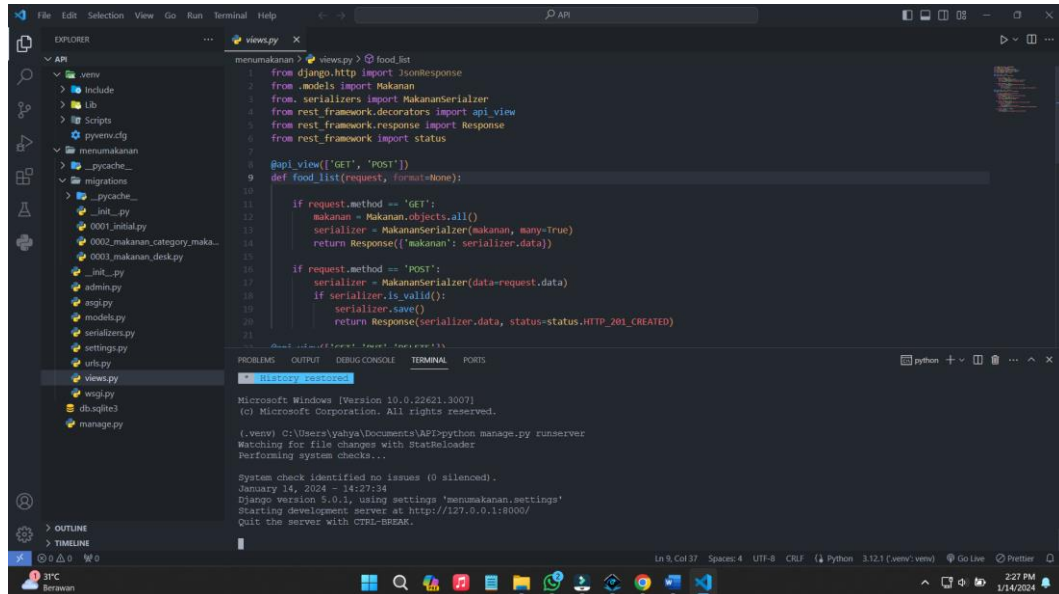NIM   : 223303030213
Nama   : Yahya Septian Siregar

TUGAS PEMROGRAMAN MOBILE

1. **Webservice, Database dan Table**
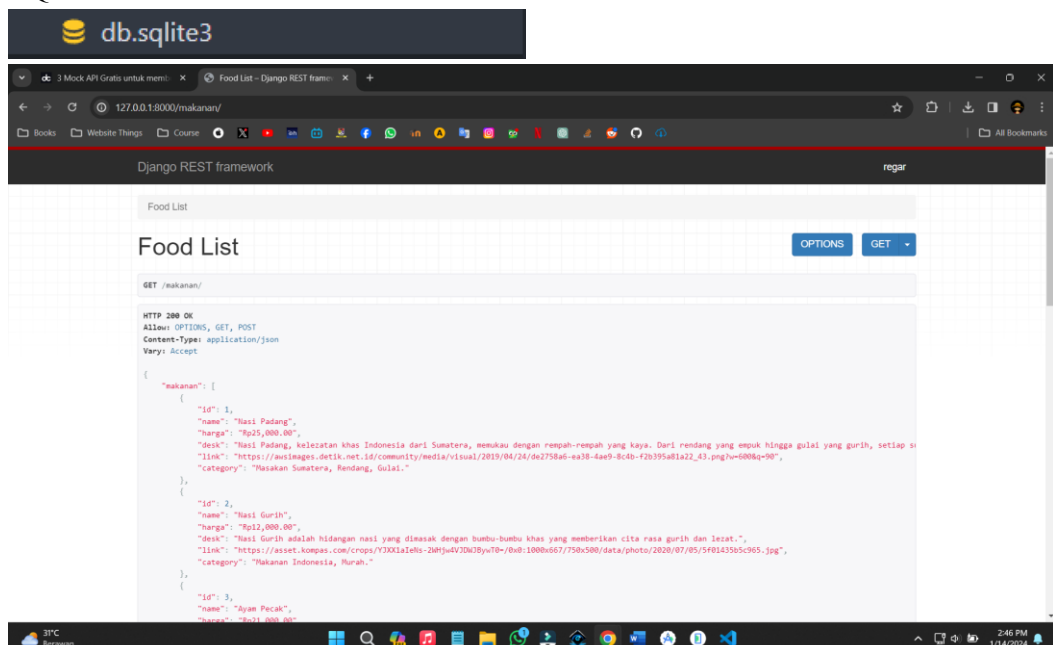   a. Webservice yang digunakan (Fake atau bangun sendiri) :
      - Bangun ApiService sendiri menggunakan Django Rest Framework

   b. Database menggunakan (MySQL/SQLite) :
      SQLite

   c. Nama table pada database (menumakanan)

