKING

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PROGRAM STUDI S1 SOFTWARE ENGINEERING

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TUGAS PENDAHULUAN

1. **SOAL**

    Buatlah Aplikasi catatan sederhana menggunakan GetX

    a. Source Code

    Note_controller

```
import 'package:get/get.dart';
import '../models/note_model.dart';

class NoteController extends GetxController {
  var notes = <Note>[].obs;
  var nextId = 1.obs;

  void addNote(String title, String description) {
    notes.add(Note(id: nextId.value, title: title, description: description));
    nextId++;
    Get.back();
    Get.snackbar('Berhasil', 'Catatan telah ditambahkan');
  }

  void removeNote(int id) {
    notes.removeWhere((note) => note.id == id);
    Get.snackbar('Berhasil', 'Catatan telah dihapus');
  }
}
```

    Note_model

```
class Note {
  int id;
  String title;
  String description;

  Note({
```

```dart
    required this.id,
    required this.title,
    required this.description,
  });
}

Add_note_page.dart
import 'package:flutter/material.dart';
import 'package:get/get.dart';
import '../controllers/note_controller.dart';

class AddNotePage extends StatelessWidget {
  final NoteController noteController = Get.find();
  final TextEditingController titleController = TextEditingController();
  final TextEditingController descController = TextEditingController();

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Tambah Catatan Baru'),
        backgroundColor: Colors.blue[700],
        leading: IconButton(
          icon: Icon(Icons.arrow_back),
          onPressed: () => Get.back(),
        ),
      ),
      body: Padding(
        padding: const EdgeInsets.all(16.0),
        child: Column(
          children: [
            TextField(
              controller: titleController,
              decoration: InputDecoration(
```

```dart
        labelText: 'Judul',
        border: OutlineInputBorder(),
        prefixIcon: Icon(Icons.title),
      ),
    ),
    SizedBox(height: 16),
    TextField(
      controller: descController,
      decoration: InputDecoration(
        labelText: 'Deskripsi',
        border: OutlineInputBorder(),
        prefixIcon: Icon(Icons.description),
      ),
      maxLines: 5,
    ),
    SizedBox(height: 24),
    ElevatedButton.icon(
      onPressed: () {
        if (titleController.text.isNotEmpty &&
            descController.text.isNotEmpty) {
          noteController.addNote(
            titleController.text, descController.text);
        } else {
          Get.snackbar('Peringatan', 'Judul dan deskripsi wajib diisi');
        }
      },
      icon: Icon(Icons.save),
      label: Text('Simpan Catatan'),
      style: ElevatedButton.styleFrom(
        padding: EdgeInsets.symmetric(horizontal: 24, vertical: 12),
      ),
    ),
  ],
),
```

```
      ),
    );
  }
}

Home_page.dart
import 'package:flutter/material.dart';
import 'package:get/get.dart';
import '../controllers/note_controller.dart';
import '../models/note_model.dart';

class HomePage extends StatelessWidget {
  final NoteController noteController = Get.put(NoteController());

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Catatan Saya'),
        backgroundColor: Colors.blue[700],
      ),
      body: Obx(() => noteController.notes.isEmpty
          ? Center(
              child: Text(
                'Belum ada catatan.',
                style: TextStyle(fontSize: 18, color: Colors.grey),
              ),
            )
          : ListView.builder(
              itemCount: noteController.notes.length,
              itemBuilder: (context, index) {
                Note note = noteController.notes[index];
                return Card(
                  margin: EdgeInsets.symmetric(horizontal: 12, vertical: 6),
```

```dart
              child: ListTile(
                title: Text(
                  note.title,
                  style: TextStyle(fontWeight: FontWeight.bold),
                ),
                subtitle: Text(note.description),
                trailing: IconButton(
                  icon: Icon(Icons.delete, color: Colors.red),
                  onPressed: () => noteController.removeNote(note.id),
                ),
              ),
            );
          },
        )),
      floatingActionButton: FloatingActionButton(
        onPressed: () => Get.toNamed('/addNote'),
        child: Icon(Icons.add),
        backgroundColor: Colors.blue[700],
      ),
    );
  }
}
```

