

Pertemuan 7

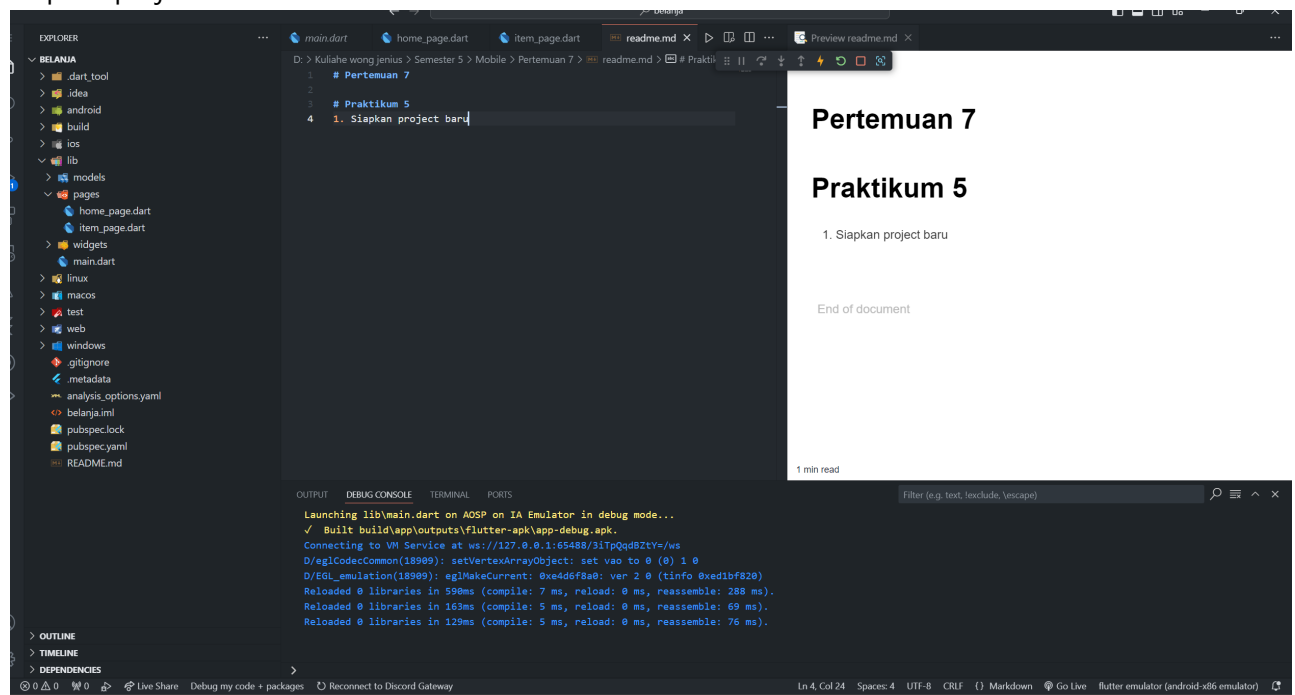
Nama : Krisna Andika Wijaya

Kelas : 3C

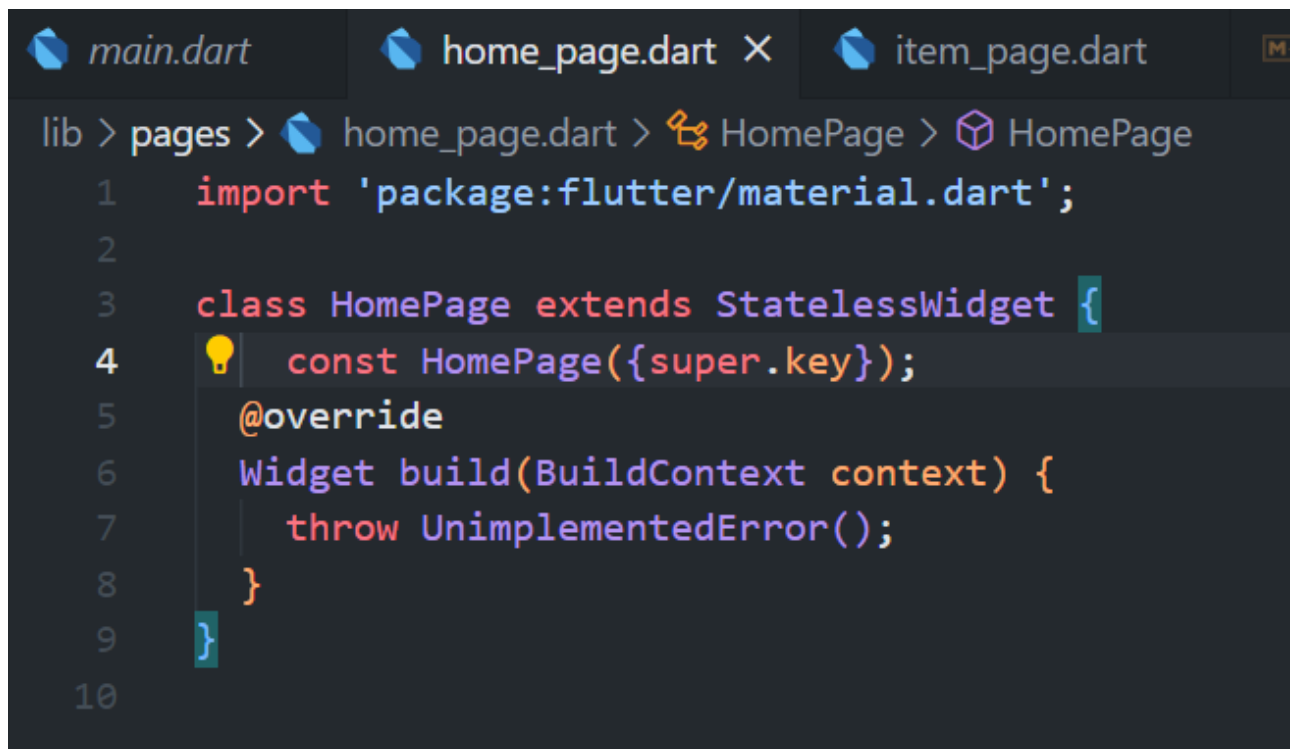
Absen : 12

Praktikum 5

1. Siapkan project baru

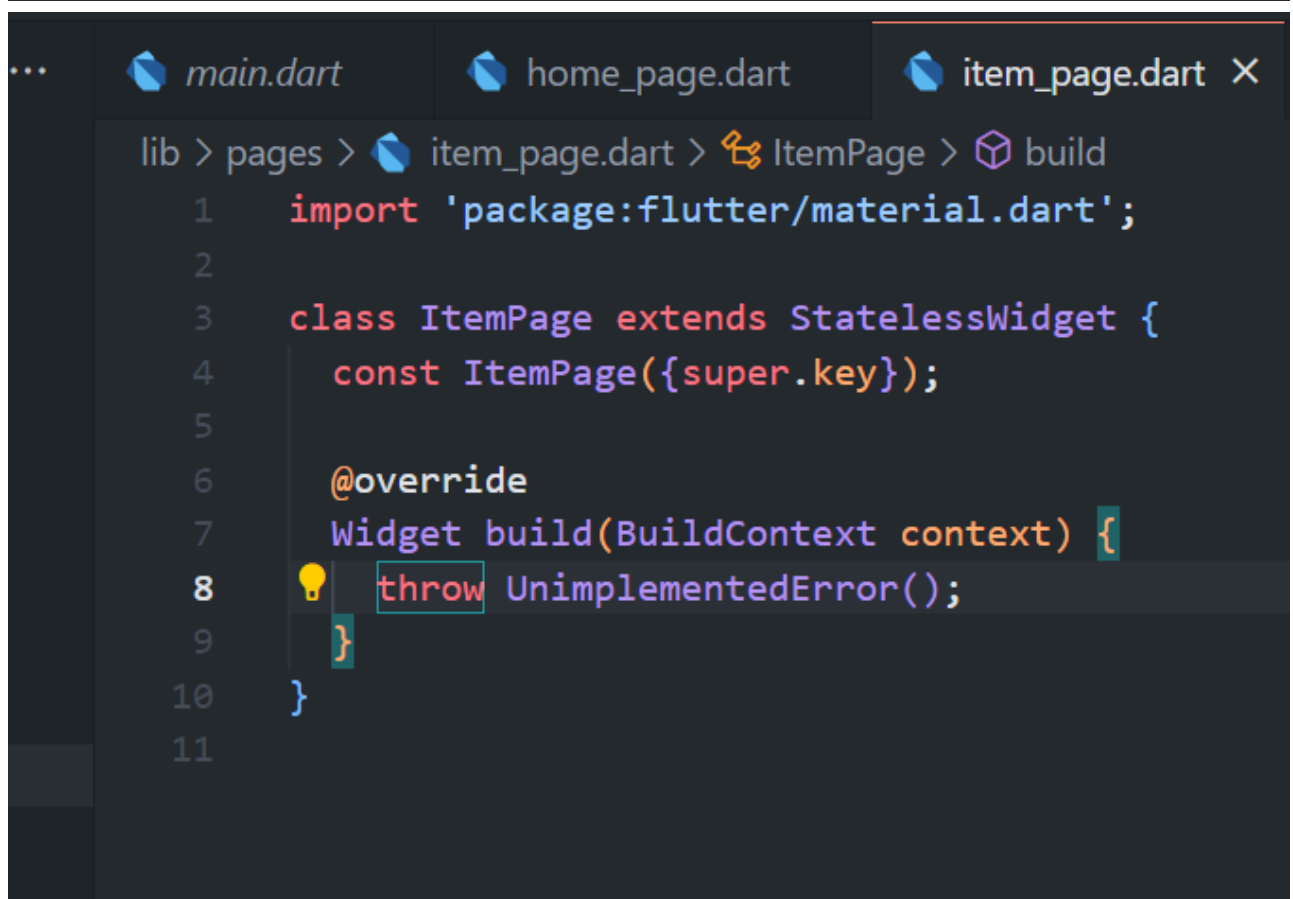


2. Mendefinisikan Route



The screenshot shows an IDE with three tabs: `main.dart`, `home_page.dart`, and `item_page.dart`. The `home_page.dart` tab is active, showing the following Dart code:

```
lib > pages > home_page.dart > HomePage > HomePage
1  import 'package:flutter/material.dart';
2
3  class HomePage extends StatelessWidget {
4    const HomePage({super.key});
5    @override
6    Widget build(BuildContext context) {
7      throw UnimplementedError();
8    }
9  }
```



The screenshot shows the same IDE with the `item_page.dart` tab active. The `item_page.dart` tab is active, showing the following Dart code:

```
lib > pages > item_page.dart > ItemPage > build
1  import 'package:flutter/material.dart';
2
3  class ItemPage extends StatelessWidget {
4    const ItemPage({super.key});
5
6    @override
7    Widget build(BuildContext context) {
8      throw UnimplementedError();
9    }
10 }
11
```

3. Lengkapi kode di main.dart

```
12 // This widget is the root of your application.
13 @override
14 Widget build(BuildContext context) {
15   return MaterialApp(
16     initialRoute: '/',
17     routes: {'/': (context) => HomePage(), Use
18 18    |'/item': (context) => ItemPage()}, Use 'con
19   ); // MaterialApp
20 }
21 }
```

4. Membuat data model

```
home_page.dart  item_page.dart  readme.md
lib > models > item.dart > ...
1
2 class Item {
3   String? name;
4   int? price;
5
6   Item({this.name, this.price});
7 }
8
```

5. Lengkapi kode di class HomePage

```
10     ];
11     @override
12     Widget build(BuildContext context) {
13       return Scaffold(
14         body: Container(
15           margin: const EdgeInsets.all(8),
16           child: ListView.builder(
17             padding: const EdgeInsets.all(8),
18             itemCount: items.length,
19             itemBuilder: (context, index) {
20               final item = items[index];
21               return Card(
22                 child: Container(
23                   margin: const EdgeInsets.all(8),
24                   child: Row(
25                     children: [
26                       Expanded(child: Text(item.name)),
27                       Expanded(
28                         child: Text(
29                           item.price.toString(),
30                           textAlign: TextAlign.end,
31                         )) // Text // Expanded
32                     ],
33                   ), // Row
34                 ), // Container
35               ); // Card
```

