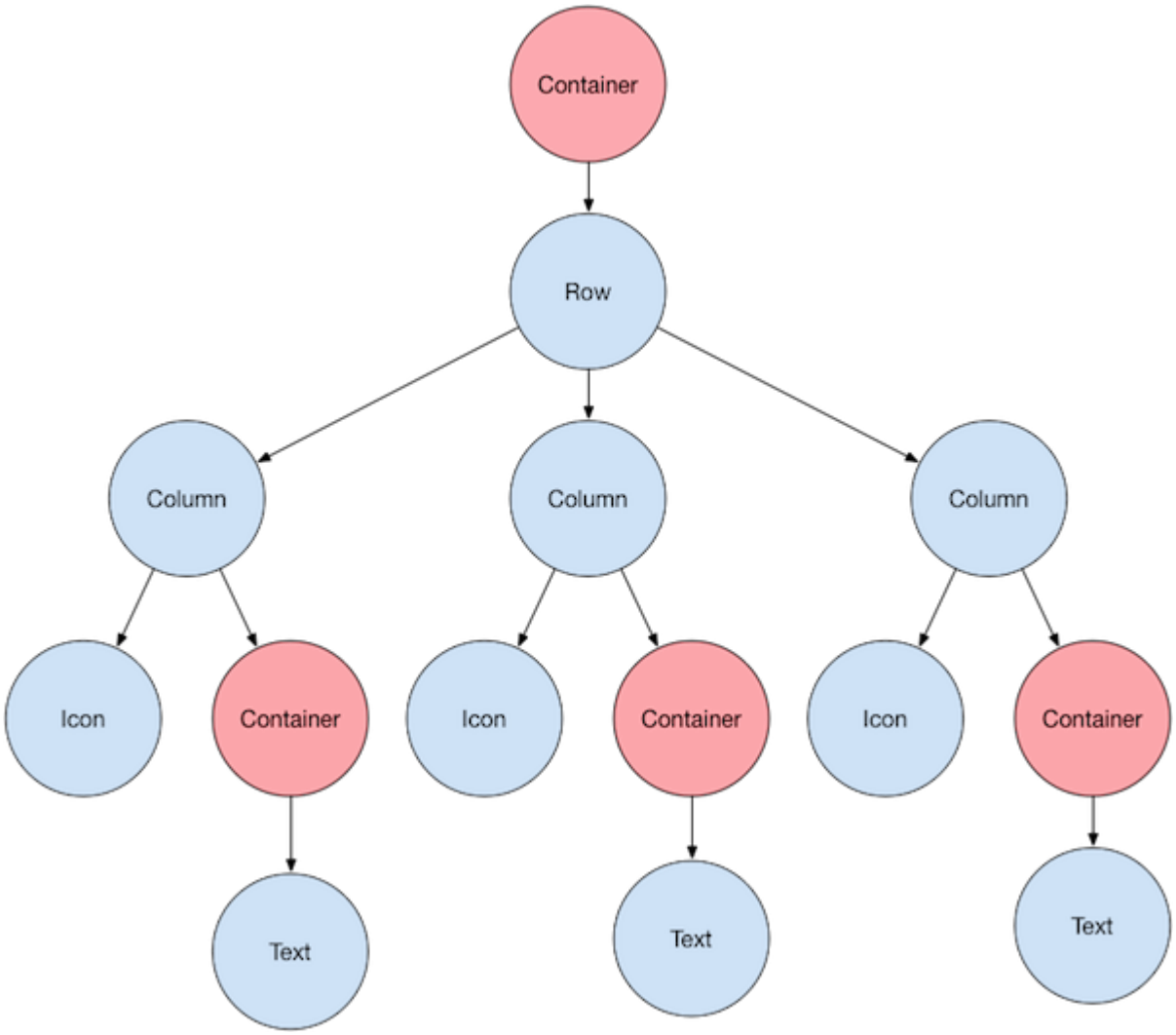
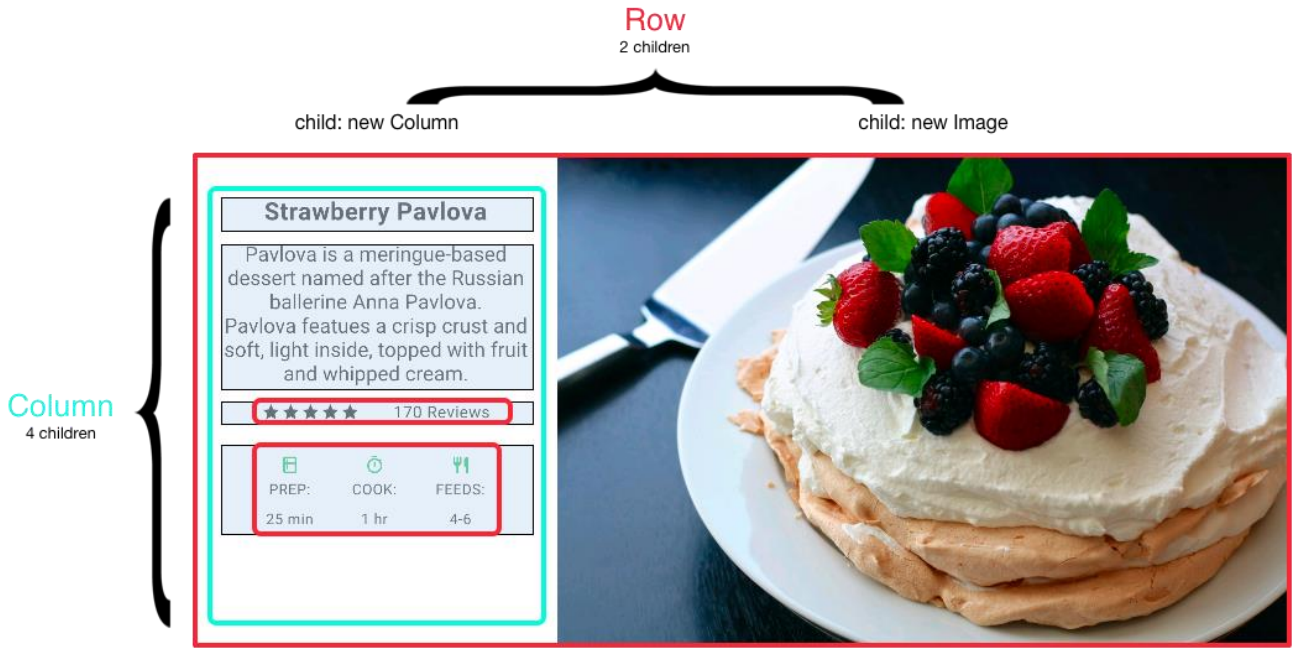
