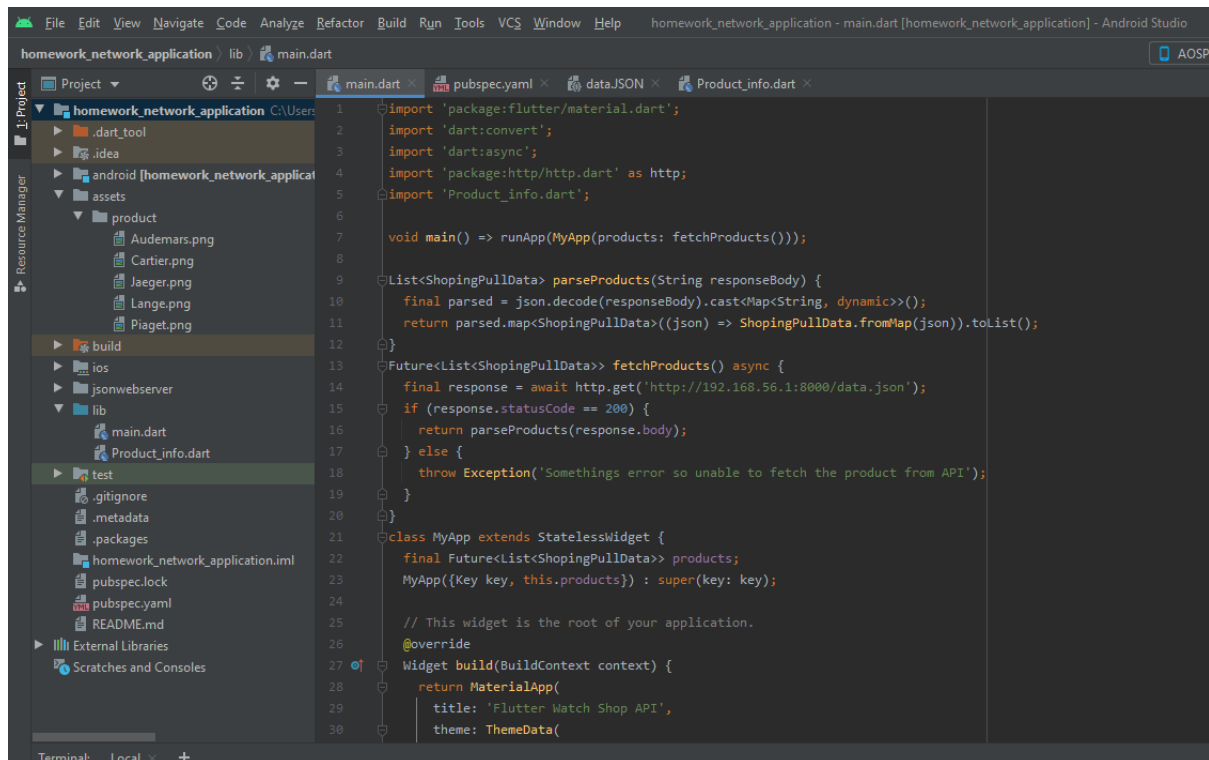


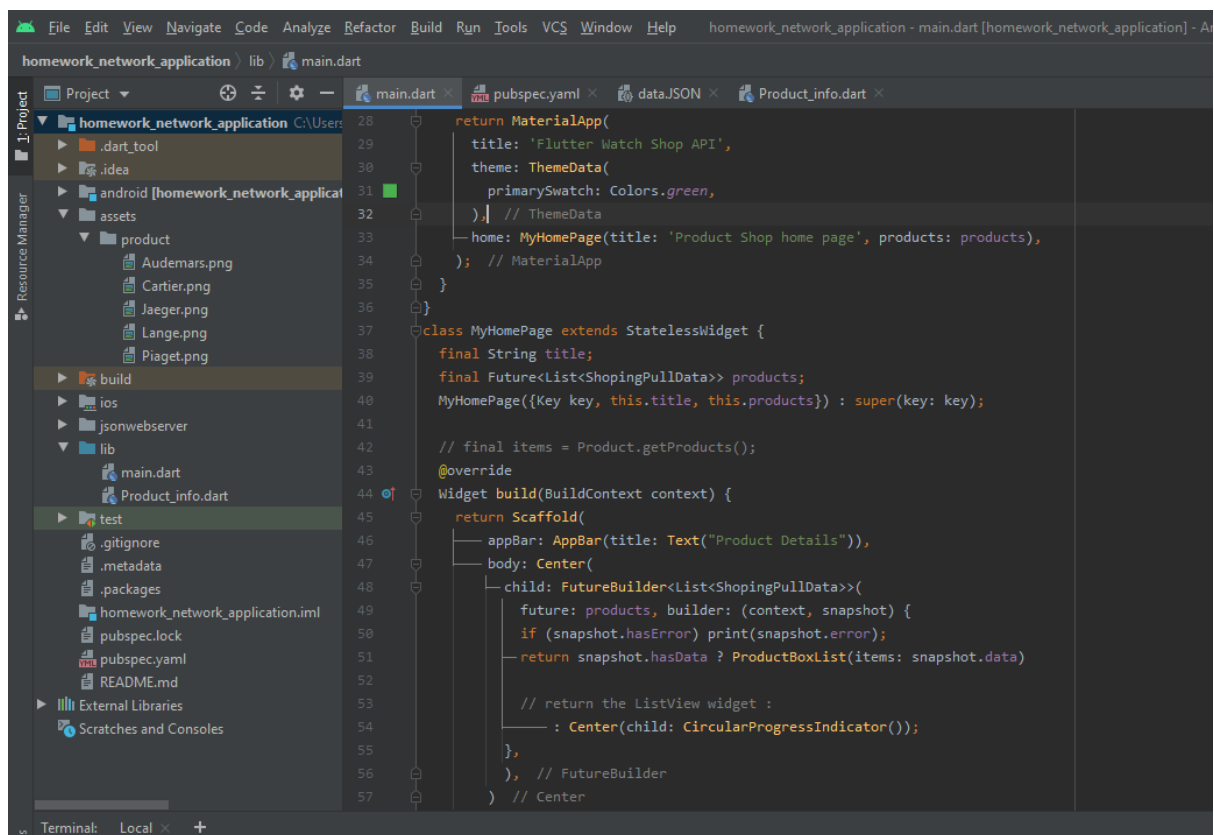
# Homework on Flutter Network application