Android Emulator - flutter_emulator:5554

10:12 ⚙️ ⚠️

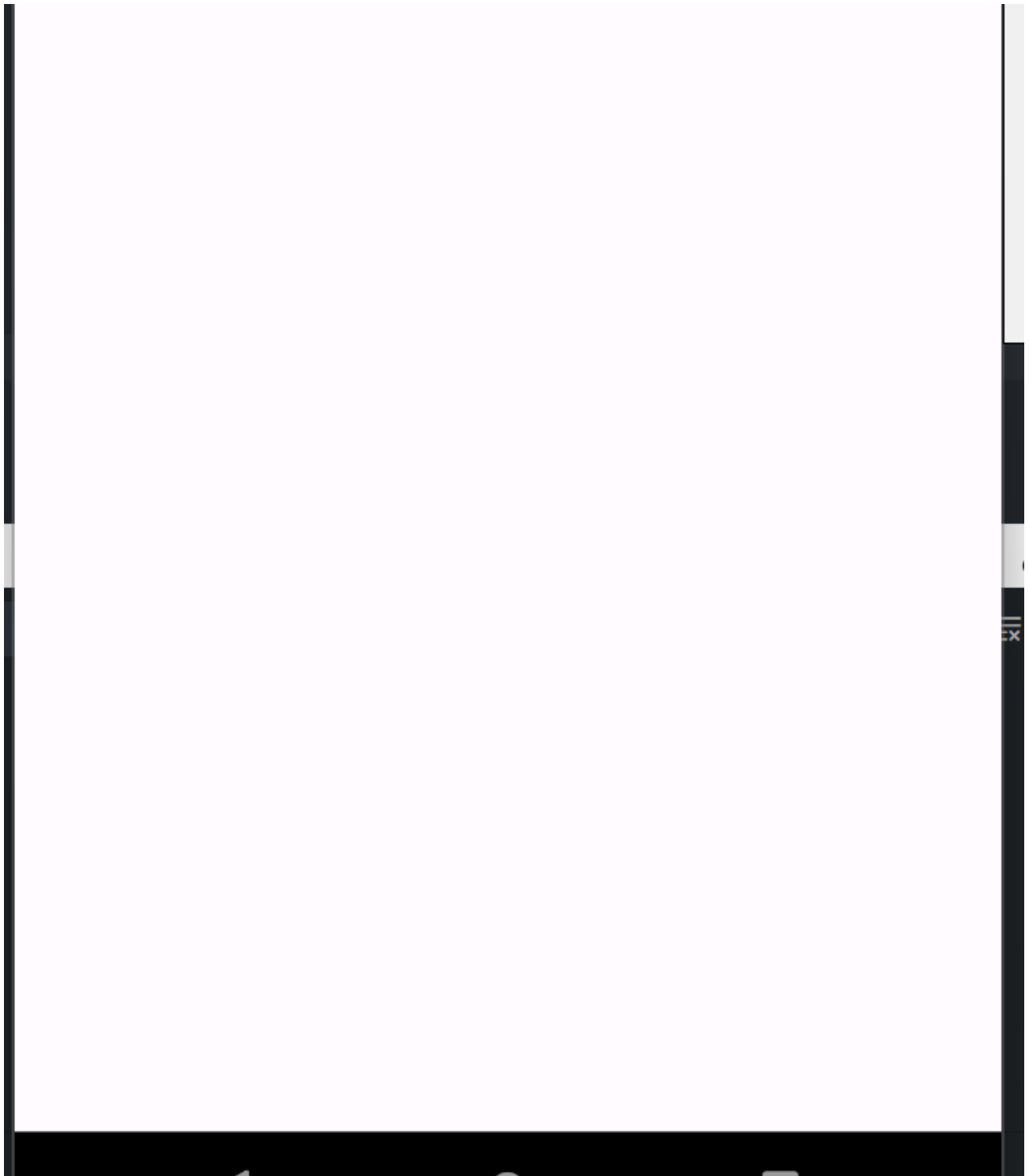


Sugar

5000

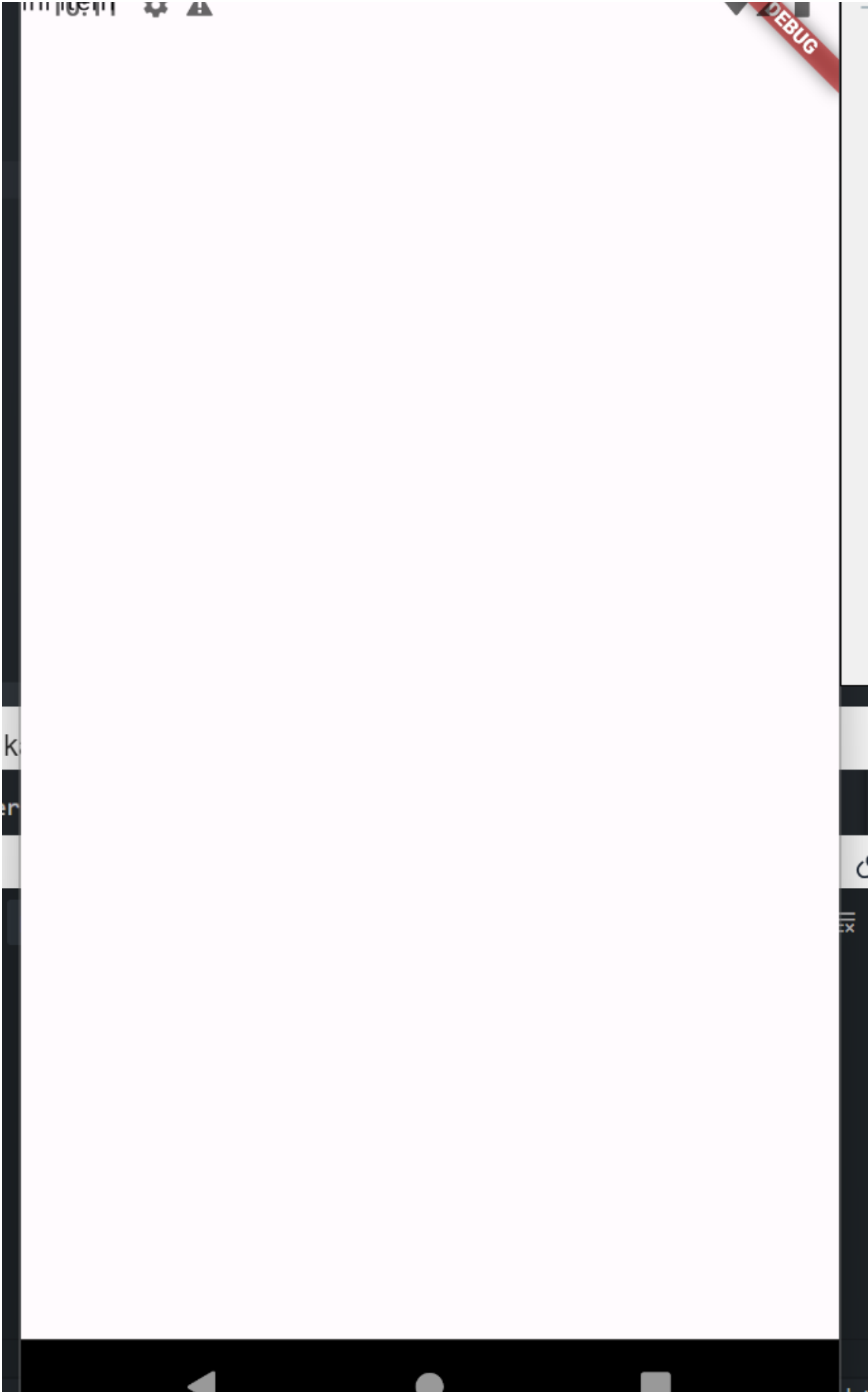
Salt

2000



6. Menambahkan aksi pada ListView







Tugas

1. Untuk melakukan pengiriman data ke halaman berikutnya, cukup menambahkan informasi arguments pada penggunaan Navigator. Perbarui kode pada bagian Navigator menjadi seperti berikut.

