**TUGAS PENDAHULUAN**
**PEMROGRAMAN PERANGKAT BERGERAK**

**MODUL VII**

**NAVIGASI DAN NOTIFIKASI**

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**PROGRAM STUDI S1 SOFTWARE ENGINEERING**

**FAKULTAS INFORMATIKA**

**TELKOM UNIVERSITY PURWOKERTO**

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**TUGAS PENDAHULUAN**

## A. SOAL NOMOR 1

a) Buatlah satu project baru, yang mana di dalamnya terdapat *navigasi* untuk pindah dari satu halaman ke halaman lainnya.

**Source Code**

main.dart

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

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

class WisataApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      debugShowCheckedModeBanner: false,
      title: 'Aplikasi Wisata',
      theme: ThemeData(
        primarySwatch: Colors.pink,
        scaffoldBackgroundColor: Color(0xFFFEEBF3),
      ),
      home: MainPage(),
    );
  }
}
```

pages/main_page.dart

```
import 'package:flutter/material.dart';
import 'home_page.dart';
import 'wisata_page.dart';
import 'profile_page.dart';

class MainPage extends StatefulWidget {
  @override
  _MainPageState createState() => _MainPageState();
}

class _MainPageState extends State<MainPage> {
  int _selectedIndex = 0;

  static final List<Widget> _pages = <Widget>[
    HomePage(),
    WisataPage(),
    ProfilePage(),
  ];

  void _onItemTapped(int index) {
    setState(() {
      _selectedIndex = index;
    });
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Aplikasi Wisata'),
        backgroundColor: Colors.pink,
      ),
```