Source code

Main.dart page



```
1 import 'package:flutter/material.dart';
2 import 'dart:convert';
3 import 'dart:async';
4 import 'package:http/http.dart' as http;
5 import 'Product_info.dart';
6
7 void main() => runApp(MyApp(products: fetchProducts()));
8
9 List<ShopingPullData> parseProducts(String responseBody) {
10   final parsed = json.decode(responseBody).cast<Map<String, dynamic>>();
11   return parsed.map<ShopingPullData>((json) => ShopingPullData.fromMap(json)).toList();
12 }
13
14 Future<List<ShopingPullData>> fetchProducts() async {
15   final response = await http.get('http://192.168.56.1:8000/data.json');
16   if (response.statusCode == 200) {
17     return parseProducts(response.body);
18   } else {
19     throw Exception('Somethings error so unable to fetch the product from API');
20   }
21 }
22
23 class MyApp extends StatelessWidget {
24   final Future<List<ShopingPullData>> products;
25   MyApp({Key key, this.products}) : super(key: key);
26
27   // This widget is the root of your application.
28   @override
29   Widget build(BuildContext context) {
30     return MaterialApp(
31       title: 'Flutter Watch Shop API',
32       theme: ThemeData(
```



```
33       return MaterialApp(
34         title: 'Flutter Watch Shop API',
35         theme: ThemeData(
36           primarySwatch: Colors.green,
37         ), // ThemeData
38       home: MyHomePage(title: 'Product Shop home page', products: products),
39     ); // MaterialApp
40   }
41 }
42
43 class MyHomePage extends StatelessWidget {
44   final String title;
45   final Future<List<ShopingPullData>> products;
46   MyHomePage({Key key, this.title, this.products}) : super(key: key);
47
48   // final items = Product.getProducts();
49   @override
50   Widget build(BuildContext context) {
51     return Scaffold(
52       appBar: AppBar(title: Text("Product Details")),
53       body: Center(
54         child: FutureBuilder<List<ShopingPullData>>(
55           future: products, builder: (context, snapshot) {
56             if (snapshot.hasError) print(snapshot.error);
57             return snapshot.hasData ? ProductBoxList(items: snapshot.data)
58
59             // return the ListView widget :
60             : Center(child: CircularProgressIndicator());
61           },
62         ), // FutureBuilder
63       ), // Center
64     );
```

```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help homework_network_application - main.dart [homework_network_application] - An
homework_network_application lib main.dart
Project
homework_network_application C:\Users
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Cartier.png
Jaeger.png
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},
), // FutureBuilder
) // Center
); // Scaffold
}
}
class ProductBoxList extends StatelessWidget {
final List<ShopingPullData> items;
ProductBoxList({Key key, this.items});
@override
Widget build(BuildContext context) {
return ListView.builder(
itemCount: items.length,
itemBuilder: (context, index) {
return GestureDetector(
child: ProductBox(item: items[index]),
onTap: () {
Navigator.push(
context, MaterialPageRoute(
builder: (context) => ProductPage(item: items[index]),
), // MaterialPageRoute
);
}); // GestureDetector
}); // ListView.builder
}
}
class ProductPage extends StatelessWidget {
```

```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help homework_network_application - main.dart [homework_network_application] - Android S
homework_network_application lib main.dart
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}
}
class ProductPage extends StatelessWidget {
ProductPage({Key key, this.item}) : super(key: key);
final ShoppingPullData item;
@override
Widget build(BuildContext context) {
return Scaffold(
appBar: AppBar(title: Text(this.item.name)),
body: Center(
child: Container(
padding: EdgeInsets.all(0),
child: Column(
mainAxisAlignment: MainAxisAlignment.start,
crossAxisAlignment: CrossAxisAlignment.start,
children: <Widget>[
Image.asset("assets/product/" + this.item.image),
Expanded(
child: Container(
padding: EdgeInsets.all(5),
child: Column(
mainAxisAlignment: MainAxisAlignment.spaceEvenly,
children: <Widget>[
Text(this.item.name, style:
TextStyle(fontWeight: FontWeight.bold)), // Text
Text(this.item.name),
Text("Price: " + this.item.price.toString()),
RatingBox(),
], // <Widget>[]
), // Column
) // Scaffold
}
```

```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help homework_network_application - main.dart [homework_network_application] - Android
homework_network_application > lib > main.dart
Project
homework_network_application C:\Users\...
├── .dart_tool
├── .idea
├── android [homework_network_applicat
├── assets
│   └── product
│       ├── Audemars.png
│       ├── Cartier.png
│       ├── Jaeger.png
│       ├── Lange.png
│       └── Piaget.png
├── build
├── ios
├── jsonwebserver
├── lib
│   ├── main.dart
│   └── Product_info.dart
├── test
├── .gitignore
├── .metadata
├── .packages
├── homework_network_application.iml
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RatingBox(),
], // <Widget>[]
) // Column
) // Container
) // Expanded
] // <Widget>[]
), // Column
), // Container
), // Center
); // Scaffold
}
class RatingBox extends StatefulWidget {
  @override
  _RatingBoxState createState() => _RatingBoxState();
}
class _RatingBoxState extends State<RatingBox> {
  int _rating = 0;
  void _setRatingAsOne() {
    setState(() {
      _rating = 1;
    });
  }
  void _setRatingAsTwo() {
    setState(() {
      _rating = 2;
    });
  }
  void _setRatingAsThree() {
    setState(() {
```

```
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help homework_network_application - main.dart [homework_network_application] - Android
homework_network_application > lib > main.dart
Project
homework_network_application C:\Users\...
├── .dart_tool
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├── android [homework_network_applicat
├── assets
│   └── product
│       ├── Audemars.png
│       ├── Cartier.png
│       ├── Jaeger.png
│       ├── Lange.png
│       └── Piaget.png
├── build
├── ios
├── jsonwebserver
├── lib
│   ├── main.dart
│   └── Product_info.dart
├── test
├── .gitignore
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}
void _setRatingAsThree() {
  setState(() {
    _rating = 3;
  });
}
Widget build(BuildContext context) {
  double _size = 20;
  print(_rating);
  return Row(
    mainAxisAlignment: MainAxisAlignment.end,
    crossAxisAlignment: CrossAxisAlignment.end,
    mainAxisAlignment: MainAxisAlignment.max,

    children: <Widget>[
      Container(
        padding: EdgeInsets.all(0),
        child: IconButton(
          icon: (
            _rating >= 1
              ? Icon(Icons.star, size: _size,)
              : Icon(Icons.star_border, size: _size,)
          ),
          color: Colors.tealAccent[400], onPressed: _setRatingAsOne, iconSize: _size,
        ), // IconButton
      ), // Container
      Container(
        padding: EdgeInsets.all(0),
        child: IconButton(
          icon: (
```