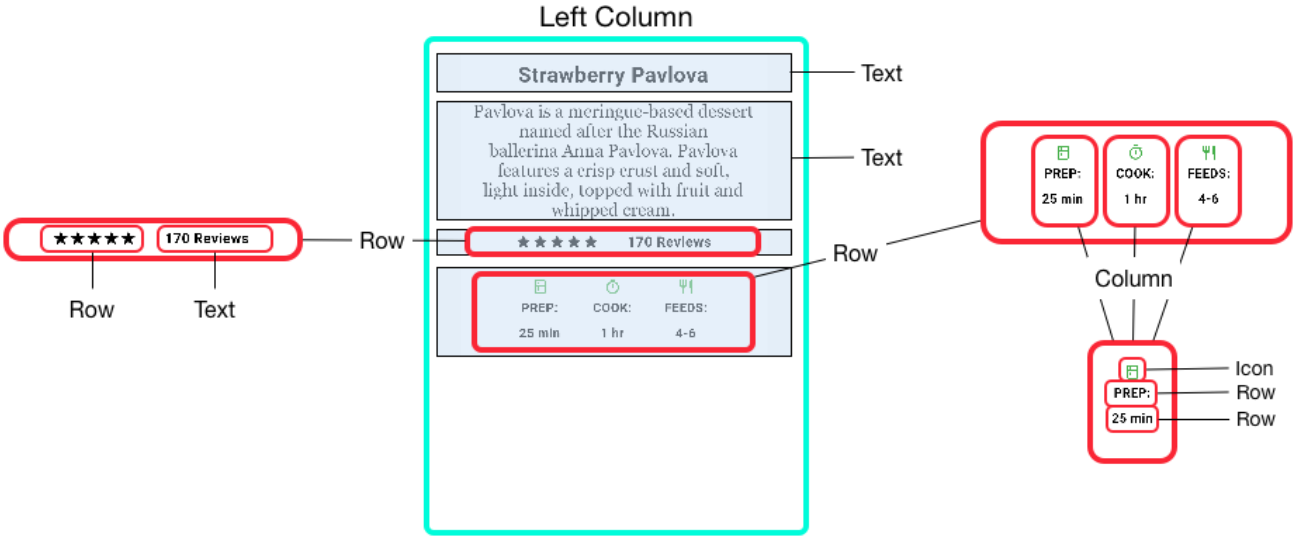
Layouts en Flutter