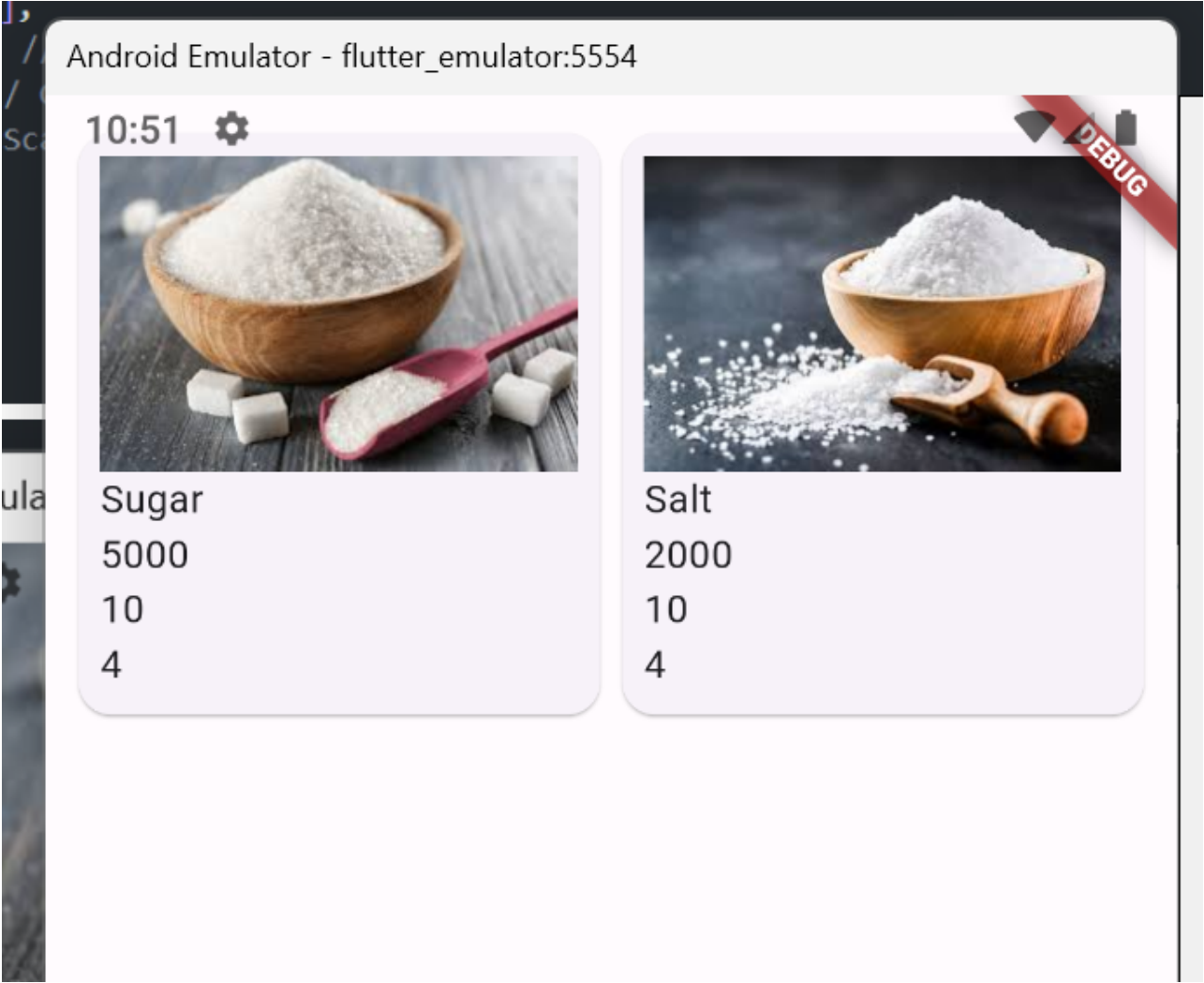
```
padding: const EdgeInsets.all(8),
itemCount: items.length,
itemBuilder: (context, index) {
  final item = items[index];
  return InkWell(
    onTap: (){
      Navigator.pushNamed(context, '/item', arguments: item);
    },
    child: Card(
      child: Container(
        margin: const EdgeInsets.all(8),
```

2. Pembacaan nilai yang dikirimkan pada halaman sebelumnya dapat dilakukan menggunakan ModalRoute. Tambahkan kode berikut pada blok fungsi build dalam halaman ItemPage. Setelah nilai didapatkan, anda dapat menggunakannya seperti penggunaan variabel pada umumnya.

```
b > pages > item_page.dart > ItemPage > build
1  import 'package:flutter/material.dart';
2  import 'package:belanja/models/item.dart';
3
4  class ItemPage extends StatelessWidget {
5    const ItemPage({super.key});
6
7    @override
8    Widget build(BuildContext context) {
9      final itemArgs = ModalRoute.of(context)!.settings.arguments as I
10     return Scaffold(
11       body: Center(
12         child: Text(itemArgs.name.toString()),
13       ), // Center
14     ); // Scaffold
15   }
16 }
17
```

3. Pada hasil akhir dari aplikasi belanja yang telah anda selesaikan, tambahkan atribut foto produk, stok, dan rating. Ubahlah tampilan menjadi GridView seperti di aplikasi marketplace pada umumnya.