```
        body: _pages[_selectedIndex],
        bottomNavigationBar: BottomNavigationBar(
          items: const <BottomNavigationBarItem>[
            BottomNavigationBarItem(
              icon: Icon(Icons.home),
              label: 'Home',
            ),
            BottomNavigationBarItem(
              icon: Icon(Icons.explore),
              label: 'Wisata',
            ),
            BottomNavigationBarItem(
              icon: Icon(Icons.person),
              label: 'Profil',
            ),
          ],
          currentIndex: _selectedIndex,
          selectedItemColor: Colors.pink,
          onTap: _onItemTapped,
        ),
      );
    }
}
```

pages/home_page.dart

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

class HomePage extends StatelessWidget {
  final TextEditingController nameController = TextEditingController();

  final List<Map<String, String>> popularDestinations = [
    {
      'name': 'Pantai Kuta',
      'description':
          'Pantai dengan pasir putih dan matahari terbenam yang indah.',
      'image':
          'https://www.water-sport-bali.com/wp-content/uploads/2015/02/Pantai-Nusa-
Dua-Bali-1.jpg'
    },
    {
      'name': 'Gunung Bromo',
      'description':
          'Gunung berapi terkenal dengan pemandangan sunrise yang memukau.',
      'image':
          'https://i0.wp.com/jnewsonline.com/wp-content/uploads/2023/05/gunung-
bromo.jpg?w=1000&ssl=1'
    },
    {
      'name': 'Danau Toba',
      'description':
          'Danau vulkanik terbesar di dunia dengan pemandangan alam yang indah.',
      'image':
          'https://torch.id/cdn/shop/articles/Artikel_170_-
_Preview.jpg?v=1713641039'
    },
  ];

  void _showWelcomeMessage(BuildContext context) {
    if (nameController.text.isNotEmpty) {
      ScaffoldMessenger.of(context).showSnackBar(
        SnackBar(content: Text('Selamat Datang, ${nameController.text}!')),
      );
    }
  }
  @override
  Widget build(BuildContext context) {
    return SingleChildScrollView(
      child: Padding(
        padding: const EdgeInsets.all(16.0),
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.center,
          children: [
```

```dart
              // Welcome Carousel
              CarouselSlider(
                items: popularDestinations.map((destination) {
                  return ClipRRect(
                    borderRadius: BorderRadius.circular(10),
                    child: Stack(
                      fit: StackFit.expand,
                      children: [
                        Image.network(
                          destination['image']!,
                          fit: BoxFit.cover,
                        ),
                        Positioned(
                          bottom: 10,
                          left: 10,
                          child: Text(
                            destination['name']!,
                            style: TextStyle(
                              fontSize: 20,
                              fontWeight: FontWeight.bold,
                              color: Colors.white,
                              backgroundColor: Colors.black54,
                            ),
                          ),
                        ),
                      ],
                    ),
                  );
                }).toList(),
                options: CarouselOptions(
                  height: 200,
                  autoPlay: true,
                  enlargeCenterPage: true,
                ),
              ),
              SizedBox(height: 20),
              // Welcome Message
              Text(
                'Selamat Datang di Aplikasi Wisata!',
                style: TextStyle(fontSize: 24, fontWeight: FontWeight.bold),
                textAlign: TextAlign.center,
              ),
              SizedBox(height: 20),
              // User Input
              TextField(
                controller: nameController,
                decoration: InputDecoration(
                  labelText: 'Masukan Nama Wisata',
                  border: OutlineInputBorder(),
                  prefixIcon: Icon(Icons.person),
                ),
              ),
              SizedBox(height: 20),
              ElevatedButton(
                onPressed: () => _showWelcomeMessage(context),
                style: ElevatedButton.styleFrom(backgroundColor: Colors.pink),
                child: Text('Cari tempat'),
              ),
              Size
              // Greeting Card with User's Name
              if (nameController.text.isNotEmpty)
                Card(
                  color: Colors.pink[50],
                  child: Padding(
                    padding: const EdgeInsets.all(16.0),
                    child: Column(
                      children: [
                        Text(
                          'Halo, ${nameController.text}!',
                          style: TextStyle(
                              fontSize: 18, fontWeight: FontWeight.bold),
                        ),
                        SizedBox(height: 5),
                        Text(
                          'Temukan destinasi wisata yang cocok untuk Anda!',
                          style: TextStyle(fontSize: 16, color: Colors.pink),
                        ),
                      ],
                    ),
                  ),
                ),
```

```
            SizedBox(height: 20),
            // Popular Destinations List
            Text(
              'Destinasi Populer',
              style: TextStyle(fontSize: 20, fontWeight: FontWeight.bold),
            ),
            SizedBox(height: 10),
            ListView.builder(
              physics: NeverScrollableScrollPhysics(),
              shrinkWrap: true,
              itemCount: popularDestinations.length,
              itemBuilder: (context, index) {
                final destination = popularDestinations[index];
                return Card(
                  margin: EdgeInsets.symmetric(vertical: 8),
                  elevation: 3,
                  child: ListTile(
                    leading: ClipRRect(
                      borderRadius: BorderRadius.circular(8.0),
                      child: Image.network(
                        destination['image']!,
                        fit: BoxFit.cover,
                        width: 50,
                        height: 50,
                      ),
                    ),
                    title: Text(destination['name']!),
                    subtitle: Text(destination['description']!),
                  ),
                );
              },
            ),
            SizedBox(height: 20),
            // Explore Button
            ElevatedButton.icon(
              onPressed: () {
                ScaffoldMessenger.of(context).showSnackBar(
                  SnackBar(content: Text('Mengeksplorasi destinasi wisata...')),
                );
              },
              icon: Icon(Icons.explore),
              label: Text('Eksplorasi Sekarang'),
              style: ElevatedButton.styleFrom(
                textStyle: TextStyle(fontSize: 16),
              ),
            ),
          ],
        ),
      ),
    );
  }
}
```

### pages/wisata.dart

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

class WisataPage extends StatelessWidget {
  final List<Map<String, String>> wisataList = [
    {
      'name': 'Pantai Kuta',
      'description':
          'Pantai yang indah dengan pasir putih dan pemandangan matahari terbenam yang
menawan.',
      'image':
          'https://www.water-sport-bali.com/wp-content/uploads/2015/02/Pantai-Nusa-
Dua-Bali-1.jpg'
    },
    {
      'name': 'Gunung Bromo',
      'description':
          'Gunung berapi aktif yang terkenal, dengan pemandangan sunrise yang
memukau.',
      'image':
          'https://i0.wp.com/jnewsonline.com/wp-content/uploads/2023/05/gunung-
bromo.jpg?w=1000&ssl=1'
    },
    {
```

```dart
      'name': 'Danau Toba',
      'description':
          'Danau vulkanik terbesar di dunia, dikelilingi oleh pemandangan alam yang
indah.',
      'image':
          'https://torch.id/cdn/shop/articles/Artikel_170_-_Preview.jpg?v=1713641039'
    },
  ];