Row
2 children
child: new Column
child: new Image
Column
4 children
Strawberry Pavlova
Pavlova is a meringue-based dessert named after the Russian ballerine Anna Pavlova. Pavlova featues a crisp crust and soft, light inside, topped with fruit and whipped cream.
170 Reviews
PREP:
25 min
COOK:
1 hr
FEEDS:
4-6


Left Column
Strawberry Pavlova
Text
Pavlova is a meringue-based dessert named after the Russian ballerina Anna Pavlova. Pavlova features a crisp crust and soft, light inside, topped with fruit and whipped cream.
Text
170 Reviews
Row
Row
Row
Text
PREP:
25 min
COOK:
1 hr
FEEDS:
4-6
Column
Icon
Row
Row

Creación de widget

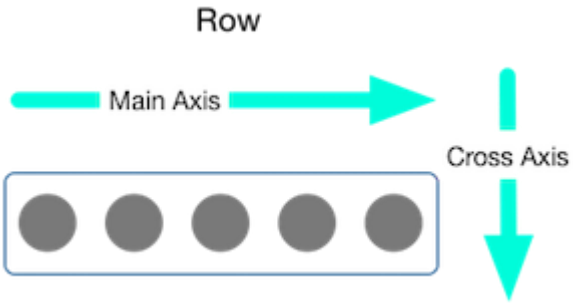
```
Text('Hello World'),
```

```
Image.asset(
  'images/lake.jpg',
  fit: BoxFit.cover,
),

Icon(
  Icons.star,
  color: Colors.red[500],
),

Center(
  child: Text('Hello World'),
),
```

Columnas y filas



File Edit Selection View Go Debug Terminal Help pubspec.yaml - layouts - Visual Studio C...

EXPLORER

OPEN EDITORS
main.dart lib
pubspec.yaml

LAYOUTS
.idea
android
assets
cereza.png
frambuesa.png
frutilla.png
manzana.png
naranja.png
pinia.png
sandia.png
uva.png
build
ios
lib
main.dart
test
widget_test.dart
.gitignore
.metadata
OUTLINE
DEPENDENCIES
MAVEN PROJECTS
MONGO RUNNER

main.dart | pubspec.yaml

```
38  # The following line ensures that the Material Icons
39  # included with your application, so that you can us
40  # the material Icons class.
41  uses-material-design: true
42
43  # To add assets to your application, add an assets s
44  assets:
45    - assets/frutilla.png
46    - assets/naranja.png
47    - assets/sandia.png
48    - assets/pinia.png
49    - assets/cereza.png
50
51  # An image asset can refer to one or more resolution
52  # https://flutter.io/assets-and-images/#resolution-a
53
54  # For details regarding adding assets from package d
55  # https://flutter.io/assets-and-images/#from-package
56
57  # To add custom fonts to your application, add a fon
58  # in this "flutter" section. Each entry in this list
59  # "family" key with the font family name, and a "fon
60  # list giving the asset and other descriptors for th
61  # example:
```

PROBLEMS OUTPUT ... Flutter

```
exit code 0
[layouts] flutter packages get
Running "flutter packages get" in layouts...
 0,9s
exit code 0
```