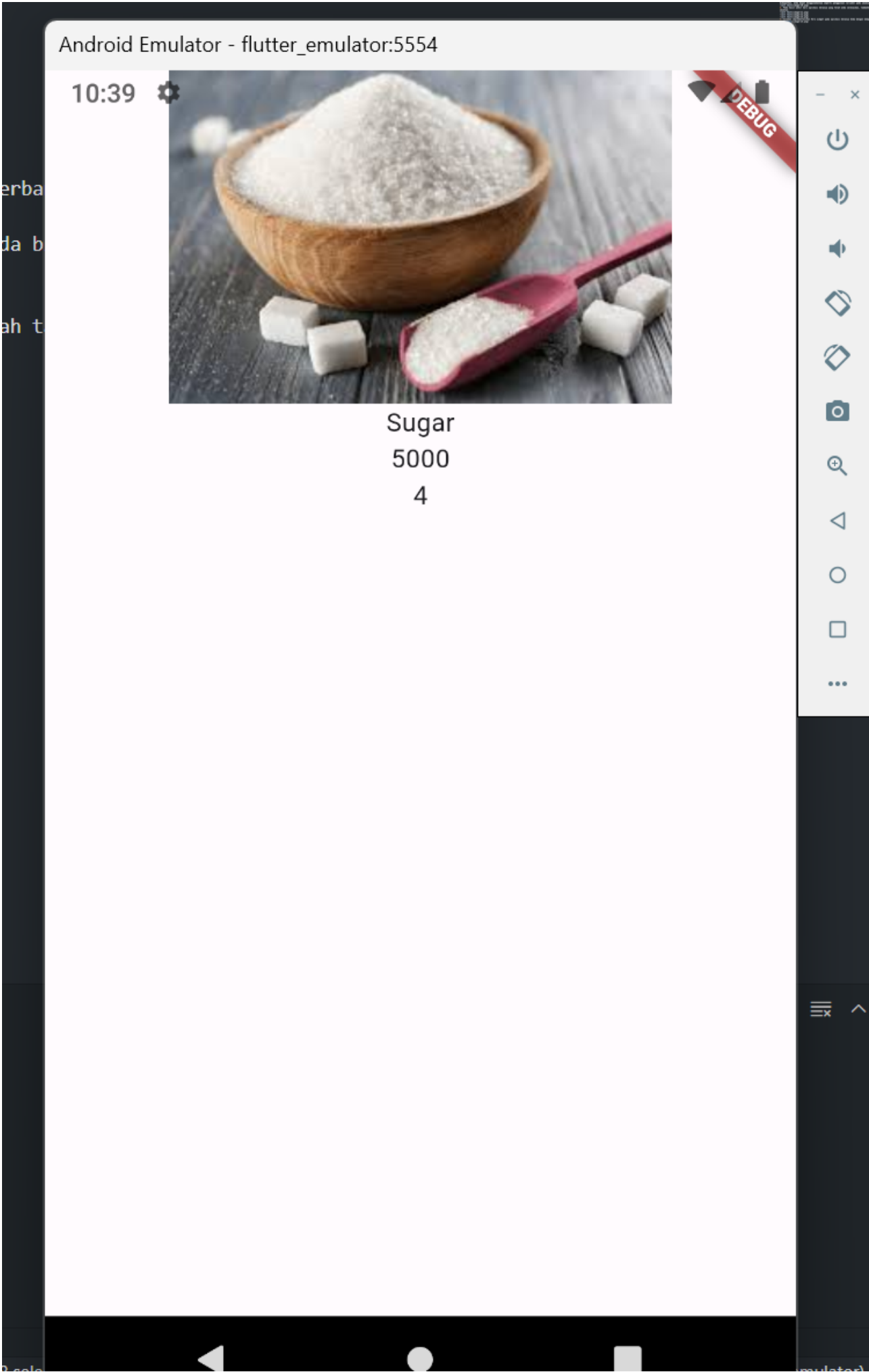
```
21 @override
22 Widget build(BuildContext context) {
23   return Scaffold(
24     body: Container(
25       margin: const EdgeInsets.all(8),
26       child: GridView.builder(
27         gridDelegate: SliverGridDelegateWithFixedCrossAxisCount(
28           crossAxisCount: 2,
29           childAspectRatio: 0.9,
30         ), // SliverGridDelegateWithFixedCrossAxisCount
31         padding: const EdgeInsets.symmetric(vertical: 2),
32         itemCount: items.length,
33         itemBuilder: (context, index) {
34           final item = items[index];
35           return InkWell(
36             onTap: () {
37               Navigator.pushNamed(context, '/item', arguments: item);
38             },
39             child: Card(
40               child: Container(
41                 margin: const EdgeInsets.all(8),
42                 child: Column(
43                   mainAxisAlignment: MainAxisAlignment.start,
44                   crossAxisAlignment: CrossAxisAlignment.start,
45                   children: [
46                     Container(
47                       width: double.infinity,
48                       child: Image.asset(
49                         item.foto_produk.toString(),
50                         fit: BoxFit.fill,
51                       ), // Image.asset // Container
52                     Container(child: Text(item.name.toString())),
53                     Container(
```





4. Silakan implementasikan Hero widget pada aplikasi belanja Anda dengan mempelajari dari sumber ini:

```
ib > pages > item_page.dart > ItemPage > build
1  import 'package:flutter/material.dart';
2  import 'package:belanja/models/item.dart';
3
4  class ItemPage extends StatelessWidget {
5    const ItemPage({super.key});
6
7    @override
8    Widget build(BuildContext context) {
9      final itemArgs = ModalRoute.of(context)!.settings.arguments as Item;
10     return Scaffold(
11       body: Center(
12         child: Column(
13           children: [
14             Hero(
15               tag: 'imagehero',
16               child: Image.asset(
17                 itemArgs.foto_produk.toString(),
18                 fit: BoxFit.fill,
19               ), // Image.asset // Hero
20             Text(itemArgs.name.toString()),
21             Text(itemArgs.price.toString()),
22             Text(itemArgs.rating.toString()),
23           ],
24         ), // Column
25       ), // Center
26     ); // Scaffold
27   }
28 }
29
```



