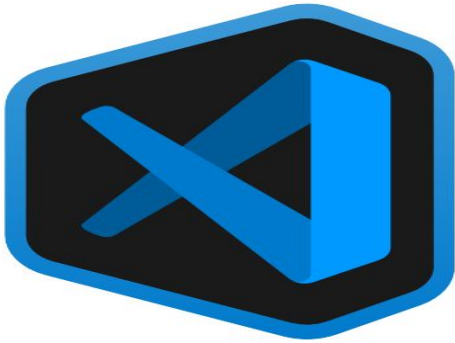




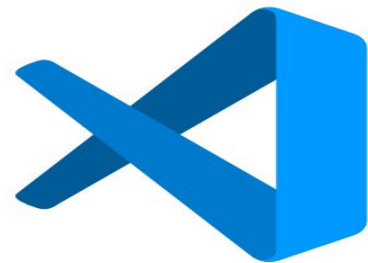
Flutter



Dart



macOS



Windows / Linux



Developing
Mobile Applications
with Flutter

Session 6

Summary:-

1. In today's session we got to know about widgets,decoration,container,properties of Scaffold, AppBar, runApp, column function and basic widgets in flutter such as column, container, image, icon and much more.
- 2.Scaffold :- Widget to design canvas and capable of creating widget inside it whereas default scaffold is white.
- 3.Scaffold contains almost everything you need to create a functional and responsive apps.
- 3.The body is a Text placed in a Center in order to center the text within the Scaffold.
4. Inside the container we can use various other things such as color,decoration,child,width, height to make our app attractive.
- 5.Decoration : Decoration is used to change the look of the boundary created by container. We can't use decoration and colour together because decoration have there own color property.
6. Color :- Color is used to change the color.
- 7.Width and height :- Adjust width and height on the screen (how much area should be covered on the screen according to the given input).
- 8.Box decoration function:This function is used customize the image, text and many other things which are present inside the box . If we want to create boxes we can use layout function instead of Boxdecoration function.
- 9.We can create container inside the container as per our requirement.
10. To overcome the limitation of container, we used column fun() .We can use multiple (children).The column fun () supports the list.
11. If the requirement is to keep multiple things in an application , so we can use column widget in place of container.
- 12.Border Radius:- The border-radius property is used to round the corners of an element
- 13.ImageNetwork Function :- Display images from the internet.To work with images from a URL, use the Image.network().
- 14.CenterTitle :- Align title at the center of appbar.It is Set to true.

Cit Command Prompt - flutter create secondflutter_app

```
Microsoft Windows [Version 10.0.18362.900]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Asus>cd C:\src\flutter\flutter_class\projects
```

```
C:\src\flutter\flutter_class\projects>dir
```

Volume in drive C is OS

Volume Serial Number is 3CCE-7C22

Directory of C:\src\flutter\flutter_class\projects

```
22/07/2020  09:12 PM    <DIR>        .
22/07/2020  09:12 PM    <DIR>        ..
22/07/2020  09:36 PM    <DIR>        firstflutter_app
17/07/2020  02:29 AM    <DIR>        test_app
21/07/2020  12:20 AM    <DIR>        test_app2
21/07/2020  10:28 PM    <DIR>        test_app3
               0 File(s)                0 bytes
               6 Dir(s)  9,515,028,480 bytes free
```

```
Command Prompt
C:\src\flutter\flutter_class\projects>flutter create secondflutter_app
Creating project secondflutter_app...
secondflutter_app\gitignore (created)
secondflutter_app\idea\libraries\Dart_SDK.xml (created)
secondflutter_app\idea\libraries\Flutter_for_Android.xml (created)
secondflutter_app\idea\libraries\KotlinJavaRuntime.xml (created)
secondflutter_app\idea\modules.xml (created)
secondflutter_app\idea\runConfigurations\main_dart.xml (created)
secondflutter_app\idea\workspace.xml (created)
secondflutter_app\metadata (created)
secondflutter_app\android\app\build.gradle (created)
secondflutter_app\android\app\src\main\kotlin\com\example\secondflutter_app\MainActivity.kt (created)
secondflutter_app\android\build.gradle (created)
secondflutter_app\android\secondflutter_app_android.iml (created)
secondflutter_app\android\gitignore (created)
secondflutter_app\android\app\src\debug\AndroidManifest.xml (created)
secondflutter_app\android\app\src\main\AndroidManifest.xml (created)
secondflutter_app\android\app\src\main\res\drawable\launch_background.xml (created)
secondflutter_app\android\app\src\main\res\mipmap-hdpi\ic_launcher.png (created)
secondflutter_app\android\app\src\main\res\mipmap-mdpi\ic_launcher.png (created)
secondflutter_app\android\app\src\main\res\mipmap-xhdpi\ic_launcher.png (created)
secondflutter_app\android\app\src\main\res\mipmap-xxhdpi\ic_launcher.png (created)
secondflutter_app\android\app\src\main\res\mipmap-xxxhdpi\ic_launcher.png (created)
secondflutter_app\android\app\src\main\res\values\styles.xml (created)
secondflutter_app\android\app\src\profile\AndroidManifest.xml (created)
secondflutter_app\android\gradle\wrapper\gradle-wrapper.properties (created)
secondflutter_app\android\gradle.properties (created)
secondflutter_app\android\settings.gradle (created)
secondflutter_app\ios\Runner\AppDelegate.swift (created)
secondflutter_app\ios\Runner\Runner-Bridging-Header.h (created)
secondflutter_app\ios\Runner.xcodeproj\project.pbxproj (created)
secondflutter_app\ios\Runner.xcodeproj\xcshareddata\xcschemes\Runner.xcscheme (created)
secondflutter_app\ios\gitignore (created)
secondflutter_app\ios\Flutter\AppFrameworkInfo.plist (created)
secondflutter_app\ios\Flutter\Debug.xcconfig (created)
secondflutter_app\ios\Flutter\Release.xcconfig (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Contents.json (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-1024x1024@1x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-20x20@1x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-20x20@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-20x20@3x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-29x29@1x.png (created)
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secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-29x29@3x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-40x40@1x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-40x40@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-40x40@3x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-60x60@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-60x60@3x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-76x76@1x.png (created)
```