NIM   : 223303030213
Nama   : Yahya Septian Siregar

2. Isi dari file pada folder lib

a. api_service.dart

api_koneksi.dart

```dart
import 'package:dio/dio.dart';
import 'package:flutter/material.dart';
import 'package:tugas_pencarian/Response/respon_data.dart';

final dio = Dio();

class ApiService {
  Future<ResponseMakanan> getapi() async {
    try {
      final response = await dio.get('http://10.0.2.2:8000/makanan/');
      if (response.statusCode == 200) {
        // debugPrint('GET Product : ${response.data['makanan']}');
        return ResponseMakanan.fromJson(response.data['makanan']);
      } else {
        throw Exception('Failed to load data. Status code:
${response.statusCode}');
      }
    } catch (e) {
      debugPrint(e.toString());
      throw Exception('Failed to load data');
    }
  }
}
```

b. model_makanan.dart

model_makanan.dart

```dart
class ModelMakanan{
  int? id;
  String? nama;
  String? harga;
  String? description;
  String? link;
  String? category;

  ModelMakanan({required this.id, required this.nama, required
this.description, required this.harga, required this.link, required
this.category });
  ModelMakanan.fromJson(Map<String, dynamic> json){
    id = json['id'];
    nama = json['name'];
    harga = json['harga'];
    description = json['desk'];
    link = json['link'];
    category = json['category'];
  }
}
```

c. respon_data.dart

NIM   : 223303030213

Nama   : Yahya Septian Siregar

respon_data.dart

```dart
import 'package:tugas_pencarian/Model/model_makanan.dart';

class ResponseMakanan {
  List<ModelMakanan> listMakanan = [];

  ResponseMakanan.fromJson(List<dynamic> json) {
    listMakanan = json.map((item) => ModelMakanan.fromJson(item)).toList();
  }
}
```

d. search_page.dart

search_page.dart

```dart
import 'package:flutter/material.dart';
import 'package:tugas_pencarian/Connection/api_koneksi.dart';
import 'package:tugas_pencarian/Response/respon_data.dart';
import 'package:tugas_pencarian/ui/detail_page.dart';
import '../Model/model_makanan.dart';

class SearchPage extends StatefulWidget {
  const SearchPage({
    super.key,
  });

  @override
  State<SearchPage> createState() => _SearchPageState();
}

final apiService = ApiService();

class _SearchPageState extends State<SearchPage> {
  List<ModelMakanan> allMakanan = [];
  List<ModelMakanan> searchResults = [];

  @override
  void initState() {
    super.initState();
    fetchData();
  }

  Future<void> fetchData() async {
    try {
      ResponseMakanan responseMakanan = await apiService.getapi();
      setState(() {
        allMakanan = responseMakanan.listMakanan;
        searchResults = List.from(allMakanan);
      });
    } catch (error) {
      debugPrint('Error fetching data: $error');
    }
  }
```