5. Sesuaikan dan modifikasi tampilan sehingga menjadi aplikasi yang menarik. Selain itu, pecah widget menjadi kode yang lebih kecil. Tambahkan Nama dan NIM di footer aplikasi belanja Anda.

```

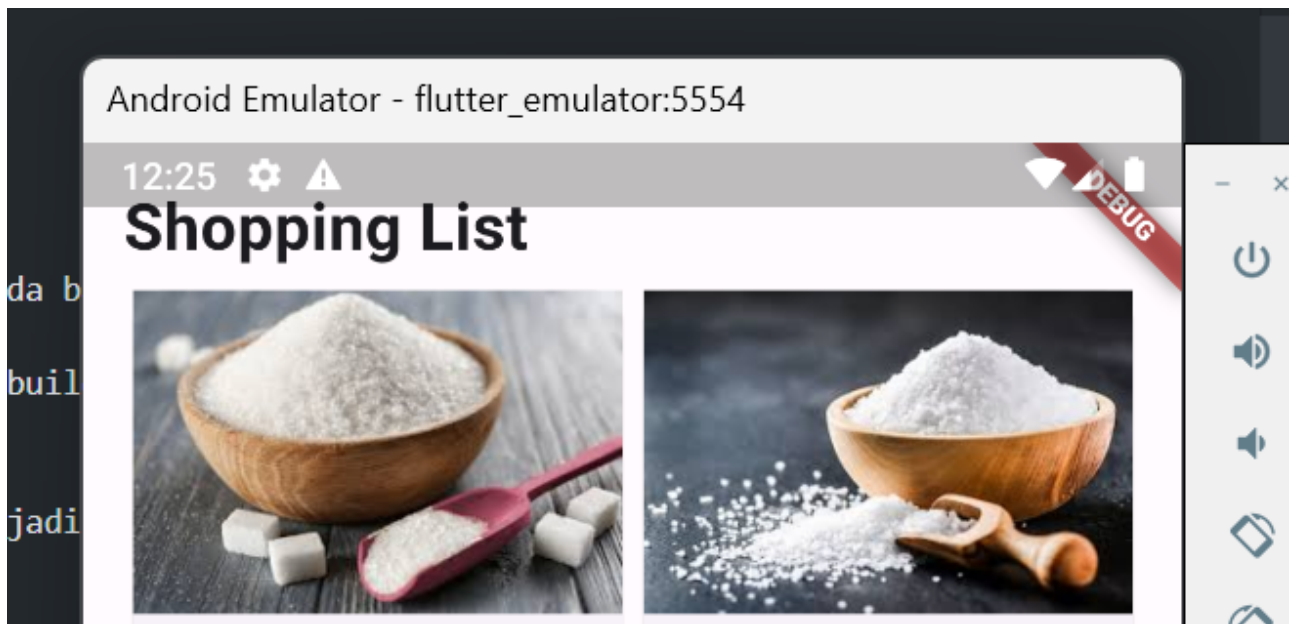
23 @override
24 Widget build(BuildContext context) {
25   return Scaffold(
26     body: Container(
27       margin: EdgeInsets.only(top: 15), // Use 'const' with the constructor to improve performance.
28       padding: EdgeInsets.symmetric(horizontal: 15), // Use 'const' with the constructor to improve performance.
29       child: Column(
30         mainAxisAlignment: MainAxisAlignment.start,
31         crossAxisAlignment: CrossAxisAlignment.start,
32         children: [
33           Text(
34             'Shopping List',
35             style: TextStyle(fontWeight: FontWeight.bold, fontSize: 24),
36           ), // Text
37           Expanded(child: shoppingList()),
38         ],
39       ), // Column // Container
40       bottomSheet: const Text('Krisna Andika / 2241720118'),
41     ); // Scaffold

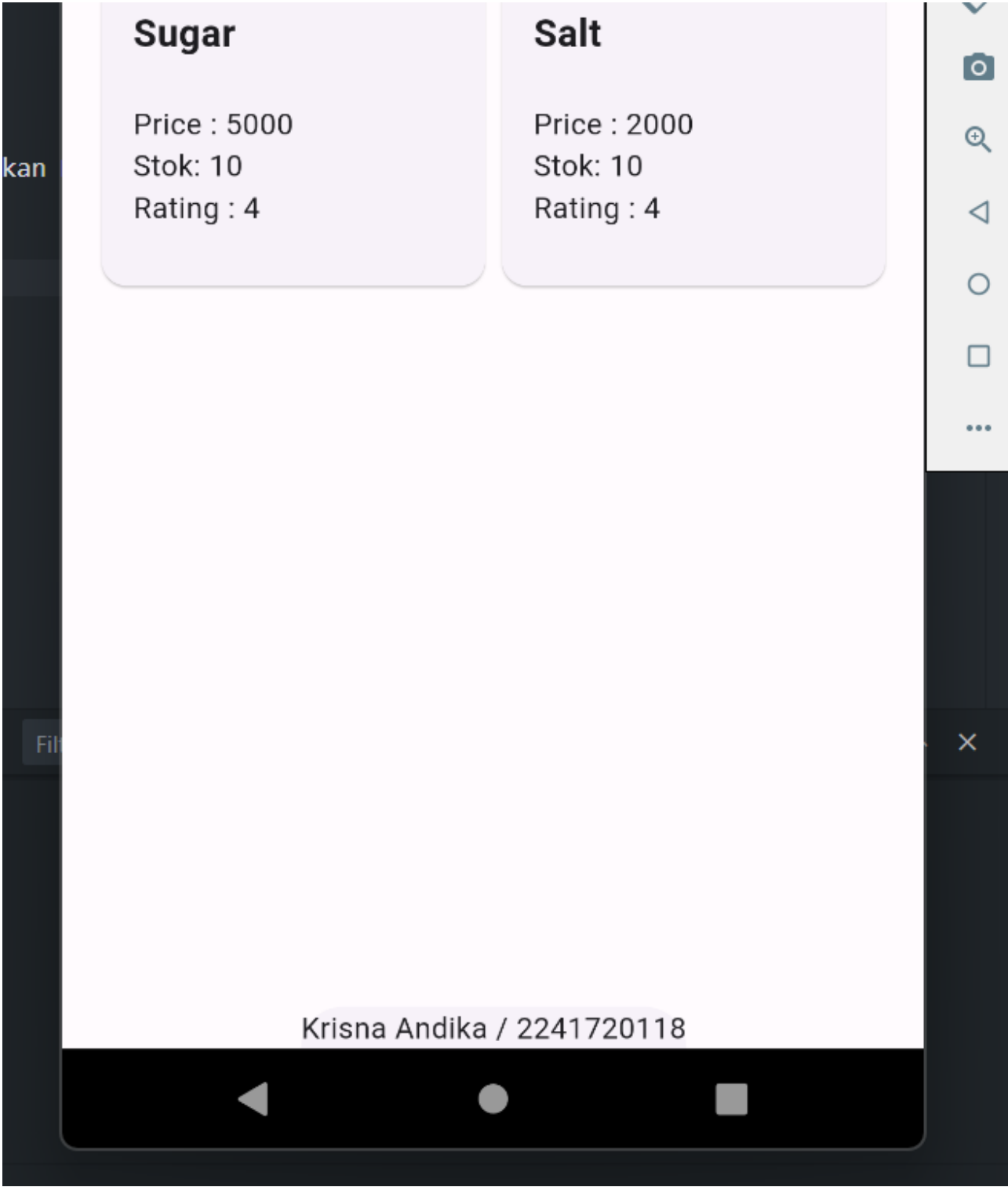
```

```

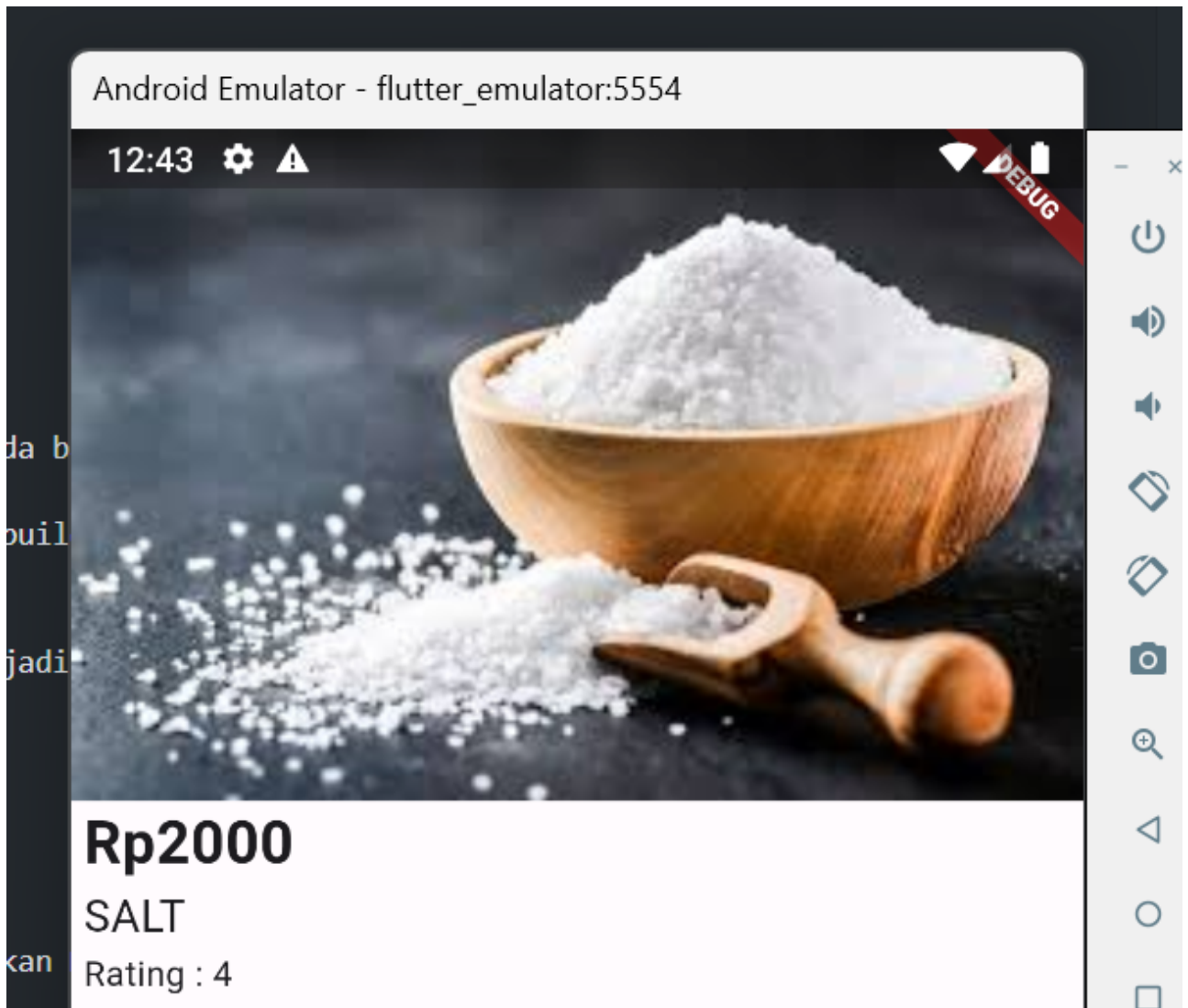
lib > pages > home_page.dart > HomePage > build
class HomePage extends StatelessWidget {
  Widget build(BuildContext context) {
    return TabView(
      onTap: () {
        Navigator.pushNamed(context, '/item', arguments: item);
      },
      child: Card(
        child: Container(
          // margin: const EdgeInsets.all(8),
          child: Column(
            // mainAxisAlignment: MainAxisAlignment.spaceAround,
            crossAxisAlignment: CrossAxisAlignment.start,
            children: [
              container(
                width: double.infinity,
                child: Image.asset(
                  item.foto_produk.toString(),
                  fit: BoxFit.fill,
                ), // Image.asset // Container
              Expanded(
                // color: Colors.black,
                // padding: const EdgeInsets.all(8.0),
                child: Container(
                  margin: EdgeInsets.only(top: 10), // Use 'const' with the constructor to improve performance.
                  padding: EdgeInsets.symmetric(horizontal: 15), // Use 'const' with the constructor to improve performance.
                  width: double.infinity,
                  child: Column(
                    crossAxisAlignment: CrossAxisAlignment.start,
                    // mainAxisAlignment: MainAxisAlignment.spaceEvenly,
                    children: [
                      container(
                        child: Text(
                          item.name.toString(),
                          style: TextStyle(
                            fontWeight: FontWeight.bold,
                            fontSize: 18, // TextStyle