Command Prompt

```
secondflutter_app\ios\Runner\AppDelegate.swift (created)
secondflutter_app\ios\Runner\Runner-Bridging-Header.h (created)
secondflutter_app\ios\Runner.xcodeproj\project.pbxproj (created)
secondflutter_app\ios\Runner.xcodeproj\xcshareddata\xcschemes\Runner.xcscheme (created)
secondflutter_app\ios\gitignore (created)
secondflutter_app\ios\Flutter\AppFrameworkInfo.plist (created)
secondflutter_app\ios\Flutter\Debug.xcconfig (created)
secondflutter_app\ios\Flutter\Release.xcconfig (created)
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secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-20x20@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-20x20@3x.png (created)
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secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-29x29@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-29x29@3x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-40x40@1x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-40x40@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-40x40@3x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-60x60@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-60x60@3x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-76x76@1x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-76x76@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\AppIcon.appiconset\Icon-App-83.5x83.5@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\LaunchImage.imageset\Contents.json (created)
secondflutter_app\ios\Runner\Assets.xcassets\LaunchImage.imageset\LaunchImage.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\LaunchImage.imageset\LaunchImage@2x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\LaunchImage.imageset\LaunchImage@3x.png (created)
secondflutter_app\ios\Runner\Assets.xcassets\LaunchImage.imageset\README.md (created)
secondflutter_app\ios\Runner\Base.lproj\LaunchScreen.storyboard (created)
secondflutter_app\ios\Runner\Base.lproj\Main.storyboard (created)
secondflutter_app\ios\Runner\Info.plist (created)
secondflutter_app\ios\Runner.xcodeproj\project.xcworkspace\contents.xcworkspacedata (created)
secondflutter_app\ios\Runner.xcodeproj\project.xcworkspace\xcshareddata\IDEWorkspaceChecks.plist (created)
secondflutter_app\ios\Runner.xcodeproj\project.xcworkspace\xcshareddata\WorkspaceSettings.xcsettings (created)
secondflutter_app\ios\Runner.xcworkspace\contents.xcworkspacedata (created)
secondflutter_app\ios\Runner.xcworkspace\xcshareddata\IDEWorkspaceChecks.plist (created)
secondflutter_app\ios\Runner.xcworkspace\xcshareddata\WorkspaceSettings.xcsettings (created)
secondflutter_app\lib\main.dart (created)
secondflutter_app\secondflutter_app.iml (created)
secondflutter_app\pubspec.yaml (created)
secondflutter_app\README.md (created)
secondflutter_app\test\widget_test.dart (created)
Running "flutter pub get" in secondflutter_app... 10.0s
Wrote 72 files.

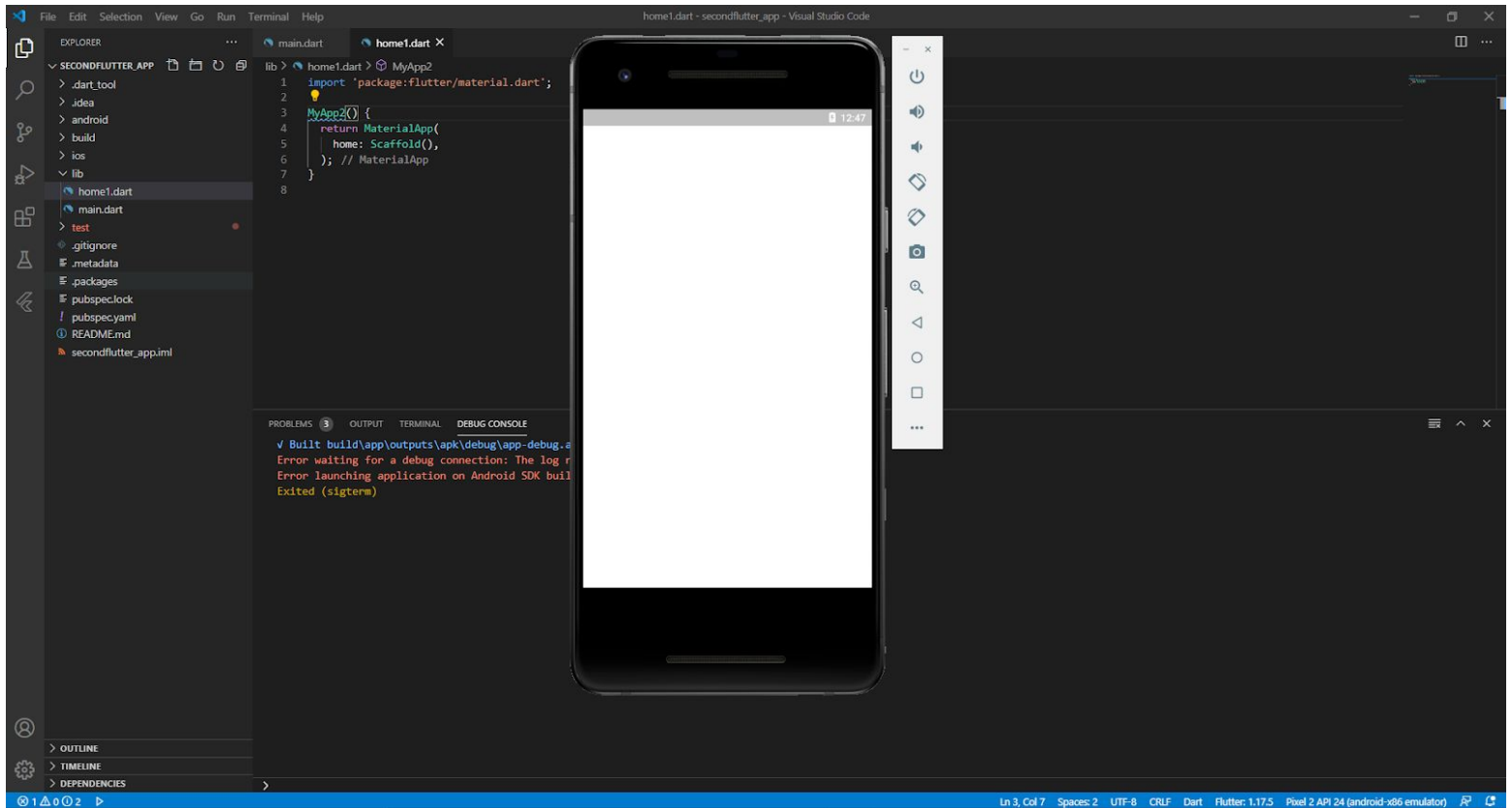
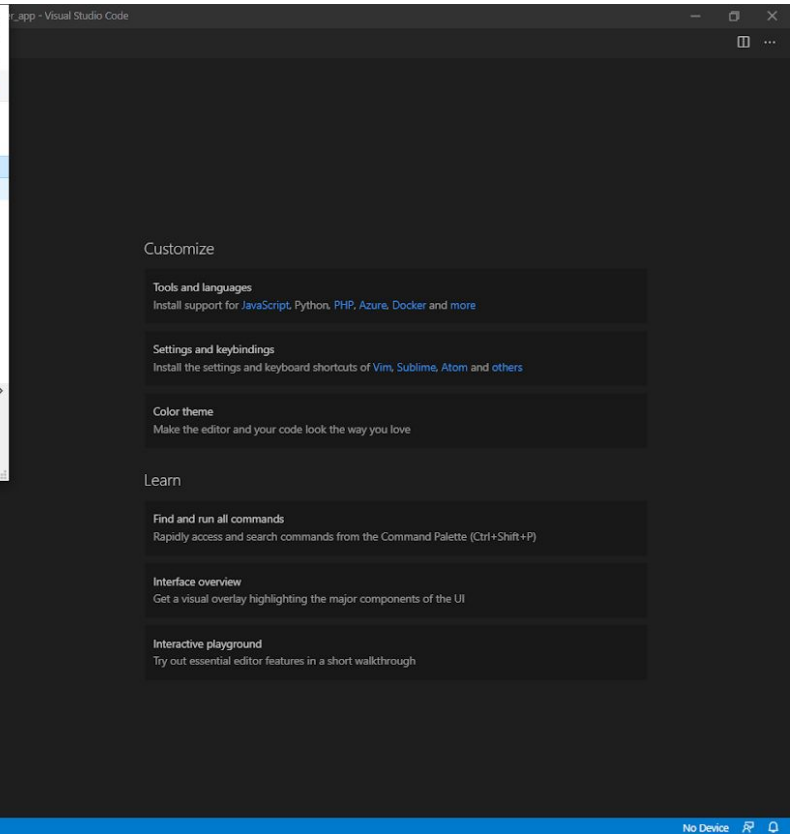
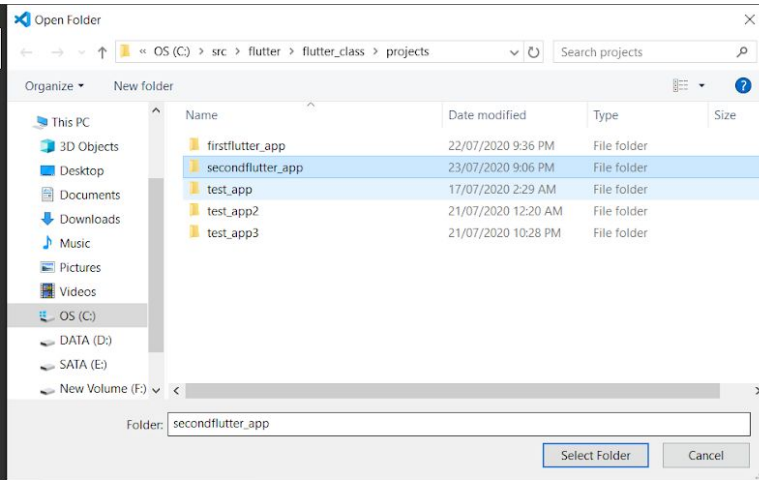
All done!
[✓] Flutter: is fully installed. (Channel stable, v1.17.5, on Microsoft Windows [Version 10.0.18362.900], locale en-US)
[✓] Android toolchain - develop for Android devices: is fully installed. (Android SDK version 29.0.3)
[✓] Android Studio: is fully installed. (version 4.0)
```

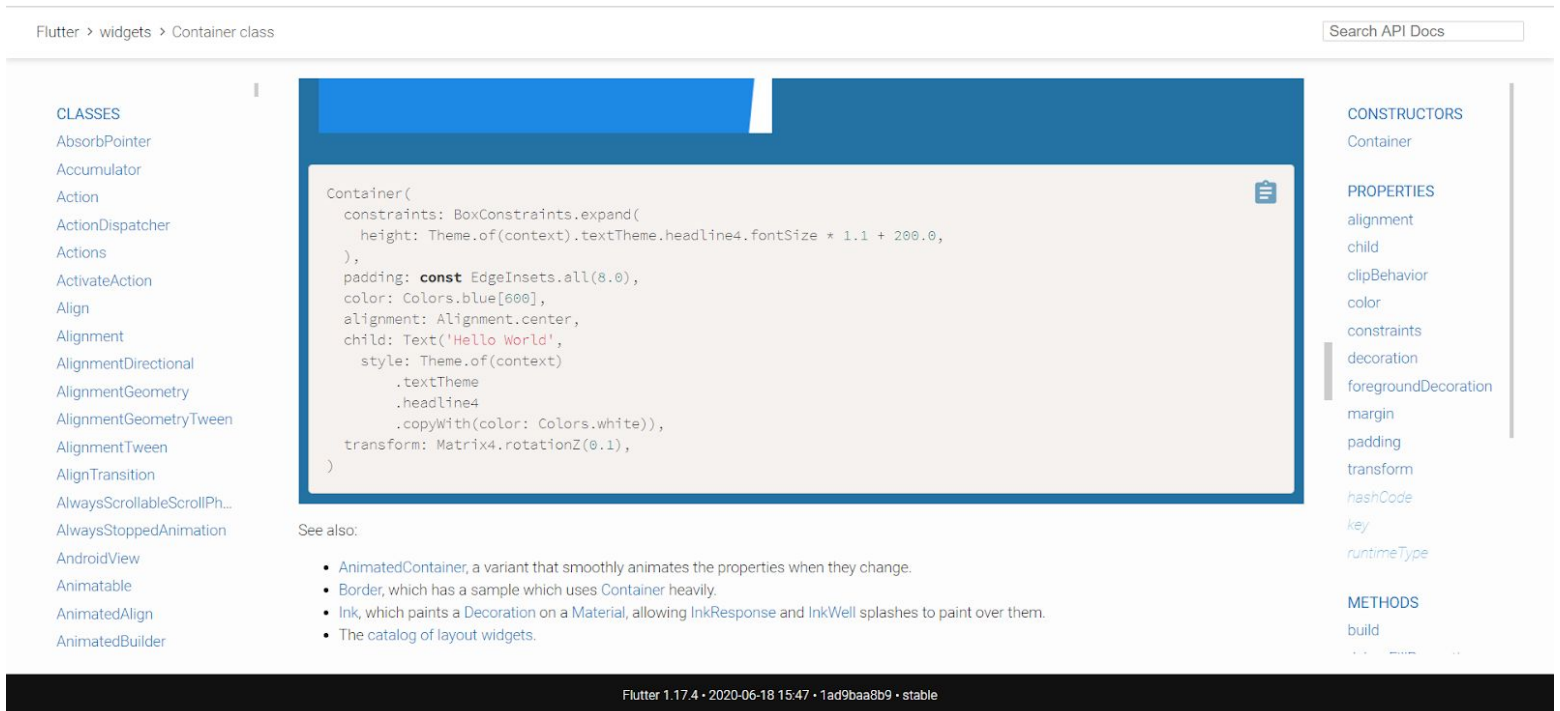
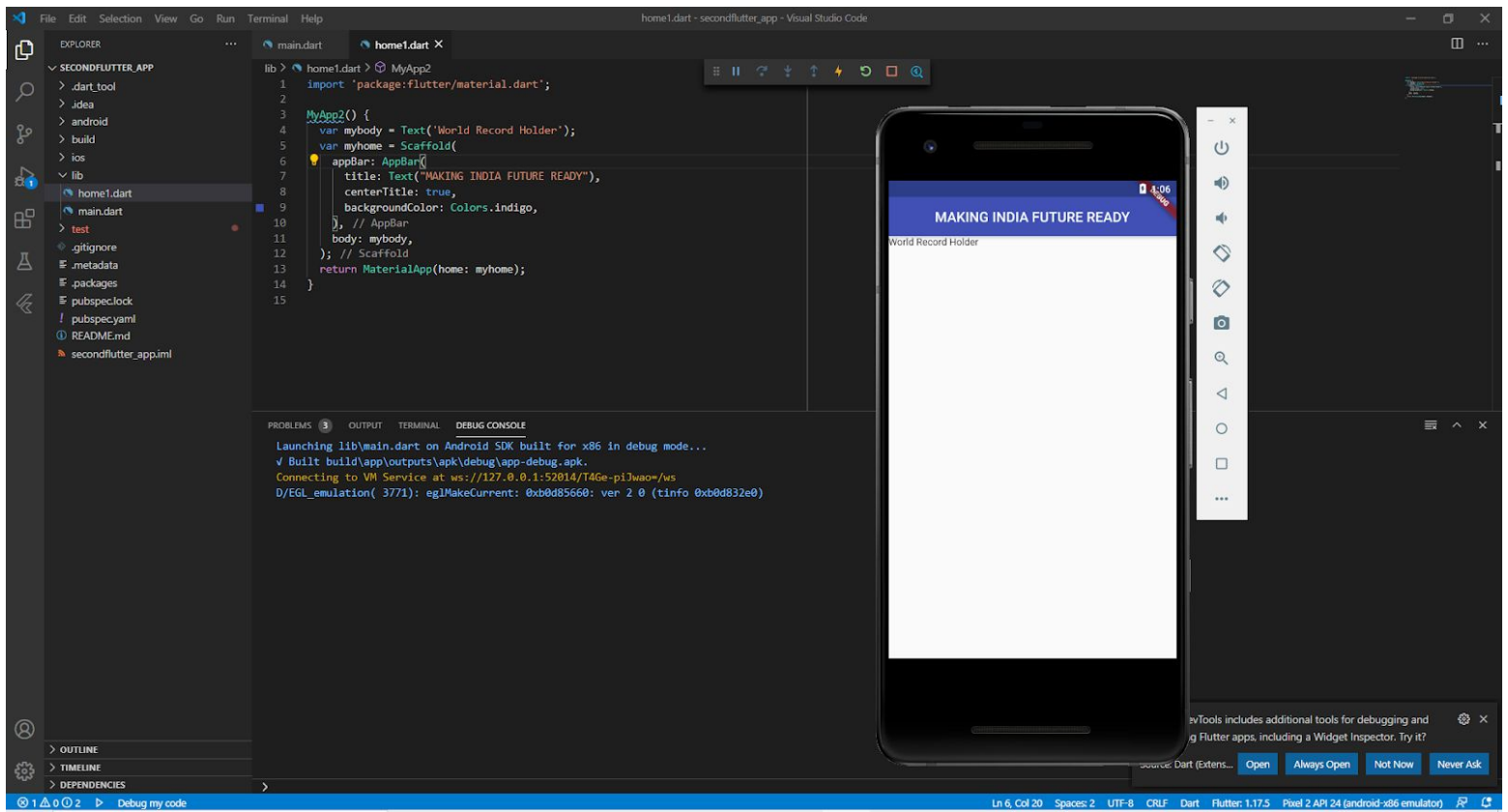
Run "flutter doctor" for information about installing additional components.