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homework_network_application > lib > main.dart

Project
homework_network_application C:\Users
  .dart_tool
  .idea
  android [homework_network_applicat
  assets
    product
      Audemars.png
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      Jaeger.png
      Lange.png
      Piaget.png
  build
  ios
  jsonwebserver
  lib
    main.dart
    Product_info.dart
  test
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pubspec.yaml
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Product_info.dart

padding: EdgeInsets.all(0),
child: IconButton(
  icon: (
    _rating >= 2
      ? Icon(Icons.star, size: _size,)
      : Icon(Icons.star_border, size: _size, )
    ),
  color: Colors.tealAccent[400],
  onPressed: _setRatingAsTwo,
  iconSize: _size,
), // IconButton
), // Container
Container(
  padding: EdgeInsets.all(0),
  child: IconButton(
    icon: (
      _rating >= 3 ?
        Icon(Icons.star, size: _size,)
        : Icon(Icons.star_border, size: _size,)
      ),
      color: Colors.tealAccent[400],
      onPressed: _setRatingAsThree,
      iconSize: _size,
    ), // IconButton
  ), // Container
], // <Widget>[]
); // Row
}
}
class ProductBox extends StatelessWidget {
```

```
homework_network_application - main.dart [homework_network_application] - Andro

homework_network_application > lib > main.dart

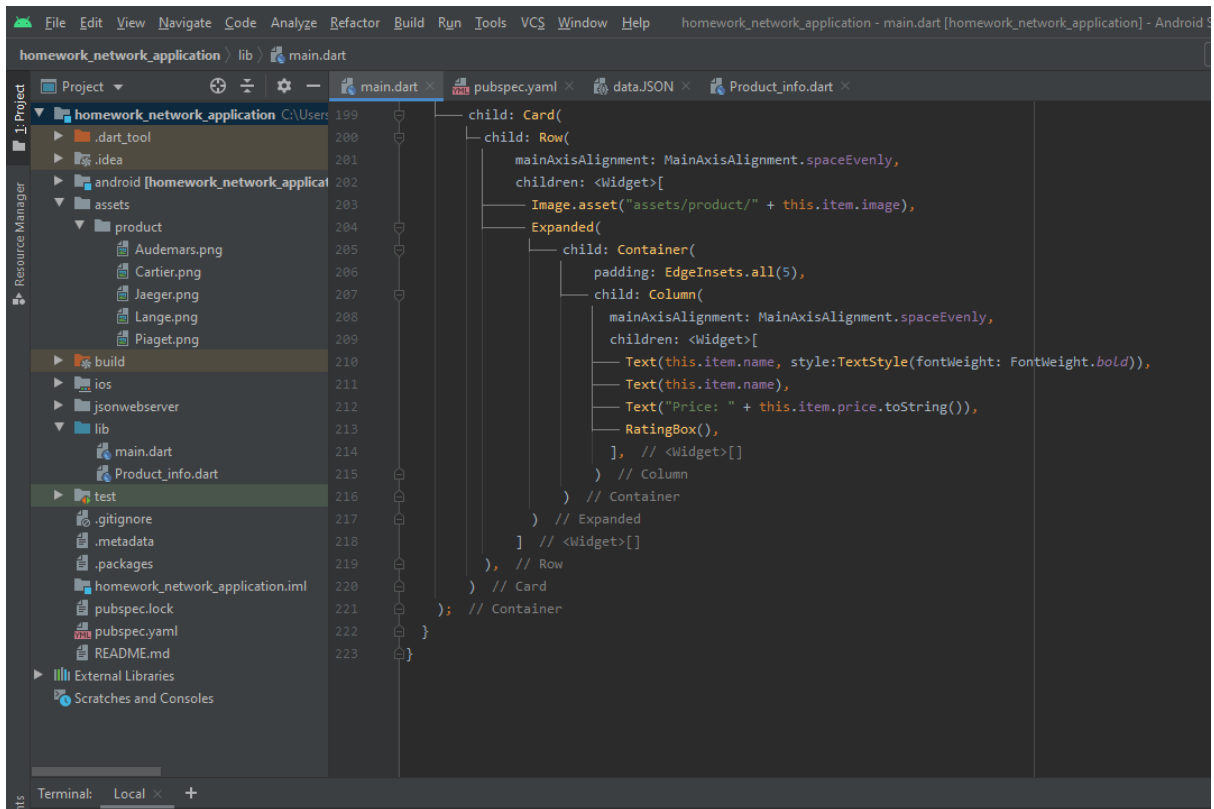
Project
homework_network_application C:\Users
  .dart_tool
  .idea
  android [homework_network_applicat
  assets
    product
      Audemars.png
      Cartier.png
      Jaeger.png
      Lange.png
      Piaget.png
  build
  ios
  jsonwebserver
  lib
    main.dart
    Product_info.dart
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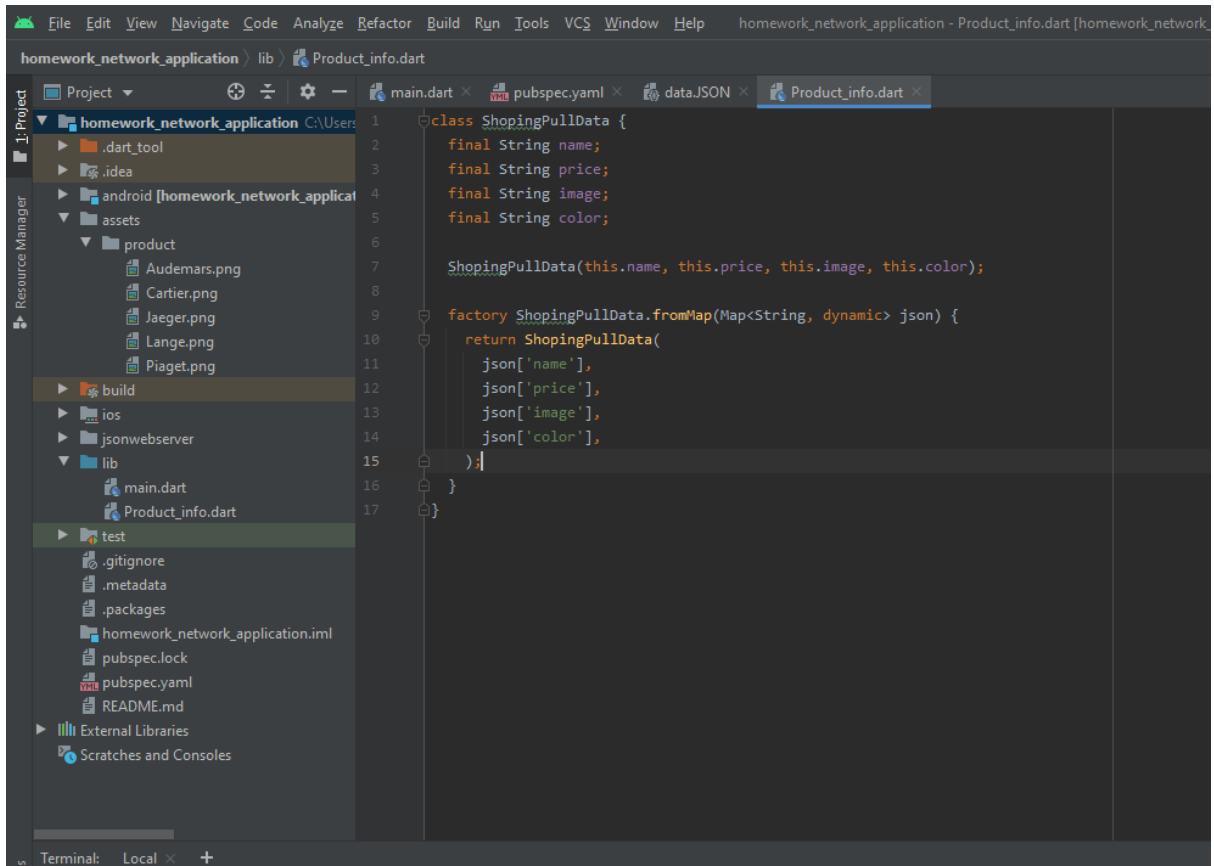
pubspec.yaml
data.JSON
Product_info.dart