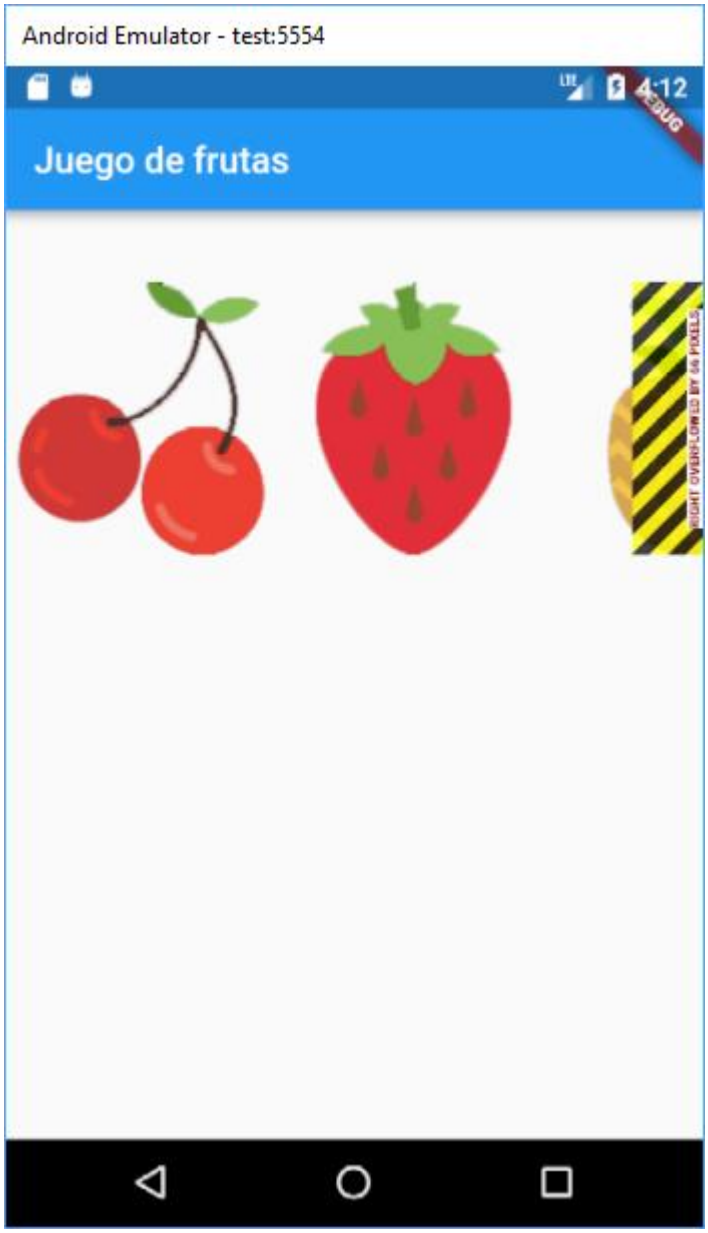
0 0 Ln 48, Col 23 Spaces: 2 UTF-8 CRLF YAML Android SDK built for x86 (android-x86 Emulator)

/lib/main.dart

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

void main() => runApp(MyApp());

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Bienvenido a Flutter',
      home: Scaffold(
        appBar: AppBar(
          title: Text('Juego de frutas'),
        ),
        body: Container(padding: EdgeInsets.only(top: 40.0 ),
        child: Row(
          mainAxisAlignment: MainAxisAlignment.spaceEvenly,
          children: [
            Image.asset('assets/cereza.png'),
            Image.asset('assets/frutilla.png'),
            Image.asset('assets/pinia.png'),
          ],
        ),
        ),
      ),
    );
  }
}
```


Android Emulator - test:5554
4:12
DEBUG
Juego de frutas

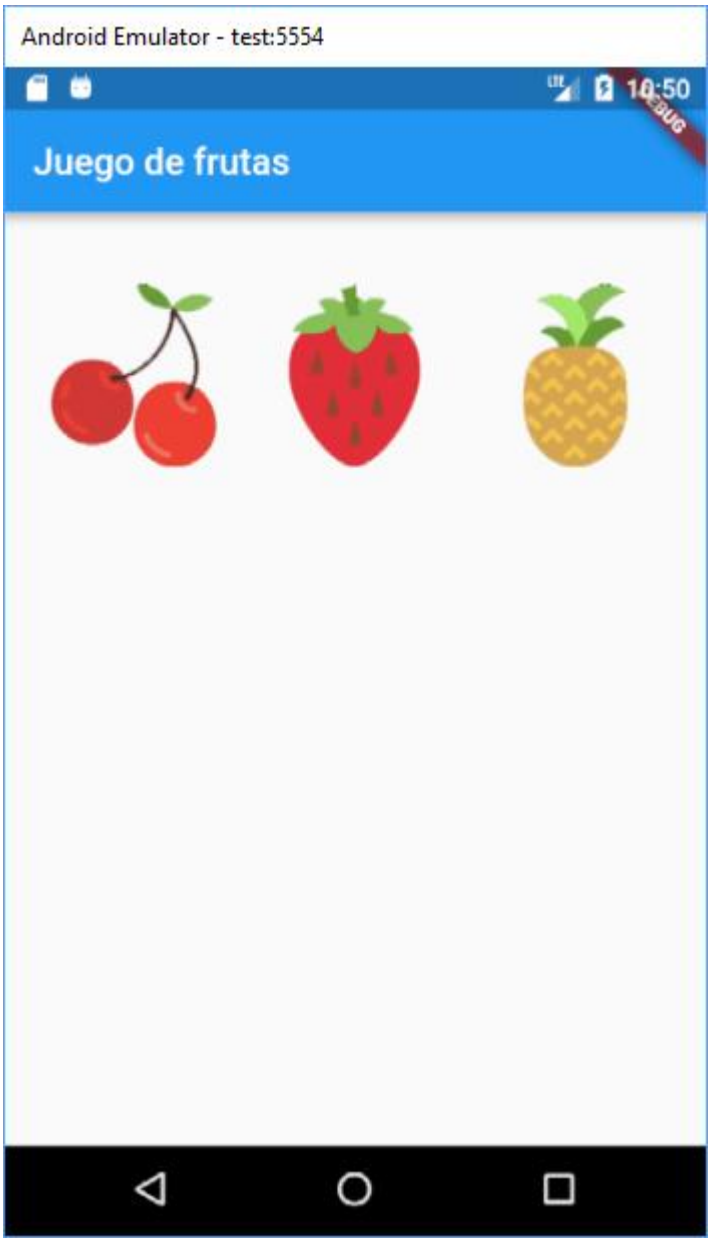
Soluciones:

/lib/main.dart

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

void main() => runApp(MyApp());

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Bienvenido a Flutter',
      home: Scaffold(
        appBar: AppBar(
          title: Text('Juego de frutas'),
        ),
        body: Container(padding: EdgeInsets.only(top: 40.0 ),
        child: Row(
          mainAxisAlignment: MainAxisAlignment.spaceEvenly,
          children: [
             Image.asset('assets/cereza.png',height: 100,width: 100,),
             Image.asset('assets/frutilla.png',height: 100,width: 100,),
             Image.asset('assets/pinia.png',height: 100,width: 100,),
          ],
        ),
        ),
      ),
    );
  }
}
```