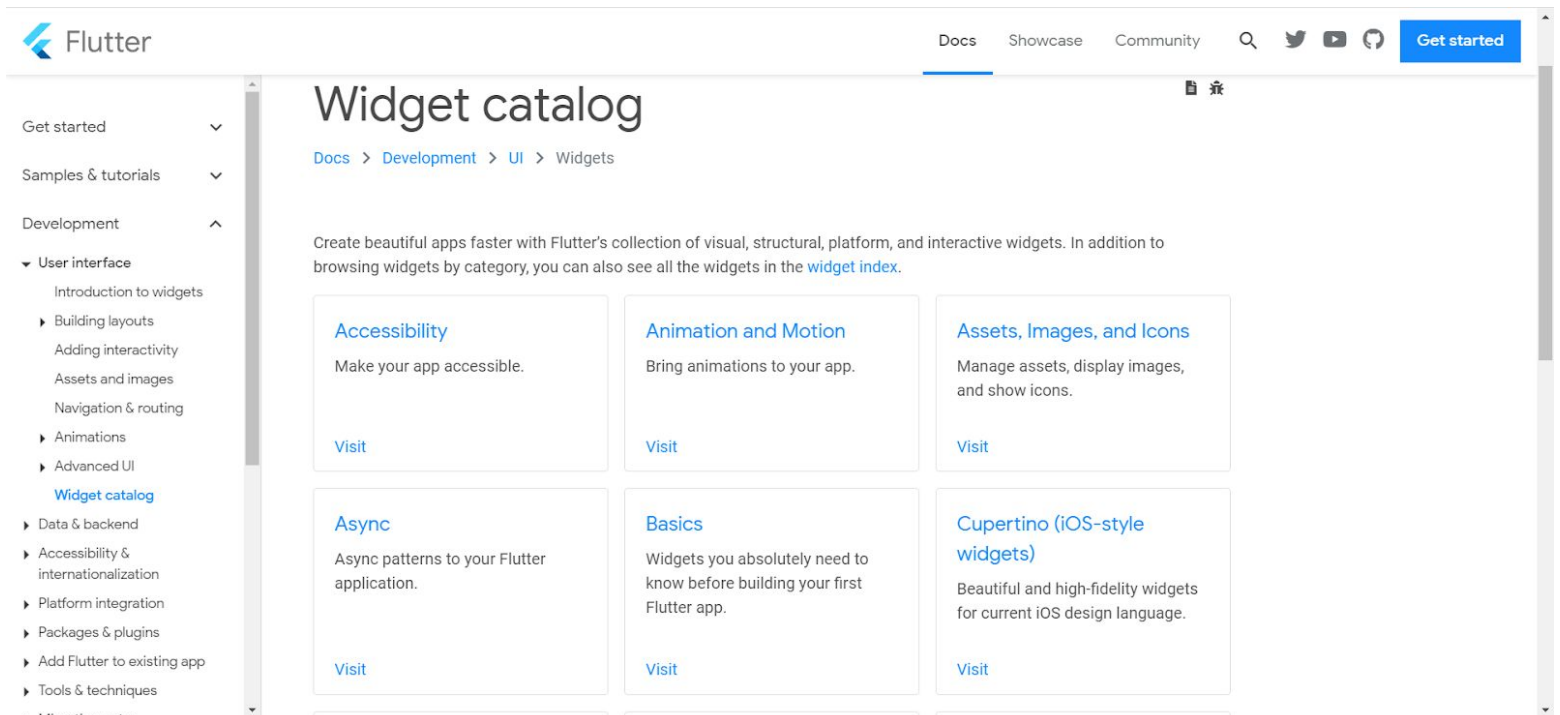
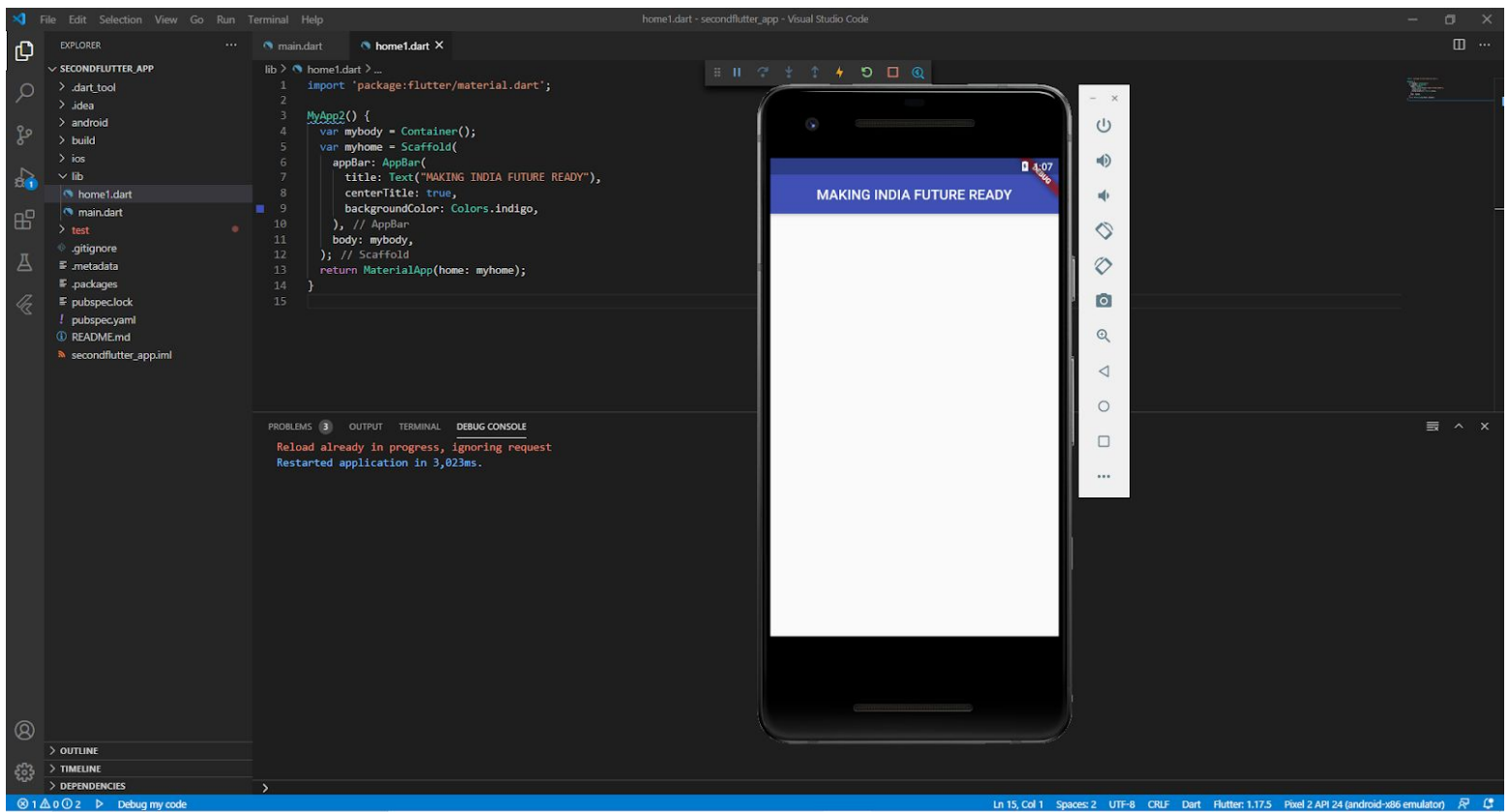
In order to run your application, type:

```
$ cd secondflutter_app
$ flutter run
```

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







Get started

Samples & tutorials

Development

User interface

Introduction to widgets

Building layouts

Adding interactivity

Assets and images

Navigation & routing

Animations

Advanced UI

[Widget catalog](#)

Data & backend

Accessibility & internationalization

Platform integration

Packages & plugins

1590038126_image.png

Assets, images, and icon widgets

[Docs](#) > [Development](#) > [UI](#) > [Widgets](#) > [Assets](#)

Manage assets, display images, and show icons.