                          ), // Text // Container
                        ),
                      SizedBox(
                        height: 20, // SizedBox
                      ), // SizedBox
                      container(
                        child: Text(
                          'Price: ' + item.price.toString(), // Use interpolation to compose strings and values.
                          textAlign: TextAlign.end,
                        ), // Text // Container
                      ),
                      container(
                        child: Text(
                          'Stok: ' + item.stok.toString(), // Use interpolation to compose strings and values.
                          textAlign: TextAlign.end,
                        ), // Text // Container
                      ),
                    ],
                  ),
                ),
              container(
                child: Text(
                  'Stok: ' + item.stok.toString(), // Use interpolation to compose strings and values.
                  textAlign: TextAlign.end,
                ), // Text // Container
              ),
            ],
          ),
        ),
      ),
    );
  }
}

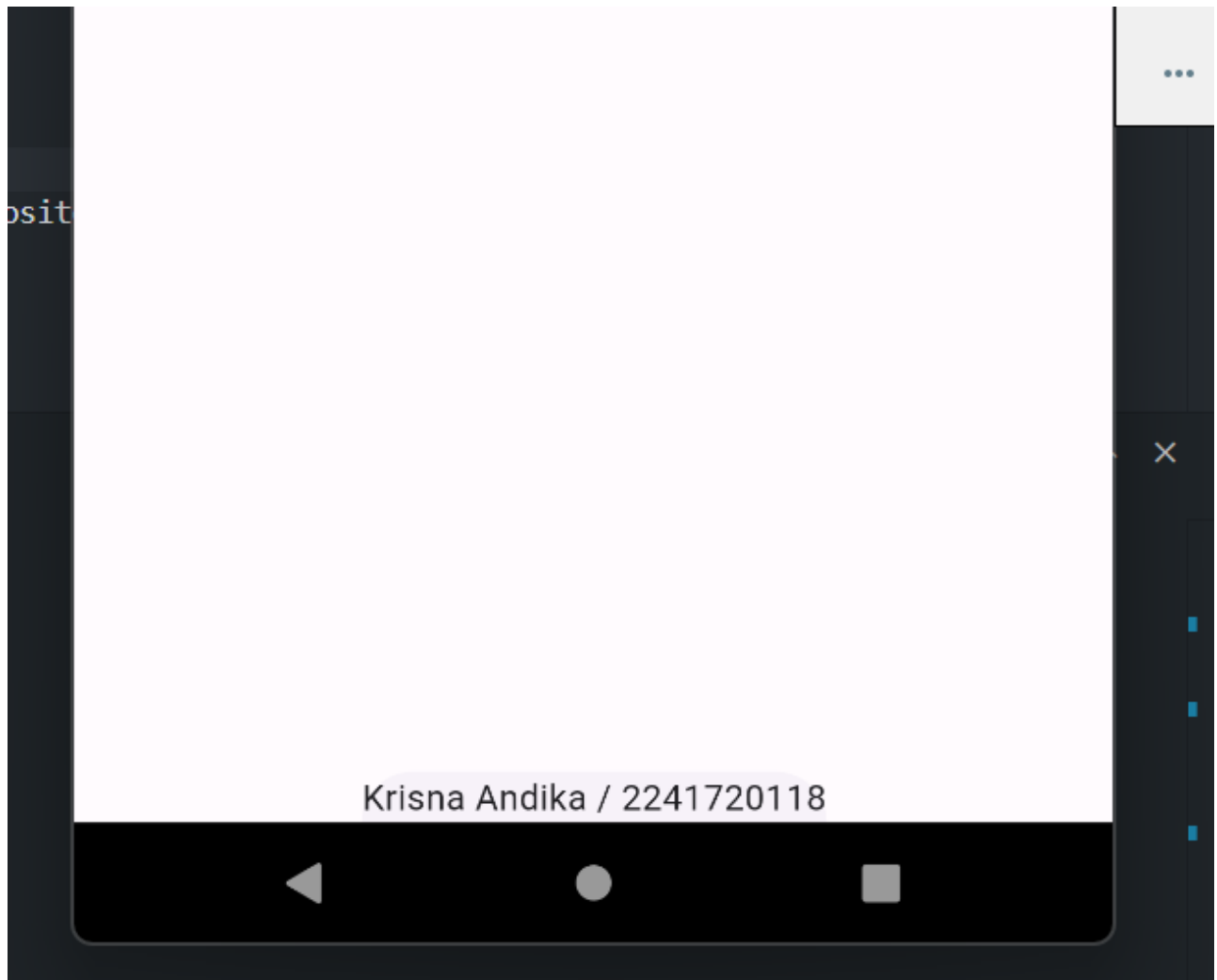
```





```
main.dart home_page.dart pubspec.yaml item_page.dart X readme.md item.dart
lib > pages > item_page.dart > ItemPage > build
4 class ItemPage extends StatelessWidget {
8   Widget build(BuildContext context) {
10
11     return Scaffold(
12       body: Container(
13         width: double.infinity,
14         child: Column(
15           mainAxisAlignment: MainAxisAlignment.start,
16           crossAxisAlignment: CrossAxisAlignment.start,
17           children: [
18             Hero(
19               tag: 'imagehero',
20               child: Image.asset(
21                 itemArgs.foto_produk.toString(),
22                 fit: BoxFit.fill,
23                 width: double.infinity,
24               ), // Image.asset // Hero
25             Padding(
26               padding: EdgeInsets.symmetric(horizontal: 5),
27               child: Column(
28                 crossAxisAlignment: CrossAxisAlignment.start,
29                 children: [
30                   Text(
31                     'Rp' + itemArgs.price.toString(),
32                     style: TextStyle(fontWeight: FontWeight.bold, fontSize: 24),
33                   ), // Text
34                   Text(
35                     itemArgs.name.toString().toUpperCase(),
36                     style: TextStyle(fontSize: 18),
37                   ), // Text
38                   Text('Rating : ' + itemArgs.rating.toString()),
39                 ],
40               ), // Column
41             ), // Padding
42           ],
43         ), // Container
44       bottomSheet: Text('Krisna Andika / 2241720118'),
```