Main.dart

```dart
import 'package:flutter/material.dart';
import 'package:get/get.dart';
import 'views/home_page.dart';
import 'views/add_note_page.dart';


void main() {
  runApp(MyApp());
}
```
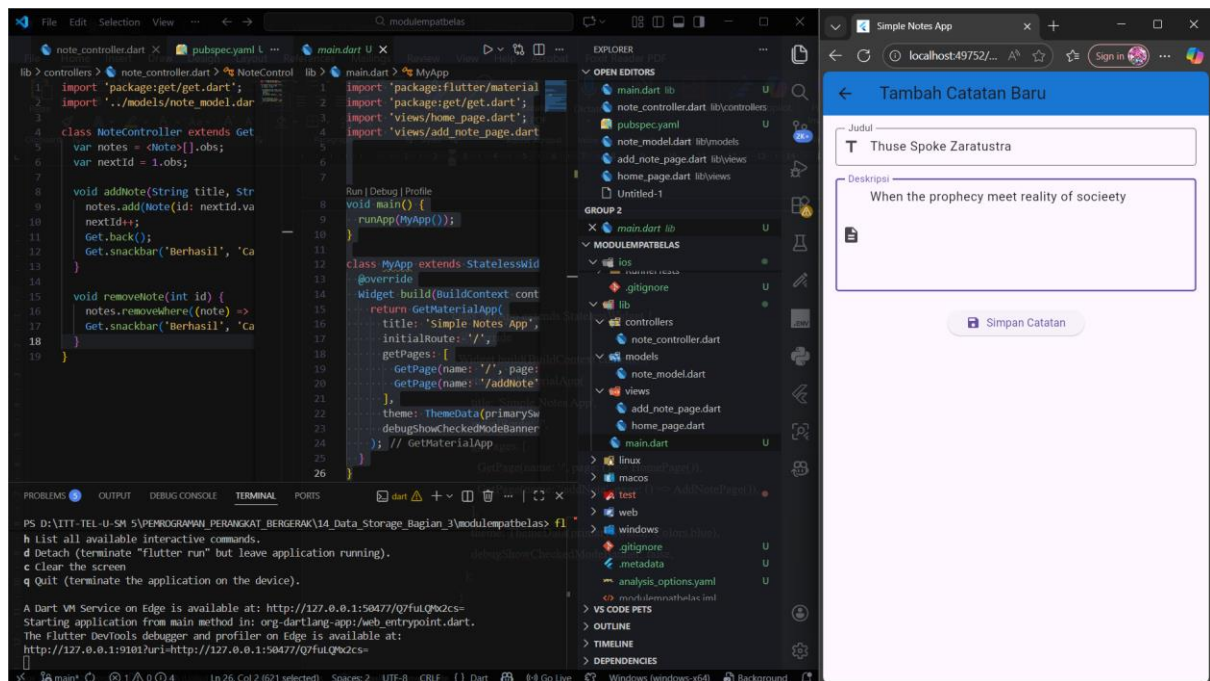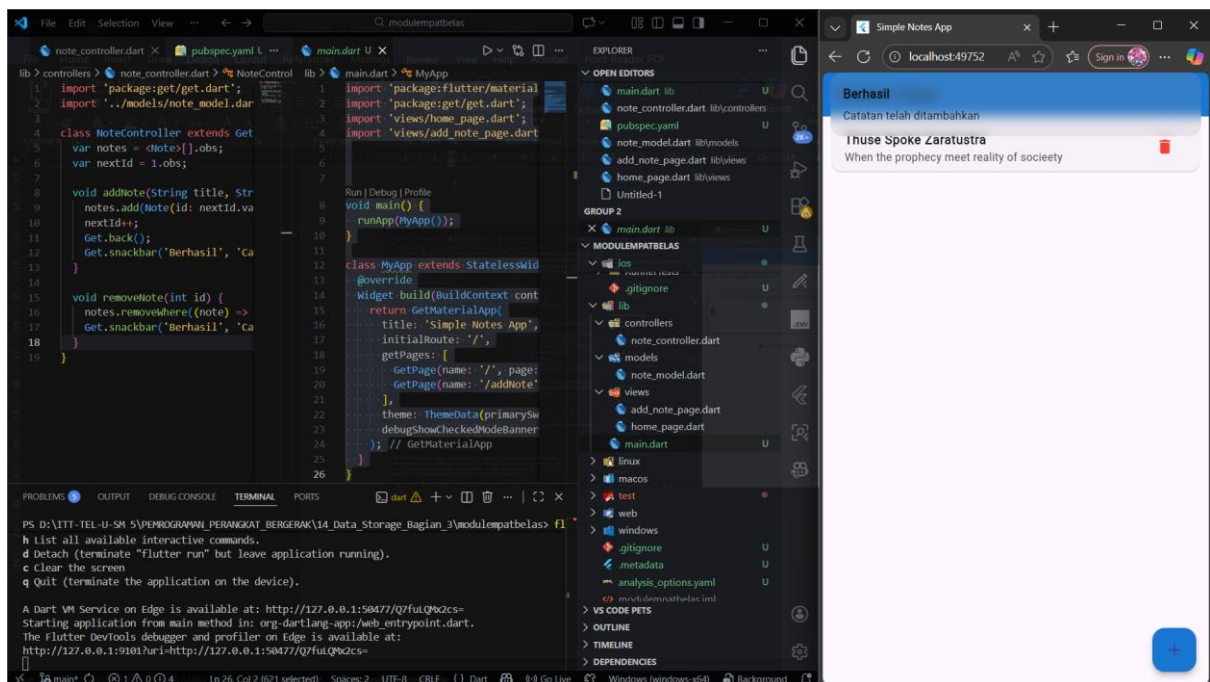
```dart
class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return GetMaterialApp(
      title: 'Simple Notes App',
      initialRoute: '/',
      getPages: [
        GetPage(name: '/', page: () => HomePage()),
        GetPage(name: '/addNote', page: () => AddNotePage()),
      ],
      theme: ThemeData(primarySwatch: Colors.blue),
      debugShowCheckedModeBanner: false,
    );
  }
}
```

Aplikasi ini merupakan aplikasi catatan sederhana berbasis Flutter yang menggunakan GetX sebagai state management dan navigasi. Pengguna dapat menambahkan, menampilkan, dan menghapus catatan yang terdiri dari judul dan deskripsi. Data catatan dikelola secara reaktif melalui NoteController, sehingga perubahan data langsung memperbarui tampilan tanpa perlu setState. Halaman utama menampilkan daftar catatan, sedangkan halaman tambah catatan menyediakan form input. GetX juga dimanfaatkan untuk perpindahan halaman (routing) serta menampilkan notifikasi (snackbar) sebagai umpan balik atas aksi pengguna.