See more widgets in the [widget catalog](#).

AssetBundle

Asset bundles contain resources, such as images and strings, that



Icon

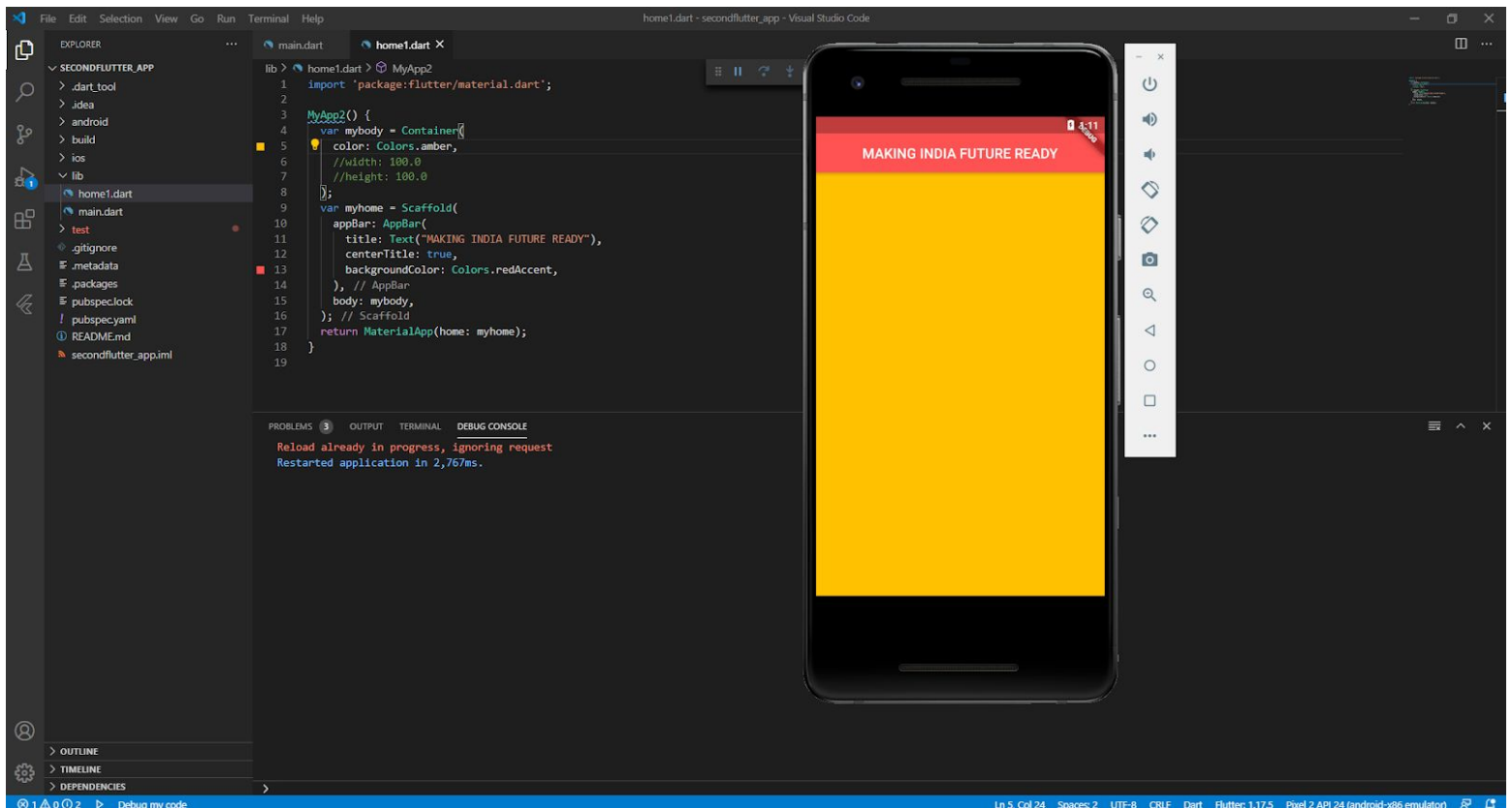
A Material Design icon.

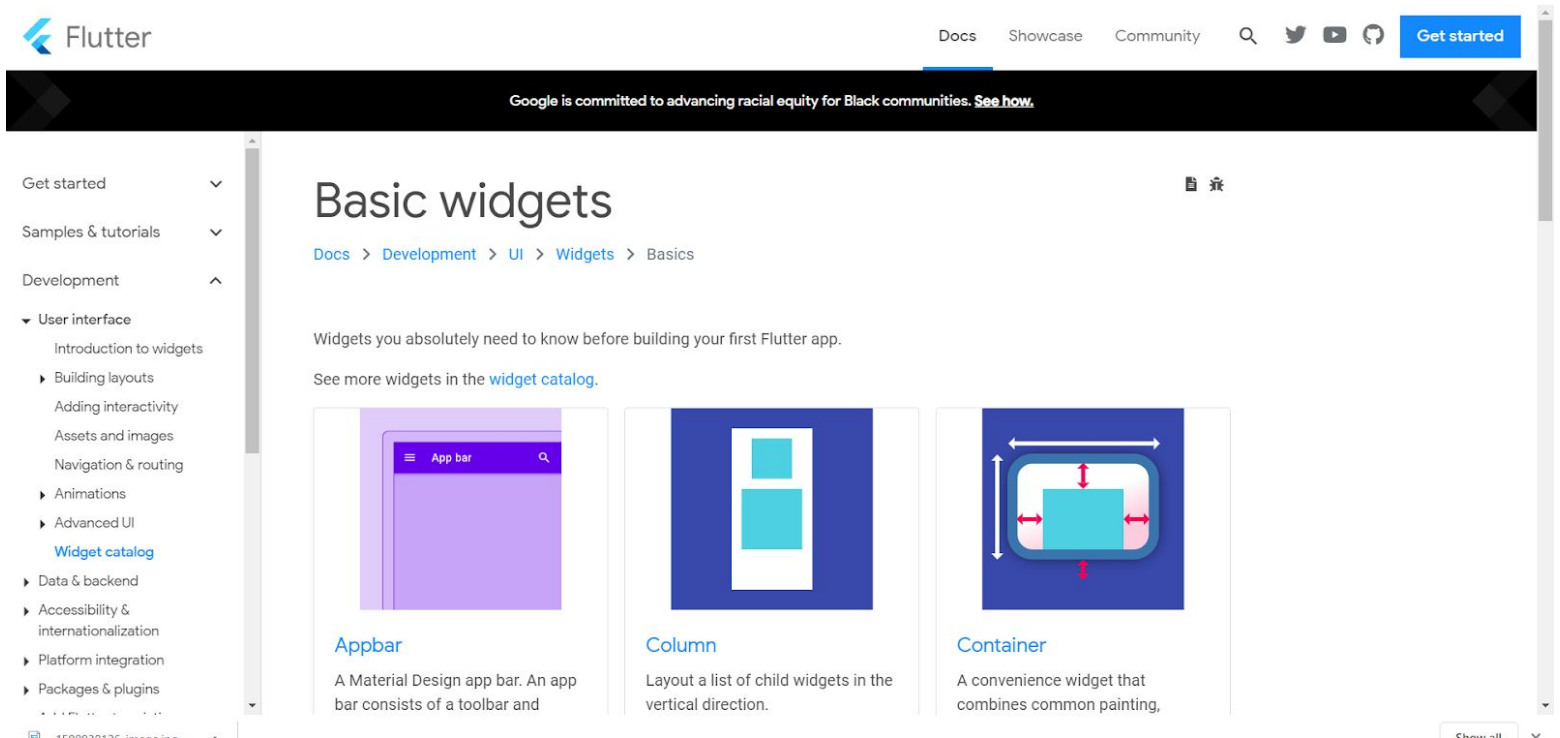
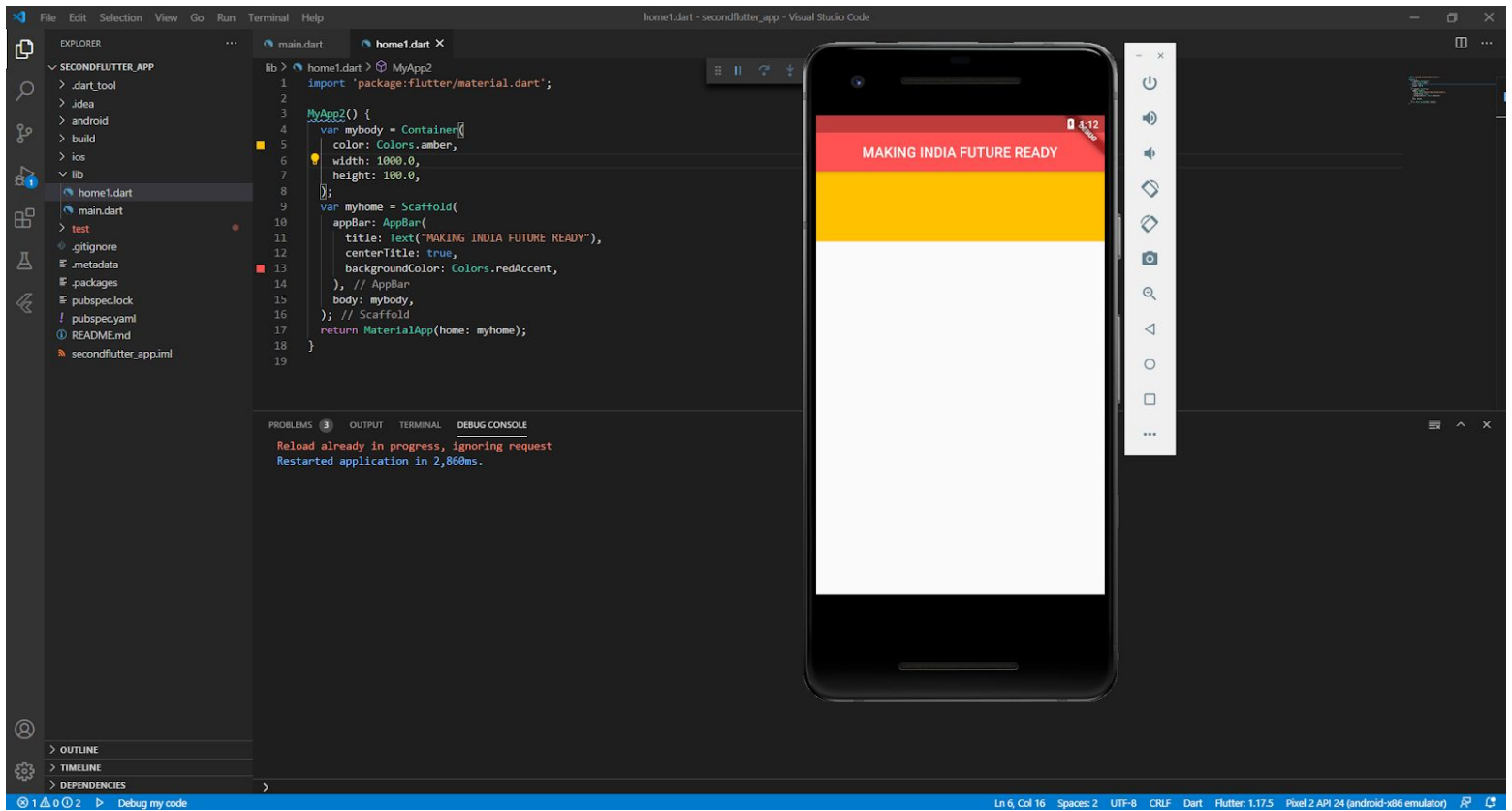