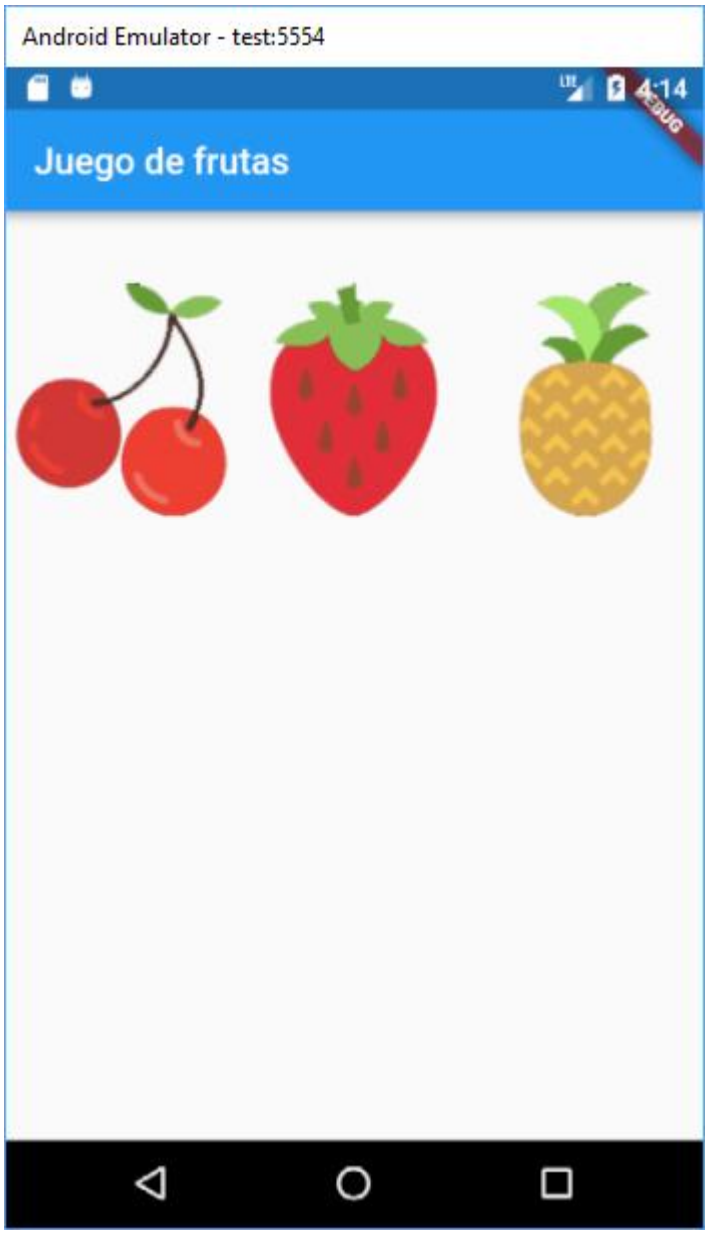

Android Emulator - test:5554
10:50
DEBUG
Juego de frutas

/lib/main.dart

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

void main() => runApp(MyApp());