NIM   : 223303030213
Nama   : Yahya Septian Siregar

```dart
// ...

  void updateList(String query) {
    setState(() {
      if (query.isEmpty) {
        searchResults = List.from(allMakanan);
      } else {
        List<String> keywords = query.toLowerCase().split(' ');

        searchResults = allMakanan.where((makanan) {
          return keywords.every((keyword) =>
              makanan.nama!.toLowerCase().contains(keyword)) &&
              keywords.any((keyword) =>
                  makanan.nama!.toLowerCase().startsWith(keyword));
        }).toList(
);
      }
    });
  }


  @override
  Widget build(BuildContext context) {

    return Scaffold(
      backgroundColor: Color(0xFF43766C),
      appBar: AppBar(
        elevation: 0.0,
        backgroundColor: Color(0xFF43766C),
        actions: [IconButton(onPressed: (){
          fetchData();
        }, icon: Icon(Icons.refresh, color: Color(0xFFF8FAE5),))],
      ),
      body: Padding(
        padding: EdgeInsets.all(16),
        child: Column(
          mainAxisAlignment: MainAxisAlignment.start,
          crossAxisAlignment: CrossAxisAlignment.start,
          children: [
            Text(
              'Cari Makanan Mu!',
              style: TextStyle(
                  color: Color(0xFFF8FAE5),
                  fontSize: 22.0,
                  fontWeight: FontWeight.bold),
            ),
            SizedBox(height: 20),
            TextField(
              enabled: true,
              onChanged: (query){
                updateList(query);
              },
              style: TextStyle(color: Color(0xFFF8FAE5)),
              decoration: InputDecoration(
                  filled: true,
                  fillColor: Color(0xFFB19470),
                  border: OutlineInputBorder(
                    borderRadius: BorderRadius.circular(8.0),
                    borderSide: BorderSide.none,
```

```
              ),
            hintText: 'cth: Nasi Padang',
            suffixIcon: Icon(Icons.search),
            suffixIconColor: Color(0xFFF8FAE5)),
        ),
        SizedBox(
          height: 20.0,
        ),
        Expanded(
          child: FutureBuilder(
              future: apiService.getapi(),
              builder:
                  (BuildContext context, AsyncSnapshot<dynamic>
snapshot) {
                if (snapshot.connectionState ==
ConnectionState.waiting) {
                  return Center(
                    child: CircularProgressIndicator(),
                  );
                } else if (snapshot.hasError) {
                  return Center(
                    child: Text(snapshot.error.toString()),
                  );
                } else if (snapshot.hasData) {
                  return ListView.builder(
                      itemCount: searchResults.length,
                      itemBuilder: (context, index) => ListTile(
                        contentPadding: EdgeInsets.all(8.0),
                            title: Text(
                              searchResults[index].nama.toString(),
                              style: TextStyle(
                                  color: Color(0xFFF8FAE5),
                                  fontWeight: FontWeight.bold),
                            ),
                            subtitle: Text(
                              '${searchResults[index].harga}',
                              style: TextStyle(color: Colors.white60),
                            ),
                            leading: Container(
                              height: 80,
                              width: 80,
                              child: Container(
                                decoration: BoxDecoration(
                                  borderRadius:
BorderRadius.circular(8.0),
                                  boxShadow: [
                                    BoxShadow(
                                      color:
Colors.black.withOpacity(0.3),
                                      spreadRadius: 2,
                                      blurRadius: 5,
                                      offset: Offset(0, 3), // Adjust
the shadow offset
                                    ),
                                  ],
                                ),
                                child: ClipRRect(
                                  borderRadius:
BorderRadius.circular(8.0),
                                  child: Image.network(
```

```
searchResults[index].link.toString(),
                                    fit: BoxFit.cover,),
                                ),
                            ),
                        ),
                    onTap: (){
                      Navigator.push(
                        context,
                        MaterialPageRoute(
                          builder: (context) => DetailPage(
                            makanan: searchResults[index],
                          ),
                        ),
                      );
                    },
                  )
                );
              }
            return Container();
          }),
        )
      ],
    ),
  ),
  );
}
}
```

e. detail_page.dart

detail_page.dart

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

class DetailPage extends StatelessWidget {
  final ModelMakanan makanan;

  DetailPage({required this.makanan});

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Color(0xFF43766C),
      appBar: AppBar(
        backgroundColor: Color(0xFF43766C),
      ),
      body: SingleChildScrollView(
        child: Column(
          mainAxisAlignment: MainAxisAlignment.start,
          crossAxisAlignment: CrossAxisAlignment.start,
          children: [
            Padding(
              padding: EdgeInsets.all(16),
              child: Column(
                crossAxisAlignment: CrossAxisAlignment.start,
```
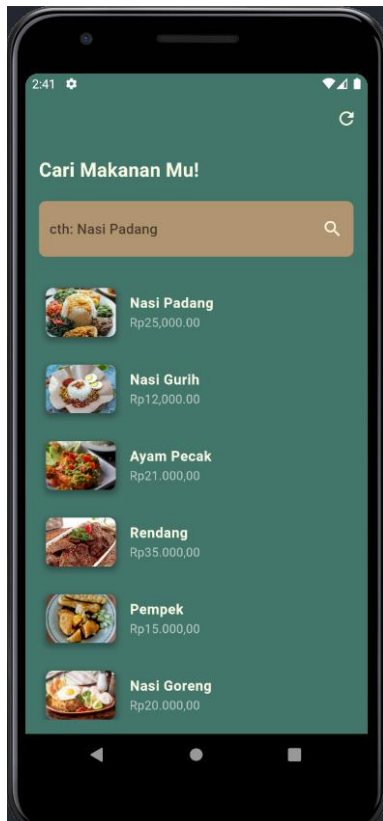
NIM   : 223303030213
Nama   : Yahya Septian Siregar