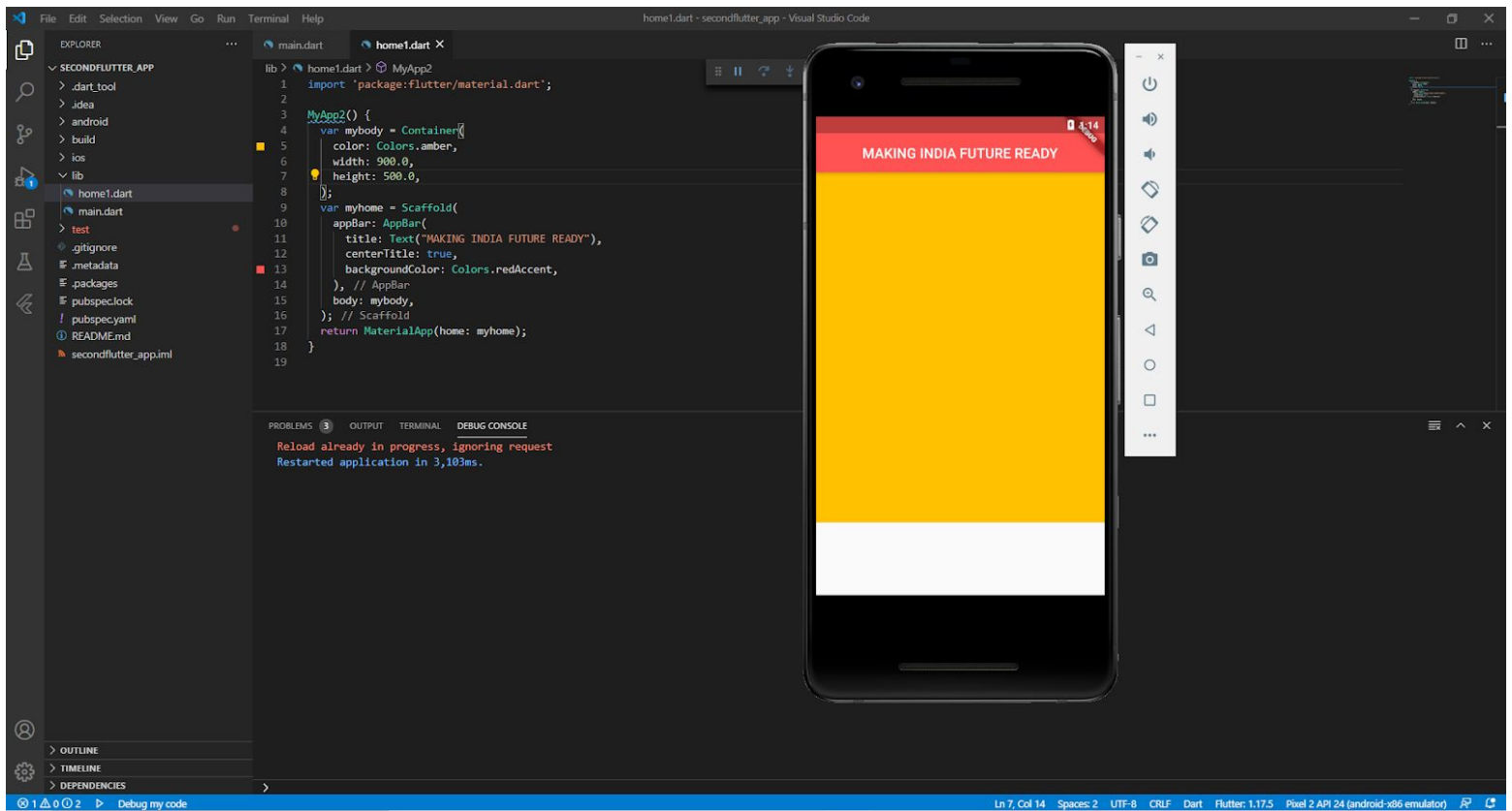
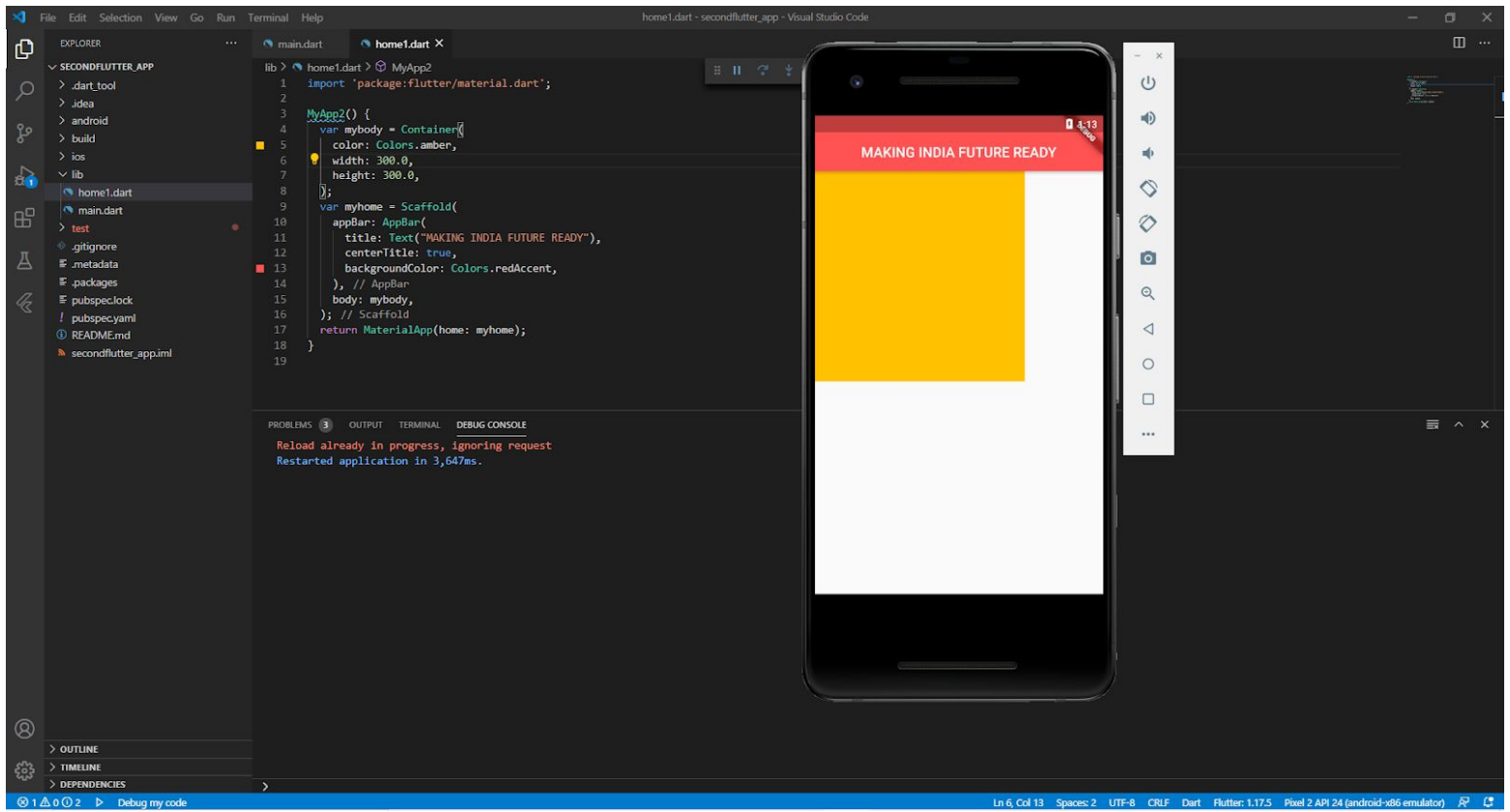
Image

A widget that displays an image.

Show all







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Animations

Advanced UI

[Widget catalog](#)

Data & backend

Accessibility & internationalization

Platform integration

Packages & plugins

Add Flutter to existing app

Tools & techniques

Migration notes

1500030156 image.png

will one day be added.

[Documentation](#)

Scaffold

Implements the basic Material Design visual layout structure. This class provides APIs for showing drawers, snack bars, and bottom sheets.

[Documentation](#)

rectangular piece of material that hovers over the interface.