6. Selesaikan Praktikum 5: Navigasi dan Rute tersebut. Cobalah modifikasi menggunakan plugin `go_router`, lalu dokumentasikan dan push ke repository Anda berupa screenshot setiap hasil pekerjaan beserta penjelasannya di file `README.md`. Kumpulkan link commit repository GitHub Anda kepada dosen yang telah disepakati!

- Install Package `go_router`

```
flutter pub add go_router
```

```
PS D:\Kuliahe wong jenius\Semester 5\Mobile\Pertemuan 7\belanja> flutter pub add go_router
Resolving dependencies...
  collection 1.18.0 (1.19.0 available)
  flutter_lints 3.0.2 (5.0.0 available)
+ flutter_web_plugins 0.0.0 from sdk flutter
+ go_router 14.3.0
  leak_tracker 10.0.0 (10.0.7 available)
  leak_tracker_flutter_testing 2.0.1 (3.0.8 available)
  leak_tracker_testing 2.0.1 (3.0.1 available)
  lints 3.0.0 (5.1.0 available)
+ logging 1.2.0
+ material_color_utilities 0.8.0 (0.12.0 available)
  meta 1.11.0 (1.16.0 available)
  stack_trace 1.11.1 (1.12.0 available)
  string_scanner 1.2.0 (1.3.0 available)
  test_api 0.6.1 (0.7.3 available)
  vm_service 13.0.0 (14.3.0 available)
Changed 3 dependencies!
```

- Import to project

```
import 'package:go_router/go_router.dart';
```

- Mendefinisikan go_route

```
// This widget is the root of your application.  
@override  
Widget build(BuildContext context) {  
  return MaterialApp.router(  
    routerConfig: GoRouter(routes: [  
      GoRoute(path: '/', builder: (context, state) => HomePage()),  
      GoRoute(  
        path: '/item',  
        builder: (context, state) {  
          Item item = state.extra as Item;  
          return ItemPage(item: item);  
        }  
      )  
    ]), // GoRouter  
  ); // MaterialApp.router  
}
```

- Mengirim data

```
final item = items[index];  
return InkWell(  
  onTap: () {  
    context.go('/item', extra: item);  
  },  
);
```