  @override
  Widget build(BuildContext context) {
    return ListView.builder(
      itemCount: wisataList.length,
      itemBuilder: (context, index) {
        return GestureDetector(
          onTap: () {
            Navigator.push(
              context,
              MaterialPageRoute(
                builder: (context) => DetailPage(
                  name: wisataList[index]['name']!,
                  description: wisataList[index]['description']!,
                  imageUrl: wisataList[index]['image']!,
                ),
              ),
            );
          },
          child: Card(
            elevation: 5,
            margin: EdgeInsets.symmetric(horizontal: 16, vertical: 10),
            shape:
                RoundedRectangleBorder(borderRadius: BorderRadius.circular(12)),
            child: Stack(
              children: [
                // Background Image with Rounded Corners
                ClipRRect(
                  borderRadius: BorderRadius.circular(12),
                  child: Image.network(
                    wisataList[index]['image']!,
                    height: 200,
                    width: double.infinity,
                    fit: BoxFit.cover,
                  ),
                ),
                // Gradient Overlay for Text Readability
                Positioned.fill(
                  child: Container(
                    decoration: BoxDecoration(
                      borderRadius: BorderRadius.circular(12),
                      gradient: LinearGradient(
                        colors: [Colors.black54, Colors.transparent],
                        begin: Alignment.bottomCenter,
                        end: Alignment.topCenter,
                      ),
                    ),
                  ),
                ),
                // Title and Description
                Positioned(
                  bottom: 15,
                  left: 15,
                  right: 15,
                  child: Column(
                    crossAxisAlignment: CrossAxisAlignment.start,
                    children: [
                      Text(
                        wisataList[index]['name']!,
                        style: TextStyle(
                          fontSize: 20,
                          fontWeight: FontWeight.bold,
                          color: Colors.white,
                        ),
                      ),
                      SizedBox(height: 5),
                      Text(
                        wisataList[index]['description']!,
                        style: TextStyle(
                          fontSize: 14,
                          color: Colors.white70,
                        ),
```

```
              maxLines: 2,
              overflow: TextOverflow.ellipsis,
            ),
          ],
        ),
      ),
    ],
  ),
),
  );
},
    );
  }
}
```

pages/detail_page.dart

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

class DetailPage extends StatelessWidget {
  final String name;
  final String description;
  final String imageUrl;

  DetailPage({
    required this.name,
    required this.description,
    required this.imageUrl,
  });

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text(name),
        backgroundColor: Colors.pink,
      ),
      body: SingleChildScrollView(
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.stretch,
          children: [
            // Display Main Image
            Container(
              height: 250,
              decoration: BoxDecoration(
                image: DecorationImage(
                  image: NetworkImage(imageUrl),
                  fit: BoxFit.cover,
                ),
              ),
            ),
            // Content Section
            Padding(
              padding: const EdgeInsets.all(16.0),
              child: Column(
                crossAxisAlignment: CrossAxisAlignment.start,
                children: [
                  // Title and Description
                  Text(
                    name,
                    style: TextStyle(
                      fontSize: 28,
                      fontWeight: FontWeight.bold,
                    ),
                  ),
                  SizedBox(height: 8),
                  Text(
                    description,
                    style: TextStyle(
                      fontSize: 16,
                      color: Colors.black87,
                    ),
                  ),
                  SizedBox(height: 20),
                  // Additional Information Section
                  Text(
                    'Explore this Beautiful Location!',
                    style: TextStyle(
                      fontSize: 20,
                      fontWeight: FontWeight.w600,
                      color: Colors.pinkAccent,
                    ),
                  ),
```

```
                        SizedBox(height: 8),
                        Text(
                          'Discover the breathtaking landscapes, vibrant culture, and serene
  ambiance of $name. Ideal for those seeking relaxation and adventure.',
                          style: TextStyle(
                            fontSize: 16,
                            color: Colors.black54,
                          ),
                        ),
                        SizedBox(height: 20),
                        // Map Placeholder
                        Container(
                          height: 200,
                          color: Colors.grey[300],
                          child: Center(
                            child: Text(
                              'Map of $name (Placeholder)',
                              style: TextStyle(color: Colors.black54),
                            ),
                          ),
                        ),
                        SizedBox(height: 20),
                        // Action Buttons
                        Row(
                          mainAxisAlignment: MainAxisAlignment.spaceEvenly,
                          children: [
                            ElevatedButton.icon(
                              icon: Icon(Icons.location_on),
                              label: Text('Get Directions'),
                              style: ElevatedButton.styleFrom(),
                              onPressed: () {
                                // Add functionality for directions
                              },
                            ),
                            ElevatedButton.icon(
                              icon: Icon(Icons.phone),
                              label: Text('Contact Us'),
                              style: ElevatedButton.styleFrom(

                              ),
                              onPressed: () {
                                // Add functionality for contact
                              },
                            ),
                          ],
                        ),
                      ],
                    ),
                  ),
                ],
              ),
            ),
          ),
        );
    }
  }
```

pages/profile_page.dart

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

class ProfilePage extends StatefulWidget {
  @override
  _ProfilePageState createState() => _ProfilePageState();
}

class _ProfilePageState extends State<ProfilePage> {
  final TextEditingController usernameController = TextEditingController();
  final TextEditingController emailController = TextEditingController();
  bool isEditing = false;