}
}
class ProductBox extends StatelessWidget {
  ProductBox({Key key, this.item}) : super(key: key);
  final ShoppingPullData item;

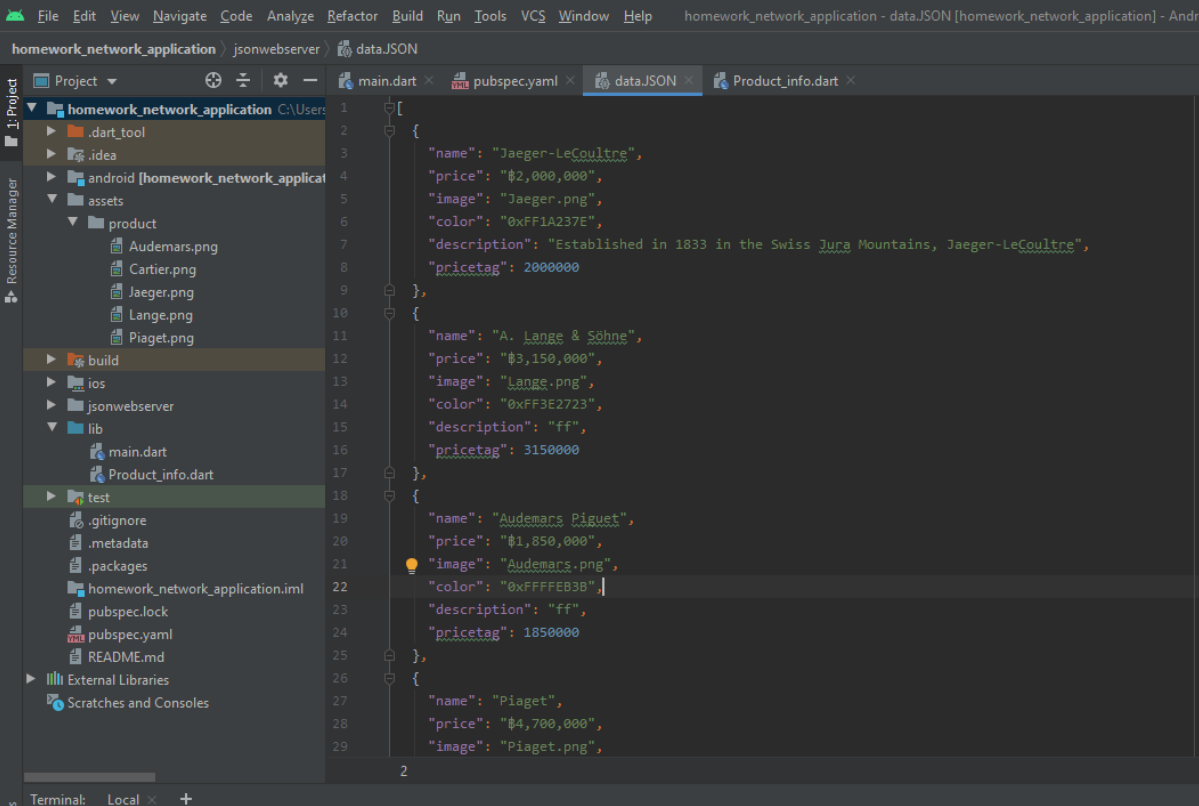
  Widget build(BuildContext context) {
    return Container(
      padding: EdgeInsets.all(2), height: 140,
      child: Card(
        child: Row(
          mainAxisAlignment: MainAxisAlignment.spaceEvenly,
          children: <Widget>[
            Image.asset("assets/product/" + this.item.image),
            Expanded(
              child: Container(
                padding: EdgeInsets.all(5),
                child: Column(
                  mainAxisAlignment: MainAxisAlignment.spaceEvenly,
                  children: <Widget>[
                    Text(this.item.name, style: TextStyle(fontWeight: FontWeight.bold)),
                    Text(this.item.name),