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Bienvenido a Flutter',
      home: Scaffold(
        appBar: AppBar(
          title: Text('Juego de frutas'),
        ),
        body: Container(padding: EdgeInsets.only(top: 40.0 ),
        child: Row(
          mainAxisAlignment: MainAxisAlignment.spaceEvenly,
          children: [
            Expanded(child: Image.asset('assets/cereza.png'),),
            Expanded(child: Image.asset('assets/frutilla.png'),),
            Expanded(child: Image.asset('assets/pinia.png'),),
          ],
        ),
        ),
      ),
    );
  }
}
```


Android Emulator - test:5554
4:14
DEBUG
Juego de frutas

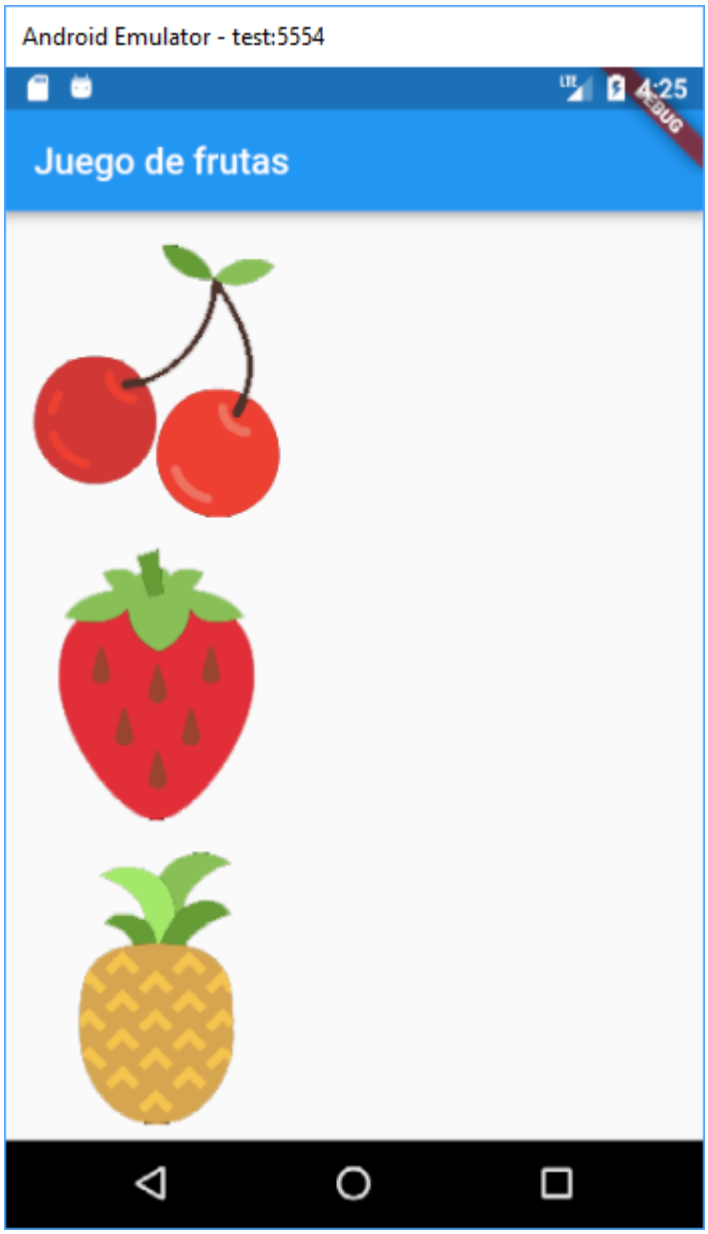
Columnas:

/lib/main.dart

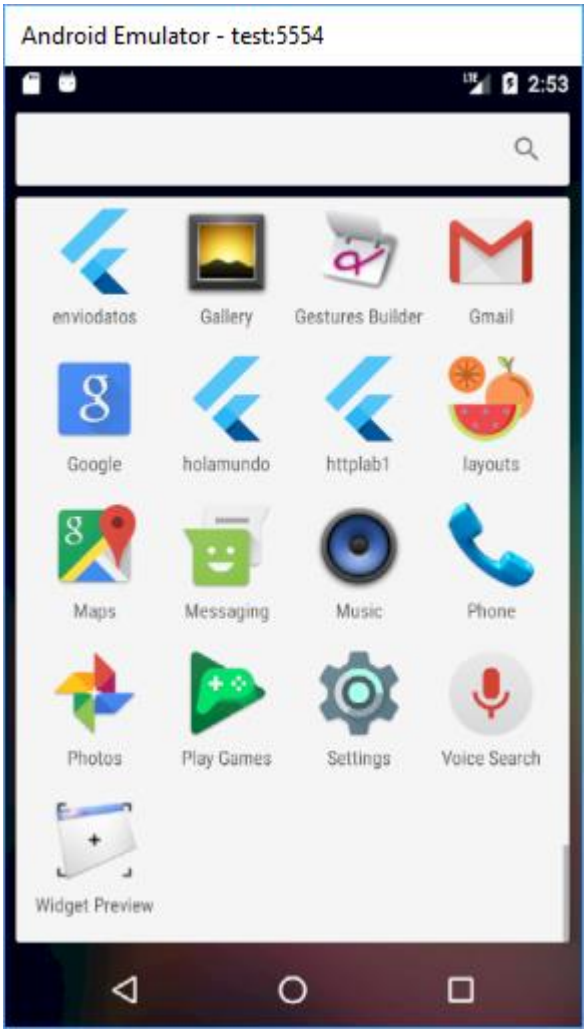
```
import 'package:flutter/material.dart';