[Documentation](#)

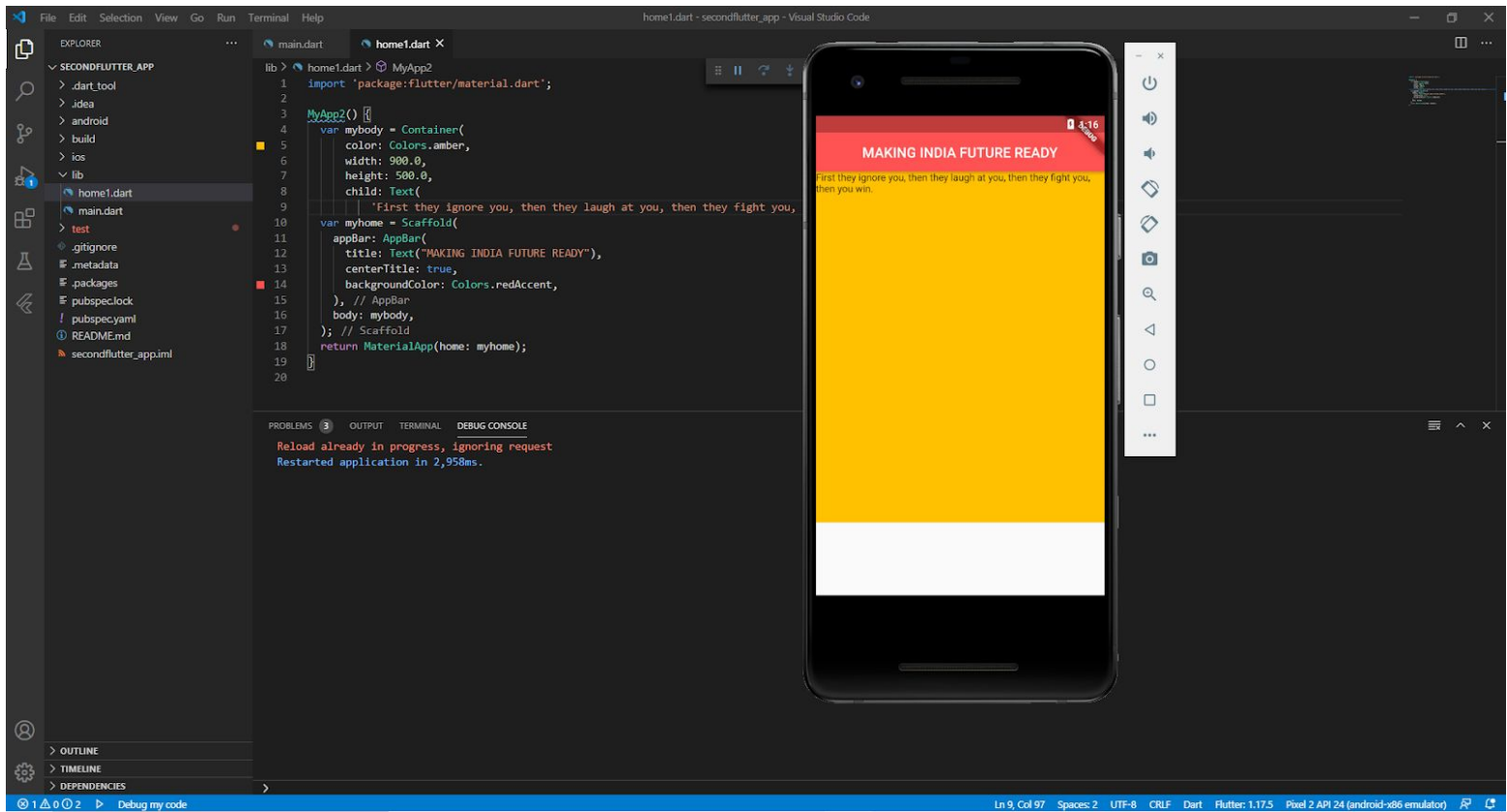
Text

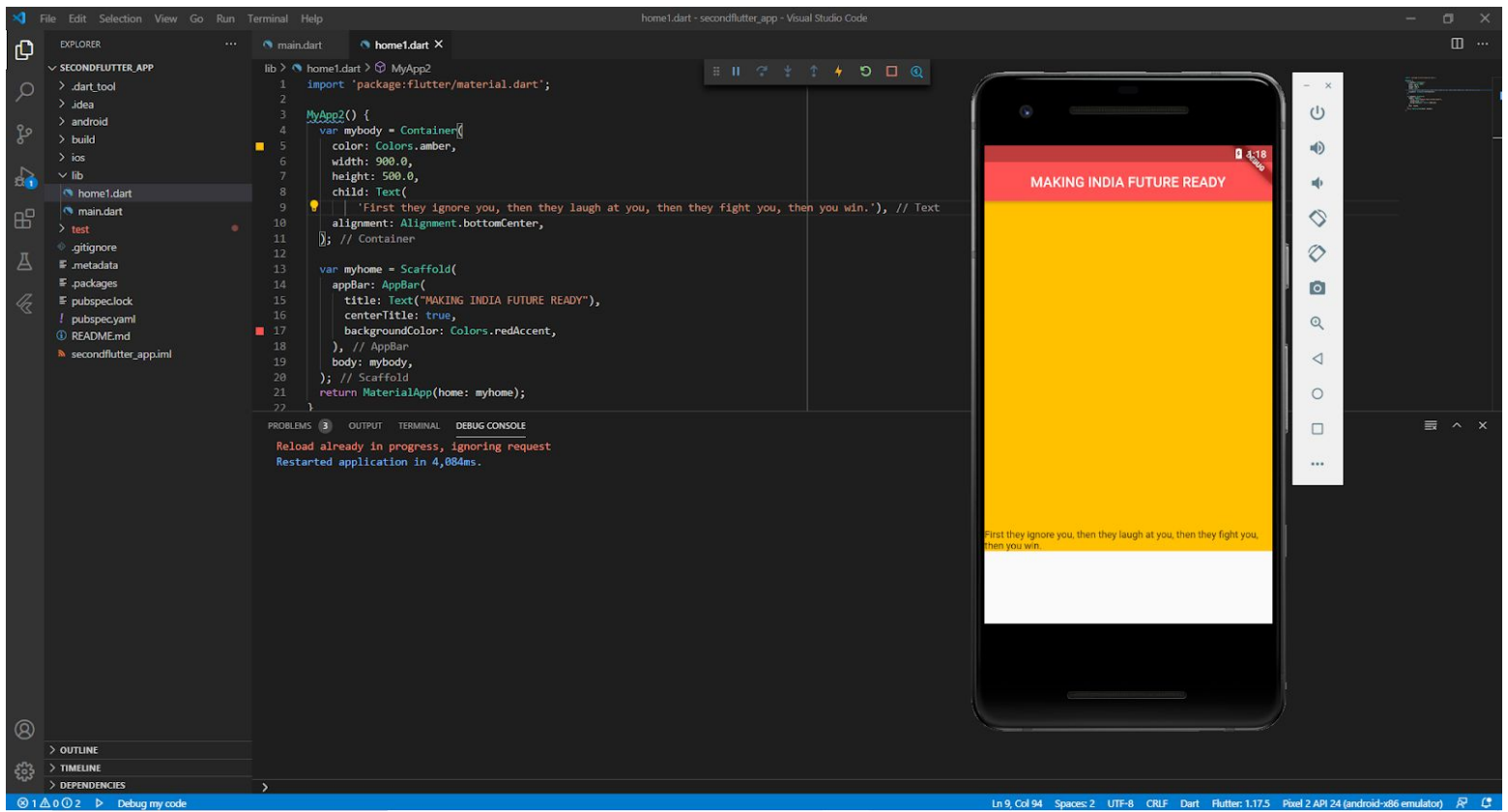
A run of text with a single style.

[Documentation](#)

See more widgets in the [widget catalog](#).

Show all





Flutter > painting > Decoration abstract class

Search API Docs

CLASSES

Accumulator
Alignment
AlignmentDirectional
AlignmentGeometry
AssetBundleImageKey
AssetBundleImageProvider
AssetImage
AutomaticNotchedShape
BeveledRectangleBorder
Border
BorderDirectional
BorderRadius
BorderRadiusDirectional
BorderRadiusGeometry
BorderSide
BoxBorder
BoxDecoration
BoxPainter
BoxShadow

Decoration class

A description of a box decoration (a decoration applied to a Rect).

This class presents the abstract interface for all decorations. See [BoxDecoration](#) for a concrete example.

To actually paint a Decoration, use the [createBoxPainter](#) method to obtain a [BoxPainter](#). Decoration objects can be shared between boxes; [BoxPainter](#) objects can cache resources to make painting on a particular surface faster.

Mixed in types
[Diagnosticable](#)

Implementers
[BoxDecoration](#), [FlutterLogoDecoration](#), [ShapeDecoration](#), [UnderlineTabIndicator](#)

Annotations
[@immutable](#)

Constructors

[Decoration\(\)](#)
Abstract const constructor. This constructor enables subclasses to provide const constructors so that they can be used in const expressions.
[const](#)