  @override
  void initState() {
    super.initState();
    _loadProfile();
  }
```

```dart
  Future<void> _saveProfile() async {
    SharedPreferences prefs = await SharedPreferences.getInstance();
    await prefs.setString('username', usernameController.text);
    await prefs.setString('email', emailController.text);
    ScaffoldMessenger.of(context).showSnackBar(
      SnackBar(content: Text('Profile Updated Successfully')),
    );
  }

  Future<void> _loadProfile() async {
    SharedPreferences prefs = await SharedPreferences.getInstance();
    setState(() {
      usernameController.text = prefs.getString('username') ?? '';
      emailController.text = prefs.getString('email') ?? '';
    });
  }

  Future<void> _logout() async {
    SharedPreferences prefs = await SharedPreferences.getInstance();
    await prefs.clear();
    Navigator.of(context).pushReplacementNamed('/login');
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      body: Padding(
        padding: const EdgeInsets.all(16.0),
        child: SingleChildScrollView(
          child: Column(
            children: [
              // Profile Picture
              CircleAvatar(
                radius: 50,
                backgroundImage: NetworkImage(
                  'https://cdn.pixabay.com/photo/2022/10/19/01/02/woman-
7531315_1280.png', // Replace with user's image URL
                ),
                child: Align(
                  alignment: Alignment.bottomRight,
                  child: CircleAvatar(
                    radius: 18,
                    backgroundColor: Colors.white,
                    child: Icon(
                      Icons.camera_alt,
                      color: Colors.pink,
                      size: 18,
                    ),
                  ),
                ),
              ),
              SizedBox(height: 20),

              // Profile Card
              Card(
                elevation: 3,
                shape: RoundedRectangleBorder(
                  borderRadius: BorderRadius.circular(12),
                ),
                child: Padding(
                  padding: const EdgeInsets.all(20.0),
                  child: Column(
                    crossAxisAlignment: CrossAxisAlignment.start,
                    children: [
                      // Username Field
                      Text(
                        'Username',
                        style: TextStyle(
                          fontWeight: FontWeight.bold,
                          color: Colors.pinkAccent,
                        ),
                      ),
                      TextField(
                        controller: usernameController,
                        decoration: InputDecoration(
                          hintText: 'Enter your username',
                          enabled: isEditing,
                          border: isEditing
                              ? OutlineInputBorder()
                              : InputBorder.none,
                          prefixIcon: Icon(Icons.person),
                        ),
                      ),
                      SizedBox(height: 20),
```
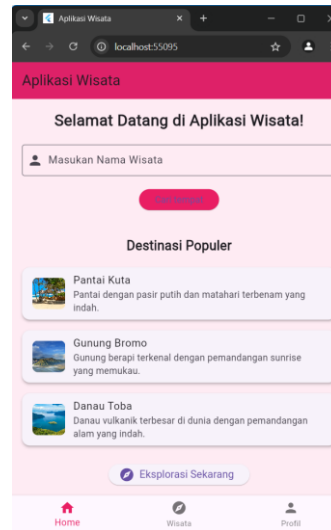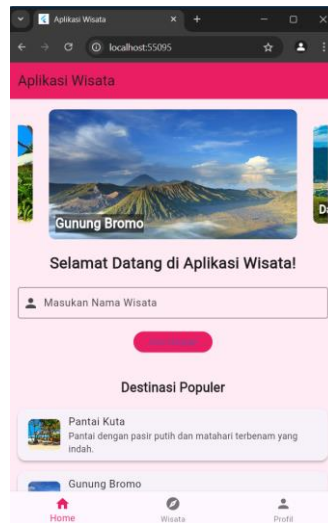
```dart
                 // Email Field
                 Text(
                   'Email',
                   style: TextStyle(
                     fontWeight: FontWeight.bold,
                     color: Colors.pinkAccent,
                   ),
                 ),
                 TextField(
                   controller: emailController,
                   decoration: InputDecoration(
                     hintText: 'Enter your email',
                     enabled: isEditing,
                     border: isEditing
                         ? OutlineInputBorder()
                         : InputBorder.none,
                     prefixIcon: Icon(Icons.email),
                   ),
                 ),
               ],
             ),
           ),
         ),