void main() => runApp(MyApp());

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Bienvenido a Flutter',
      home: Scaffold(
        appBar: AppBar(
          title: Text('Juego de frutas'),
        ),
        body: Container(padding: EdgeInsets.only(top: 10.0 ),
        child: Column(
          mainAxisAlignment: MainAxisAlignment.spaceEvenly,
          children: [
            Expanded(child: Image.asset('assets/cereza.png'),),
            Expanded(child: Image.asset('assets/frutilla.png'),),
            Expanded(child: Image.asset('assets/pinia.png'),),
          ],
        ),
        ),
      ),
    );
  }
}
```


Android Emulator - test:5554
4:25
DEBUG
Juego de frutas

Aplicar Icono en el aplicativo



https://pub.dev/packages/flutter_launcher_icons

flutter packages get

flutter packages pub run flutter_launcher_icons:main

flutter build apk

File Edit Selection View Go Debug Terminal Help pubspec.yaml - layouts - Visual Studio Code

EXPLORER
OPEN EDITORS
LAYOUTS
.dart_tool
.idea
android
assets
launcher
frutas.png
cereza.png
frambuesa.png
frutilla.png
manzana.png
naranja.png
pinia.png
sandia.png
uva.png
build
ios
lib
con-estado.dart
main.dart
sin-estado.dart
stateful.dart
OUTLINE
DEPENDENCIES
MAVEN PROJECTS
MONGO RUNNER

pubspec.yaml

```yaml
dev_dependencies:
  flutter_launcher_icons: "^0.7.0"
  flutter_test:
    sdk: flutter

flutter_icons:
  android: "launcher_icon"
  ios: true
  image_path: "assets/launcher/frutas.png"

# For information on the generic Dart part of this file, see the
# following page: https://www.dartlang.org/tools/pub/pubspec

# The following section is specific to Flutter.
flutter:

  # The following line ensures that the Material Icons font is
  # included with your application, so that you can use the icons in
  # the material Icons class.
  uses-material-design: true

  # To add assets to your application, add an assets section, like thi
  assets:
    - assets/frutas.png
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL Flutter

```
exit code 0
[layouts] flutter packages get
Running "flutter packages get" in layouts...                    1,2s
exit code 0
```

0 0 3 Ln 28, Col 3 (32 selected) Spaces: 2 UTF-8 CRLF YAML Android SDK built for x86 (android-x86 Emulator)

C:\WINDOWS\system32\cmd.exe

```
D:\marcelomos\laboratorios\flutter\layouts>flutter packages get
Running "flutter packages get" in layouts...                    1,4s

D:\marcelomos\laboratorios\flutter\layouts>flutter packages pub run flutter_launcher_icons:main
Android minSdkVersion = 16
Creating default icons Android
Adding a new Android launcher icon
Overwriting default iOS launcher icon with new icon

D:\marcelomos\laboratorios\flutter\layouts>flutter build apk
Initializing gradle...                                          1,0s
Resolving dependencies...                                       5,3s
Calling mockable JAR artifact transform to create file: C:\Users\marce\.gradle\caches\transforms-1\f
```

Persistencia de datos

Leer y escribir archivos

C:\WINDOWS\system32\cmd.exe - flutter run

```
D:\marcelomos\laboratorios\flutter>flutter create archivos

  A new version of Flutter is available!

  To update to the latest version, run "flutter upgrade".


Creating project archivos...
  archivos\.gitignore (created)
  archivos\.idea\libraries\Dart_SDK.xml (created)
```