                    Text("Price: " + this.item.price.toString()),
                    RatingBox(),
                  ], // <Widget>[]
                ) // Column
              ) // Container
            ) // Expanded
          ] // <Widget>[]
        ), // Row
      ), // Row
```



## Product\_Info.dart page

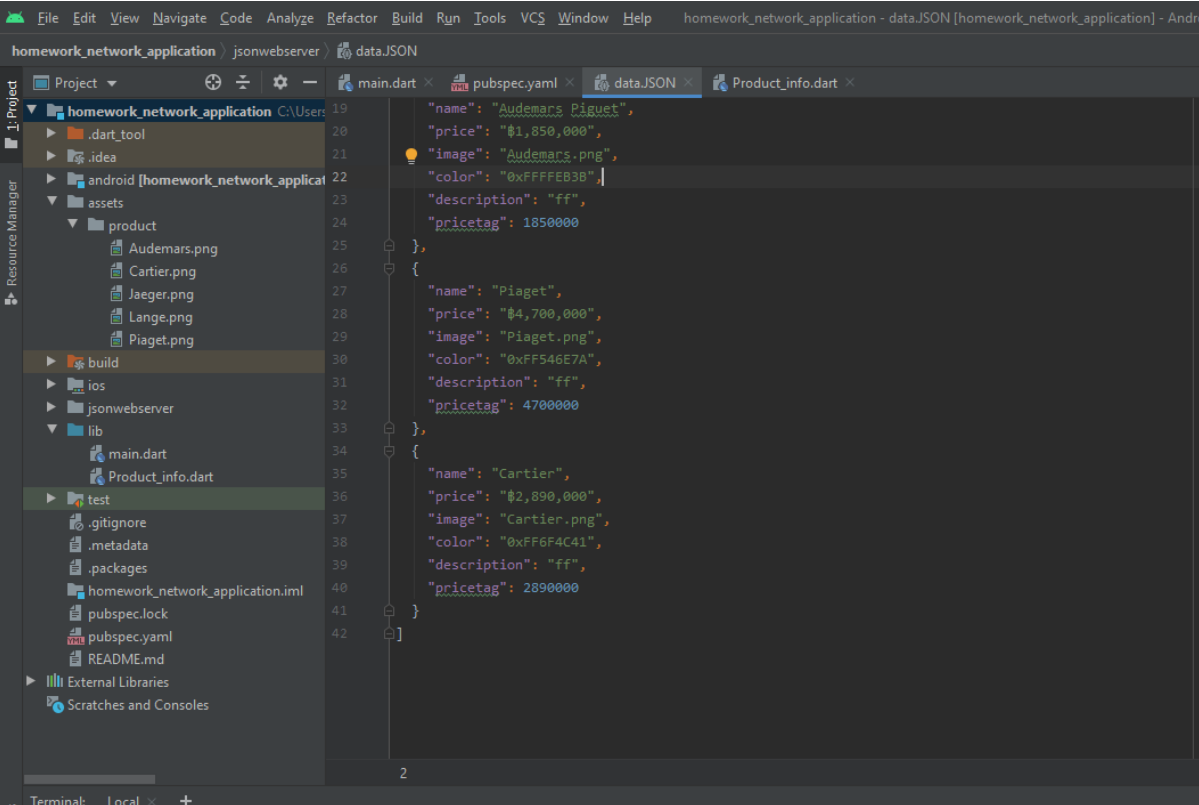


## Data.JSON page



The screenshot shows an IDE with the file explorer on the left and the editor on the right. The file explorer shows the project structure for 'homework\_network\_application'. The editor displays the 'data.JSON' file with the following content:

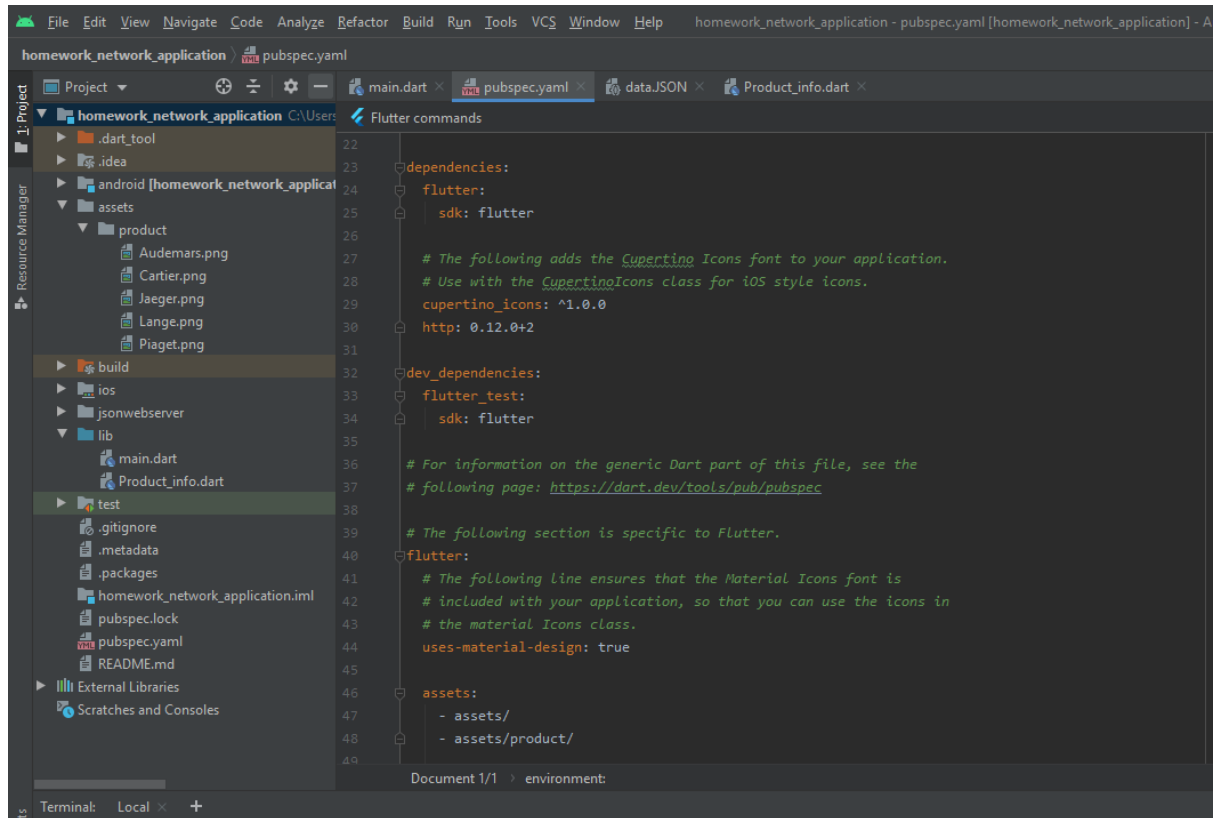
```
1  [
2    {
3      "name": "Jaeger-LeCoultre",
4      "price": "$2,000,000",
5      "image": "Jaeger.png",
6      "color": "0xFF1A237E",