         SizedBox(height: 30),

         // Action Buttons
         ElevatedButton(
           onPressed: () {
             setState(() {
               isEditing = !isEditing;
             });
             if (!isEditing) _saveProfile();
           },
           style: ElevatedButton.styleFrom(
             backgroundColor: isEditing
                 ? const Color.fromARGB(255, 137, 17, 97)
                 : const Color.fromARGB(255, 90, 13, 57),
             minimumSize: Size(double.infinity, 50),
           ),
           child: Text(
             isEditing ? 'Save Profile' : 'Edit Profile',
             style: TextStyle(fontSize: 18, color: Colors.white),
           ),
         ),
         SizedBox(height: 10),
         ElevatedButton(
           onPressed: _logout,
           style: ElevatedButton.styleFrom(
             backgroundColor: const Color.fromARGB(255, 151, 26, 68),
             minimumSize: Size(double.infinity, 50),
           ),
           child: Text(
             'Logout',
             style: TextStyle(fontSize: 18, color: Colors.white),
           ),
         ),
       ],
     ),
   ),
  ),
 );
 }
}
```
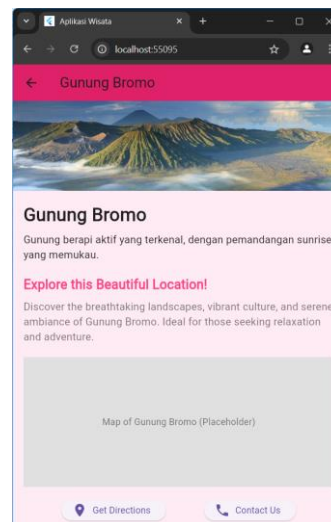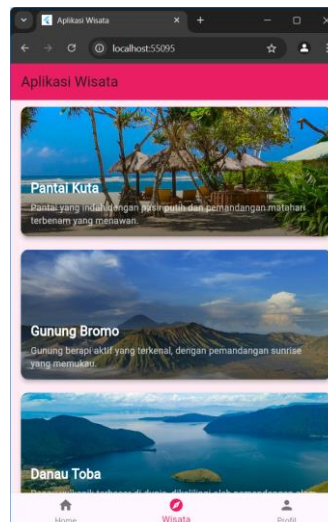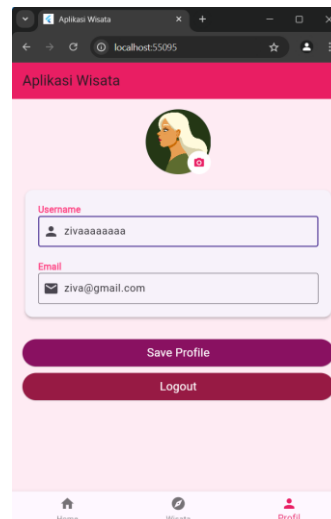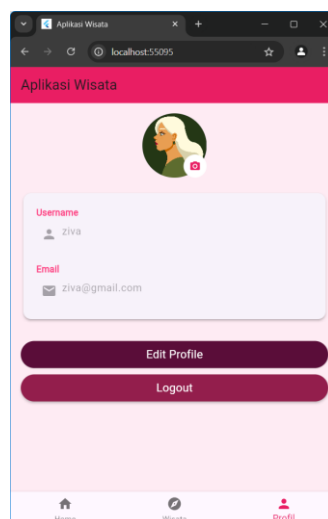
**Screenshoot Output**

1. Home Page



2. Wisata Page



3. Profile Page

**Deskripsi Program**

Ini adalah aplikasi mobile yang berfokus dalam bidang wisata. Pada halaman pertamana akan muncul halaman home page yang menampilkan wisata populer yang memiliki effect bergeser otomatis. Kemudian home page memiliki beberapa fitur lagi dibawahnya untuk kenyamanan pengguna. Selanjutnya halaman wisata yang akan menampilkan wisata apa saja yang ada. Jika kita melakukan klik pada satu wisata maka akan diarahkan ke detail page yang memuat detail dari setiap wisaata yang ada. Yang terkhir adalah profile page yang memuat gambar profile, username, email serta tombol edit dan log out pada halamanya