```dart
                    children: [
                      Text(
                        'Detail Makanan',
                        style: TextStyle(
                            color: Color(0xFFF8FAE5),
                            fontSize: 25.0,
                            fontWeight: FontWeight.bold),
                      ),
                      SizedBox(height: 16),
                      Text(
                        'ID: ${makanan.id}',
                        style: TextStyle(fontSize: 18, fontWeight:
FontWeight.bold, color: Colors.white54),
                      ),
                      SizedBox(height: 8),
                      Text(
                        'Nama: ${makanan.nama}',
                        style: TextStyle(fontSize: 18, fontWeight:
FontWeight.bold, color: Colors.white60),
                      ),
                      SizedBox(height: 8),
                      Text(
                        'Harga: ${makanan.harga}',
                        style: TextStyle(fontSize: 18, fontWeight:
FontWeight.bold, color: Colors.white60),
                      ),
                      SizedBox(height: 8),
                      Container(
                        decoration: BoxDecoration(
                          borderRadius: BorderRadius.circular(8.0),
                          boxShadow: [
                            BoxShadow(
                              color: Colors.black.withOpacity(0.5),
                              spreadRadius: 3,
                              blurRadius: 5,
                              offset: Offset(1, 2),
                            ),
                          ],
                        ),
                        child: ClipRRect(
                          borderRadius: BorderRadius.circular(8.0),
                          child: Image.network(
                            makanan.link!,
                            height: 200,
                            width: double.infinity,
                            fit: BoxFit.cover,
                          ),
                        ),
                      ),
                      SizedBox(height: 8),
                      Text(
                        'Deskripsi: \n${makanan.description}',
                        style: TextStyle(fontSize: 18, color:
Color(0xFFF8FAE5)),
                        textAlign: TextAlign.justify,
                      ),
                      SizedBox(height: 8),
                      Text(
                        'Category: \n${makanan.category}',
                        style: TextStyle(fontSize: 18, color:
```

NIM : 223303030213
Nama : Yahya Septian Siregar

```
Color(0xFFF8FAE5)),
                textAlign: TextAlign.justify,
              ),
            ],
          ),
        ),
      ],
    ),
  ),
);
}
}
```
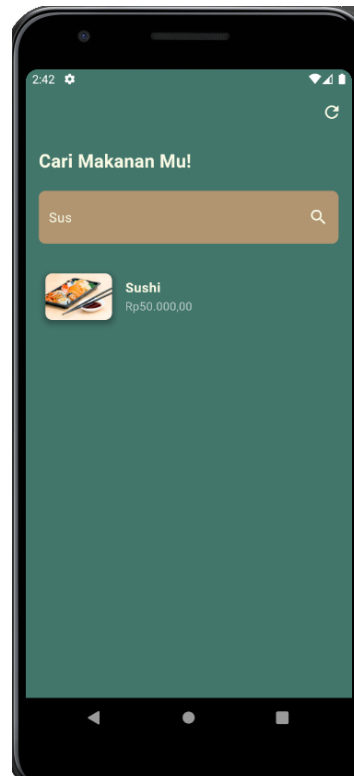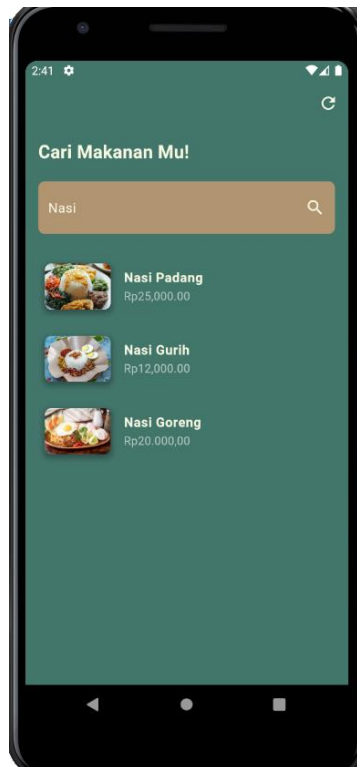
3. Ouput dari aplikasi
   a. Gambar 1

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b. Gambar 2

c. Gambar 3

NIM   : 223303030213
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4. Link channel Youtube berisi penjelasan dan penggunaan aplikasi
Link : https://youtu.be/BG8wS2bScZY

Catatan:

- *Mohon masing-masing mahasiswa/i mengikuti template ini.*
- *Jika anda tidak mengikuti format template ini, maka akan menyulitkan proses penilaian dan akan mengurangi penilaian anda.*