C:\WINDOWS\system32\cmd.exe - flutter run

```
All done!
[√] Flutter is fully installed. (Channel stable, v1.2.1, on Microsoft Windows [VersiÃ³n
    10.0.17134.706], locale es-ES)
[√] Android toolchain - develop for Android devices is fully installed. (Android SDK versio
n 28.0.3)
[!] Android Studio is partially installed; more components are available. (version 3.2)
[√] VS Code is fully installed. (version 1.33.1)
[!] Connected device is not available.

Run "flutter doctor" for information about installing additional components.

In order to run your application, type:

  $ cd archivos
  $ flutter run

Your application code is in archivos\lib\main.dart.


D:\marcelomos\laboratorios\flutter>cd archivos

D:\marcelomos\laboratorios\flutter\archivos>flutter devices
1 connected device:

Android SDK built for x86 • emulator-5554 • android-x86 • Android 6.0 (API 23) (emulator)

D:\marcelomos\laboratorios\flutter\archivos>code .
```

```
dependencies:
  path_provider: ^1.1.0
```

File Edit Selection View Go Debug Terminal Help pubspec.yaml - archivos - Visual Studio Code

EXPLORER

OPEN EDITORS

ARCHIVOS

- .idea
- android
- build
- ios
- lib
  - main.dart
- test
  - widget_test.dart
- .flutter-plugins
- .gitignore
- .metadata
- .packages
- archivos.iml
- pubspec.lock
- pubspec.yaml
- README.md

OUTLINE

DEPENDENCIES

MAVEN PROJECTS

MONGO RUNNER

main.dart | pubspec.yaml

```yaml
# In Android, build-name is used as versionName while build-number used
# Read more about Android versioning at https://developer.android.com/st
# In iOS, build-name is used as CFBundleShortVersionString while build-n
# Read more about iOS versioning at
# https://developer.apple.com/library/archive/documentation/General/Refe
version: 1.0.0+1

environment:
  sdk: ">=2.1.0 <3.0.0"

dependencies:
  flutter:
    sdk: flutter

  # The following adds the Cupertino Icons font to your application.
  # Use with the CupertinoIcons class for iOS style icons.
  cupertino_icons: ^0.1.2
  path_provider: ^1.1.0

dev_dependencies:
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL Flutter

```
[archivos] flutter packages get
Running "flutter packages get" in archivos...                    4,1s
exit code 0
```

0 0 Ln 26, Col 2 (22 selected) Spaces: 2 UTF-8 CRLF YAML Android SDK built for x86 (android-x86 Emulator)

/lib/main.dart

```
import 'dart:async';
import 'dart:io';

import 'package:flutter/foundation.dart';
import 'package:flutter/material.dart';
import 'package:path_provider/path_provider.dart';

void main() {
  runApp(
    MaterialApp(
      title: 'Lectura y escritura de archivos',
      home: FlutterDemo(storage: CounterStorage()),
    ),
  );
}

class CounterStorage {
  Future<String> get _localPath async {
    final directory = await getApplicationDocumentsDirectory();

    return directory.path;
  }

  Future<File> get _localFile async {
    final path = await _localPath;
    return File('$path/counter.txt');
  }

  Future<int> readCounter() async {
    try {
      final file = await _localFile;

      // Read the file
      String contents = await file.readAsString();

      return int.parse(contents);
    } catch (e) {
      // If encountering an error, return 0
      return 0;
```

```
    }
  }

  Future<File> writeCounter(int counter) async {
    final file = await _localFile;

    // Write the file
    return file.writeAsString('$counter');
  }
}

class FlutterDemo extends StatefulWidget {
  final CounterStorage storage;

  FlutterDemo({Key key, @required this.storage}) : super(key: key);

  @override
  _FlutterDemoState createState() => _FlutterDemoState();
}

class _FlutterDemoState extends State<FlutterDemo> {
  int _counter;

  @override
  void initState() {
    super.initState();
    widget.storage.readCounter().then((int value) {
      setState(() {
        _counter = value;
      });
    });
  }

  Future<File> _incrementCounter() {
    setState(() {
      _counter++;
    });

    // Write the variable as a string to the file.
    return widget.storage.writeCounter(_counter);
  }
```

```
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: Text('Lectura y escritura de archivos')),
      body: Center(
        child: Text(
          'Valor almacenado $_counter ',
        ),
      ),
      floatingActionButton: FloatingActionButton(
        onPressed: _incrementCounter,
        tooltip: 'Incrementar',
        child: Icon(Icons.add),
      ),
    );
  }
}
```