CONSTRUCTORS

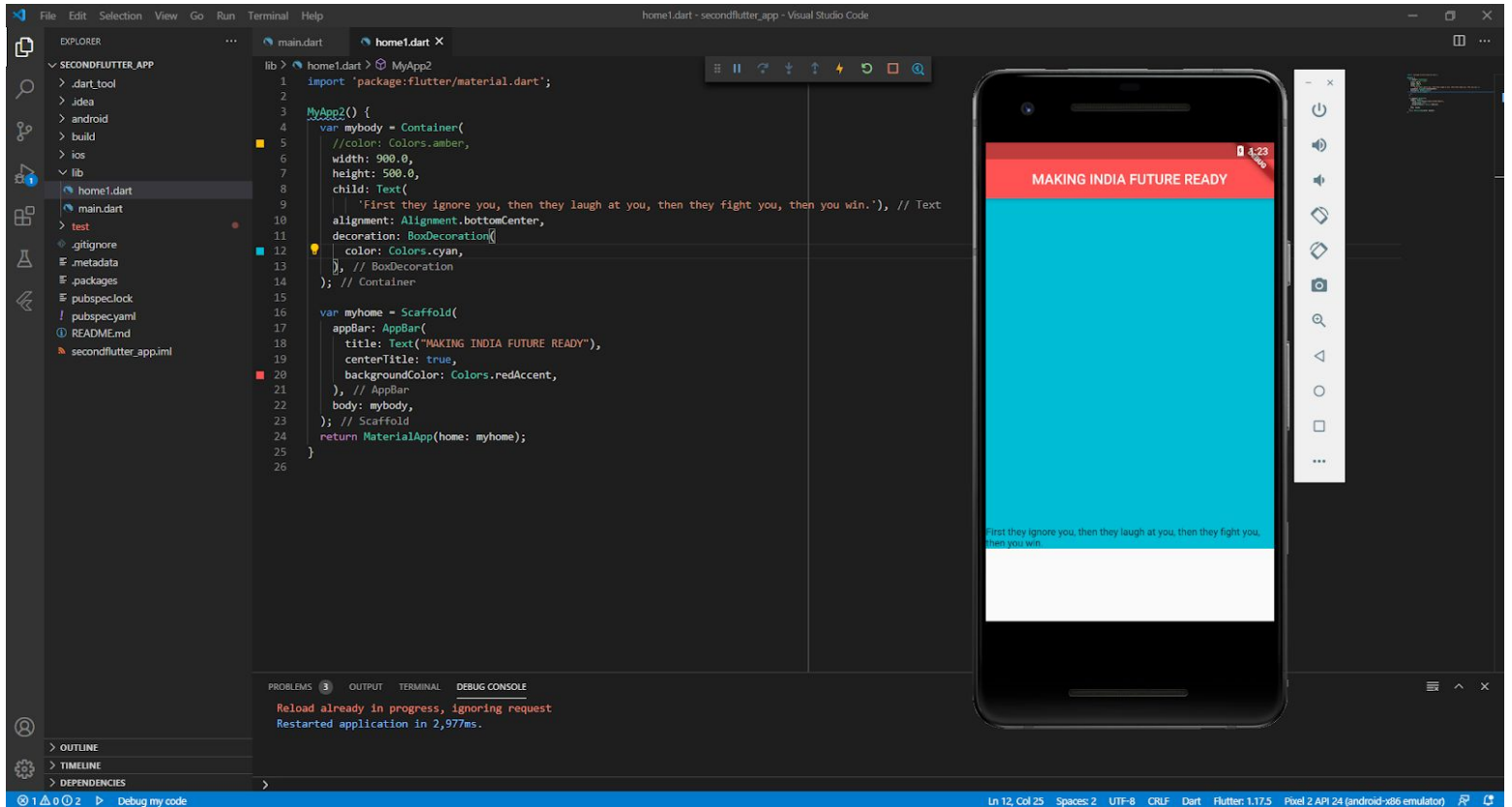
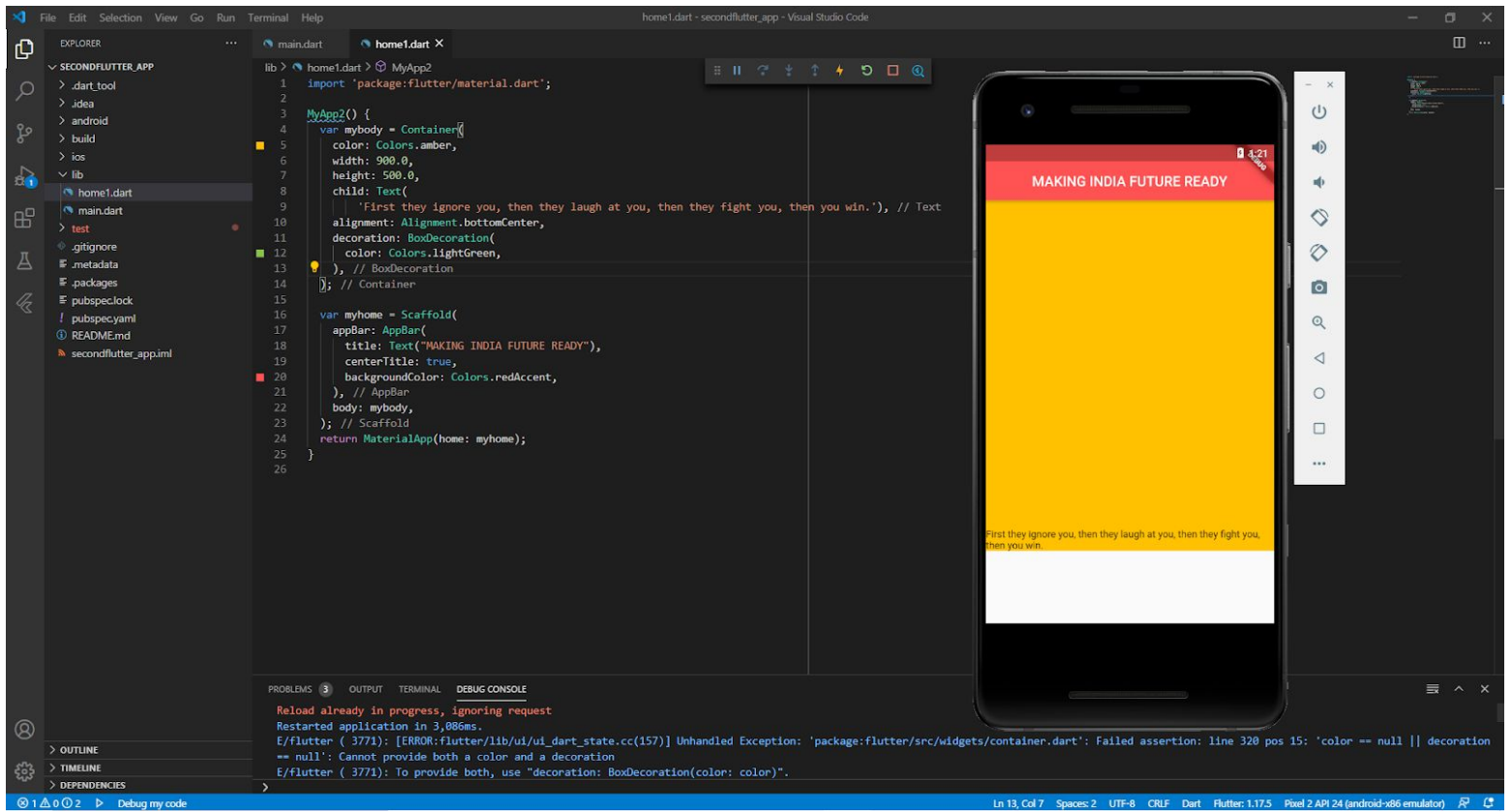
[Decoration](#)

PROPERTIES

[isComplex](#)
[padding](#)
[hashCode](#)
[runtimeType](#)

METHODS

[createBoxPainter](#)
[debugAssertIsValid](#)
[getClipPath](#)
[hitTest](#)
[lerpFrom](#)
[lerpTo](#)
[toStringShort](#)
[debugFillProperties](#)
[noSuchMethod](#)
[toDiagnosticsNode](#)



CLASSES

Accumulator
Alignment
AlignmentDirectional
AlignmentGeometry
AssetBundleImageKey
AssetBundleImageProvider
AssetImage
AutomaticNotchedShape
BeveledRectangleBorder
Border
BorderDirectional
BorderRadius
BorderRadiusDirectional
BorderRadiusGeometry
BorderSide
BoxBorder
BoxDecoration
BoxPainter
BoxShadow

DecorationImage class

An image for a box decoration.

The image is painted using `paintImage`, which describes the meanings of the various fields on this class in more detail.

Annotations

`@immutable`

Constructors

DecorationImage(({required ImageProvider image, ImageErrorListener onError, ColorFilter colorFilter, BoxFit fit, AlignmentGeometry alignment: Alignment.center, Rect centerSlice, ImageRepeat repeat: ImageRepeat.noRepeat, bool matchTextDirection: false})
Creates an image to show in a `BoxDecoration`. [...]
const

Properties

alignment → AlignmentGeometry
How to align the image within its bounds. [...]
final

CONSTRUCTORS

DecorationImage

PROPERTIES

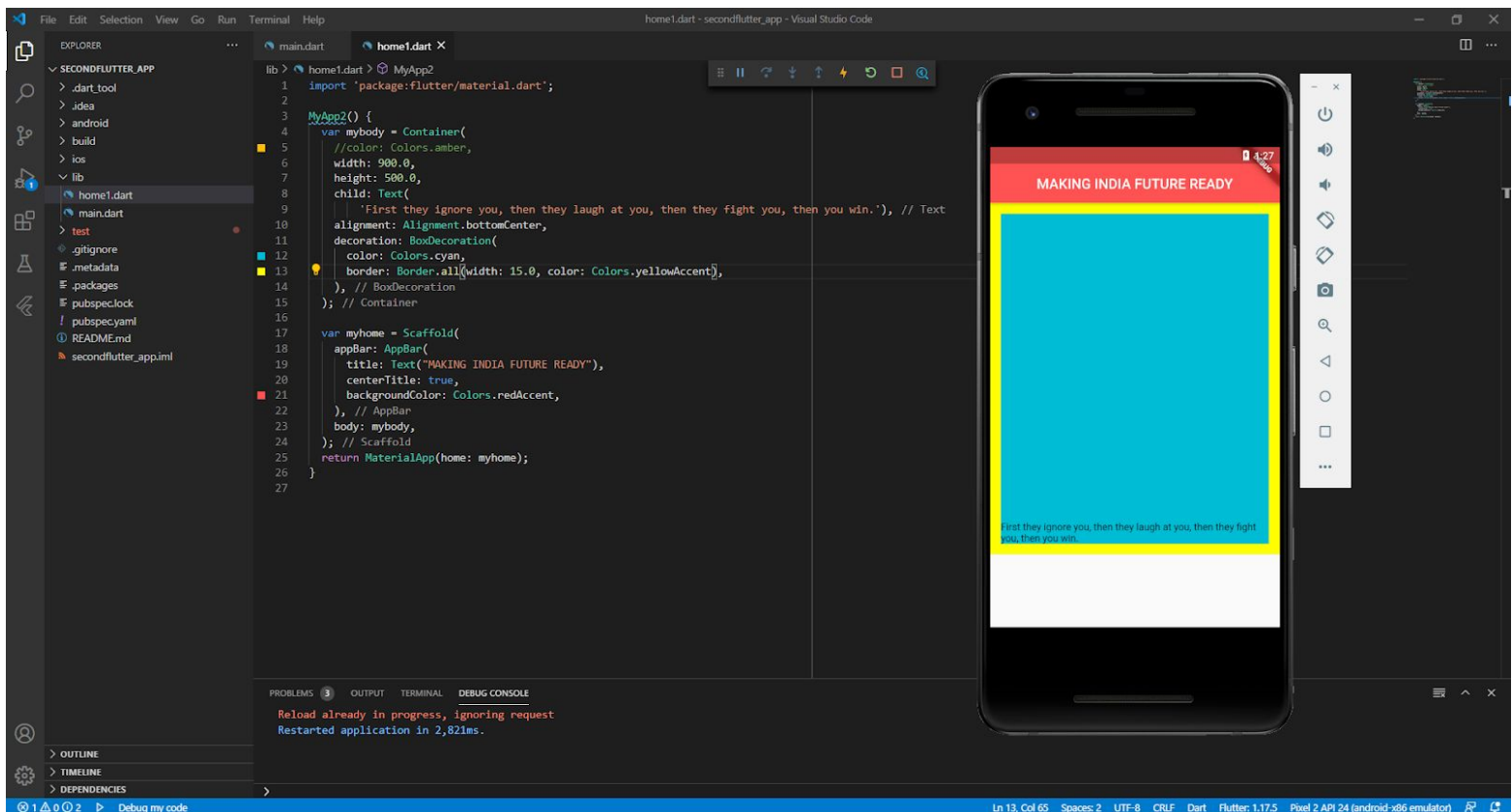
alignment
centerSlice
colorFilter
fit
hashCode
image
matchTextDirection
onError
repeat
runtimeType