7      "description": "Established in 1833 in the Swiss Jura Mountains, Jaeger-LeCoultre",
8      "pricetag": 2000000
9    },
10   {
11     "name": "A. Lange & Söhne",
12     "price": "$3,150,000",
13     "image": "Lange.png",
14     "color": "0xFF3E2723",
15     "description": "ff",
16     "pricetag": 3150000
17   },
18   {
19     "name": "Audemars Piguet",
20     "price": "$1,850,000",
21     "image": "Audemars.png",
22     "color": "0xFFFFEB3B",
23     "description": "ff",
24     "pricetag": 1850000
25   },
26   {
27     "name": "Piaget",
28     "price": "$4,700,000",
29     "image": "Piaget.png",
30   }
31 ]
```



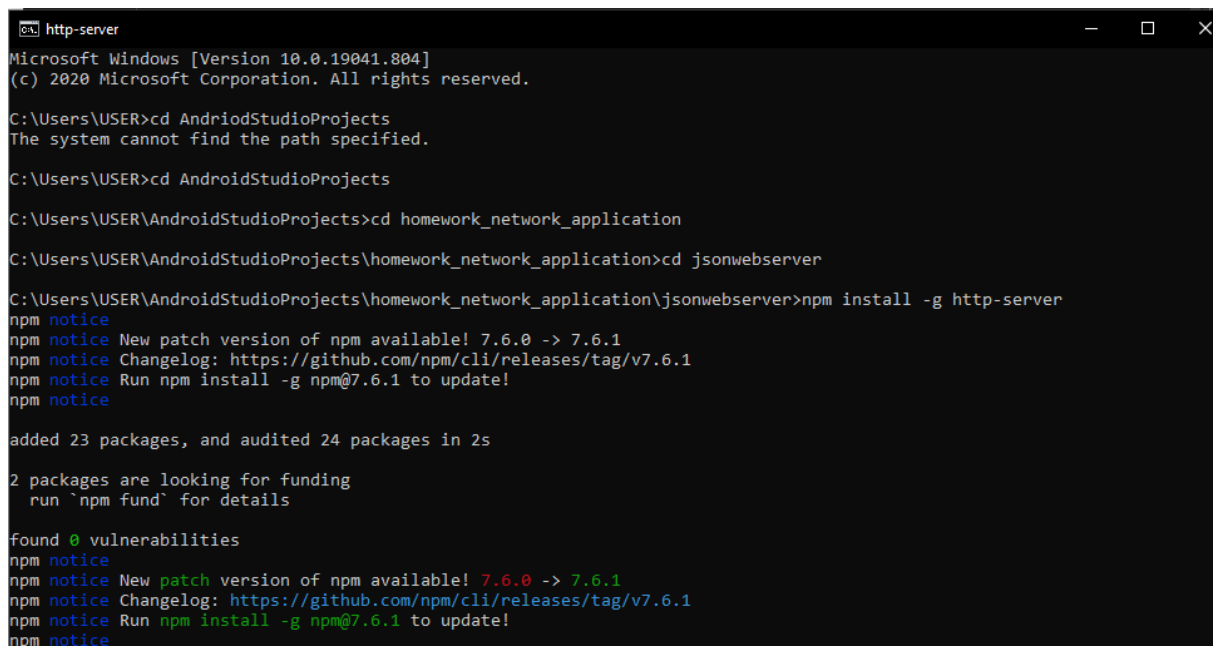
The screenshot shows the same IDE with the 'data.JSON' file. The content is the same as the previous screenshot, but the line numbers are different, indicating a scroll or a different view. The content is:

```
19   "name": "Audemars Piguet",
20   "price": "$1,850,000",
21   "image": "Audemars.png",
22   "color": "0xFFFFEB3B",
23   "description": "ff",
24   "pricetag": 1850000
25 },
26 {
27   "name": "Piaget",
28   "price": "$4,700,000",
29   "image": "Piaget.png",
30   "color": "0xFF546E7A",
31   "description": "ff",
32   "pricetag": 4700000
33 },
34 {
35   "name": "Cartier",
36   "price": "$2,890,000",
37   "image": "Cartier.png",
38   "color": "0xFF6F4C41",
39   "description": "ff",
40   "pricetag": 2890000
41 }
42 ]
```

## Pubspec.yaml page



## For cmd page



```
http-server

C:\Users\USER\AndroidStudioProjects\homework_network_application\jsonwebserver>npm install -g http-server

changed 23 packages, and audited 24 packages in 2s

2 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities

C:\Users\USER\AndroidStudioProjects\homework_network_application\jsonwebserver>http-server . -p 8000
Starting up http-server, serving .
Available on:
  http://192.168.56.1:8000
  http://192.168.1.100:8000
  http://127.0.0.1:8000
Hit CTRL-C to stop the server
http-server stopped.

C:\Users\USER\AndroidStudioProjects\homework_network_application\jsonwebserver>http-server . -p 8000
Starting up http-server, serving .
Available on:
  http://192.168.56.1:8000
  http://192.168.1.100:8000
  http://127.0.0.1:8000
Hit CTRL-C to stop the server
[2021-03-07T11:11:01.127Z] "GET /data.json" "Dart/2.10 (dart:io)"
(node:13476) [DEP0066] DeprecationWarning: OutgoingMessage.prototype._headers is deprecated
(Use `node --trace-deprecation ...` to show where the warning was created)
http-server stopped.
```

```
http-server

(node:13476) [DEP0066] DeprecationWarning: OutgoingMessage.prototype._headers is deprecated
(Use `node --trace-deprecation ...` to show where the warning was created)
http-server stopped.

C:\Users\USER\AndroidStudioProjects\homework_network_application\jsonwebserver>http-server . -p 8000
Starting up http-server, serving .
Available on:
  http://192.168.56.1:8000
  http://192.168.1.100:8000
  http://127.0.0.1:8000
Hit CTRL-C to stop the server
[2021-03-07T11:30:34.761Z] "GET /data.json" "Dart/2.10 (dart:io)"
(node:10808) [DEP0066] DeprecationWarning: OutgoingMessage.prototype._headers is deprecated
(Use `node --trace-deprecation ...` to show where the warning was created)
http-server stopped.

C:\Users\USER\AndroidStudioProjects\homework_network_application\jsonwebserver>http-server . -p 8000
Starting up http-server, serving .
Available on:
  http://192.168.56.1:8000
  http://192.168.1.100:8000
  http://127.0.0.1:8000
Hit CTRL-C to stop the server
[2021-03-07T11:35:08.609Z] "GET /data.json" "Dart/2.10 (dart:io)"
(node:11860) [DEP0066] DeprecationWarning: OutgoingMessage.prototype._headers is deprecated
(Use `node --trace-deprecation ...` to show where the warning was created)
[2021-03-07T11:36:06.751Z] "GET /data.json" "Dart/2.10 (dart:io)"
```



Emulator screen page