METHODS

createPainter
toString
noSuchMethod

OPERATORS

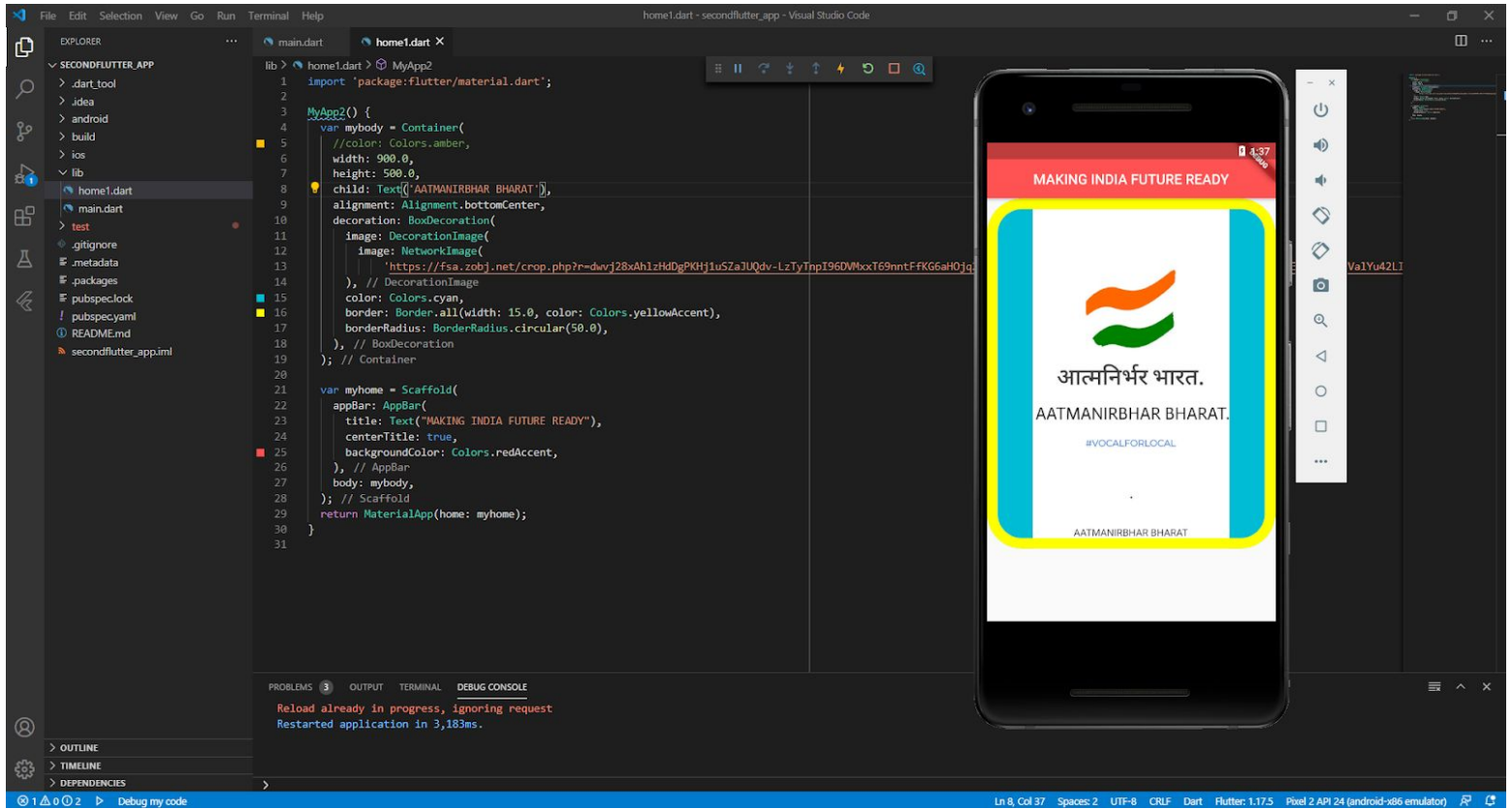
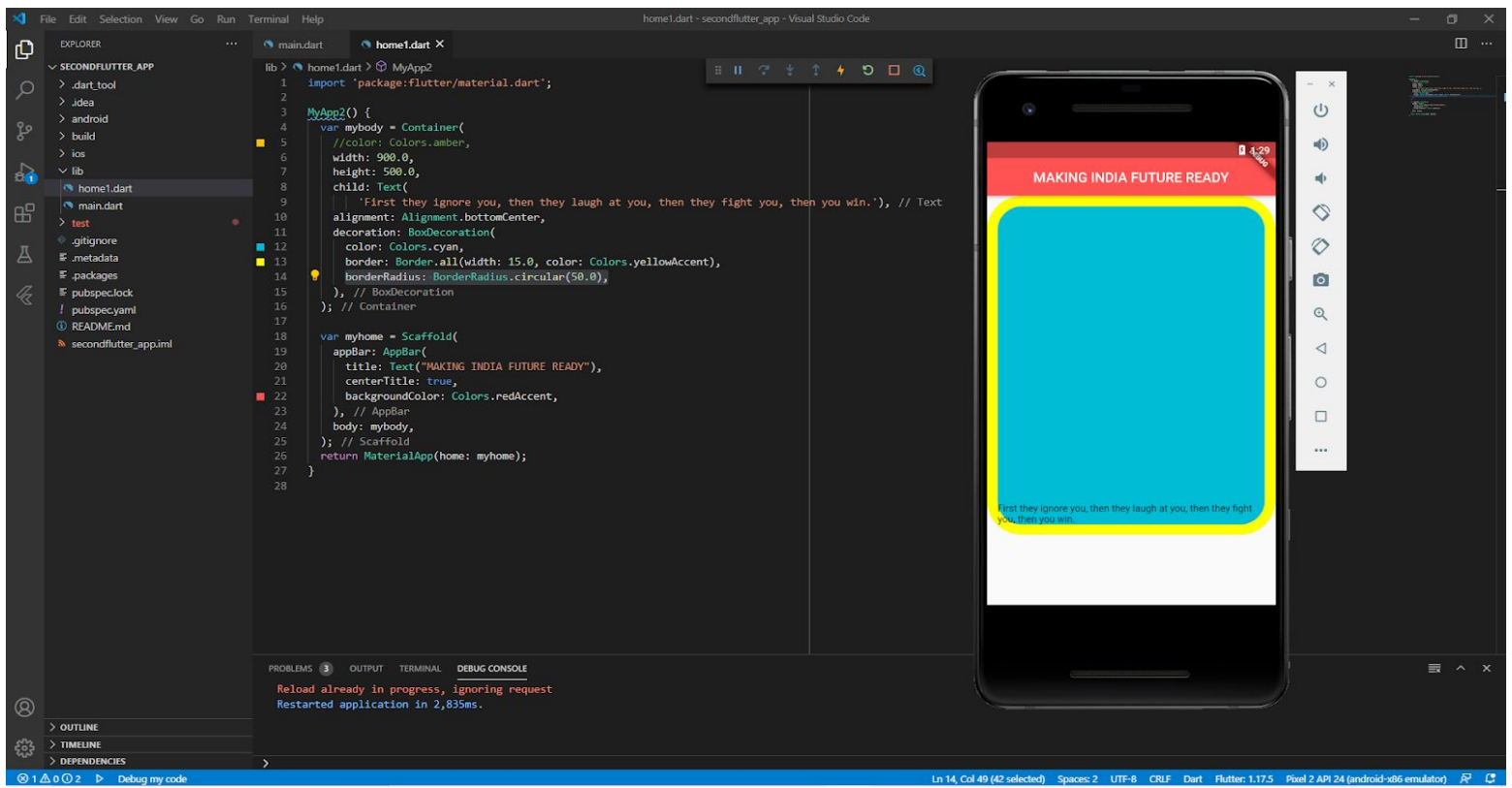
Flutter 1.17.4 • 2020-06-18 15:47 • 1ad9baa8b9 • stable



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

```
MyApp2() {  
  var mybody = Container(  
    //color: Colors.amber,  
    width: 900.0,  
    height: 500.0,  
    child: Text(  
      'First they ignore you, then they laugh at you, then they fight you, then you win.'),  
    alignment: Alignment.bottomCenter,  
    decoration: BoxDecoration(  
      color: Colors.cyan,  
      border: Border.all(  
        width: 15.0,  
        color: Colors.black38),  
    ),  
  );  
};
```

```
var myhome = Scaffold(  
  appBar: AppBar(  
    title: Text("MAKING INDIA FUTURE READY"),  
    centerTitle: true,  
    backgroundColor: Colors.redAccent,  
  ),  
  body: mybody,  
);  
return MaterialApp(home: myhome);  
}
```



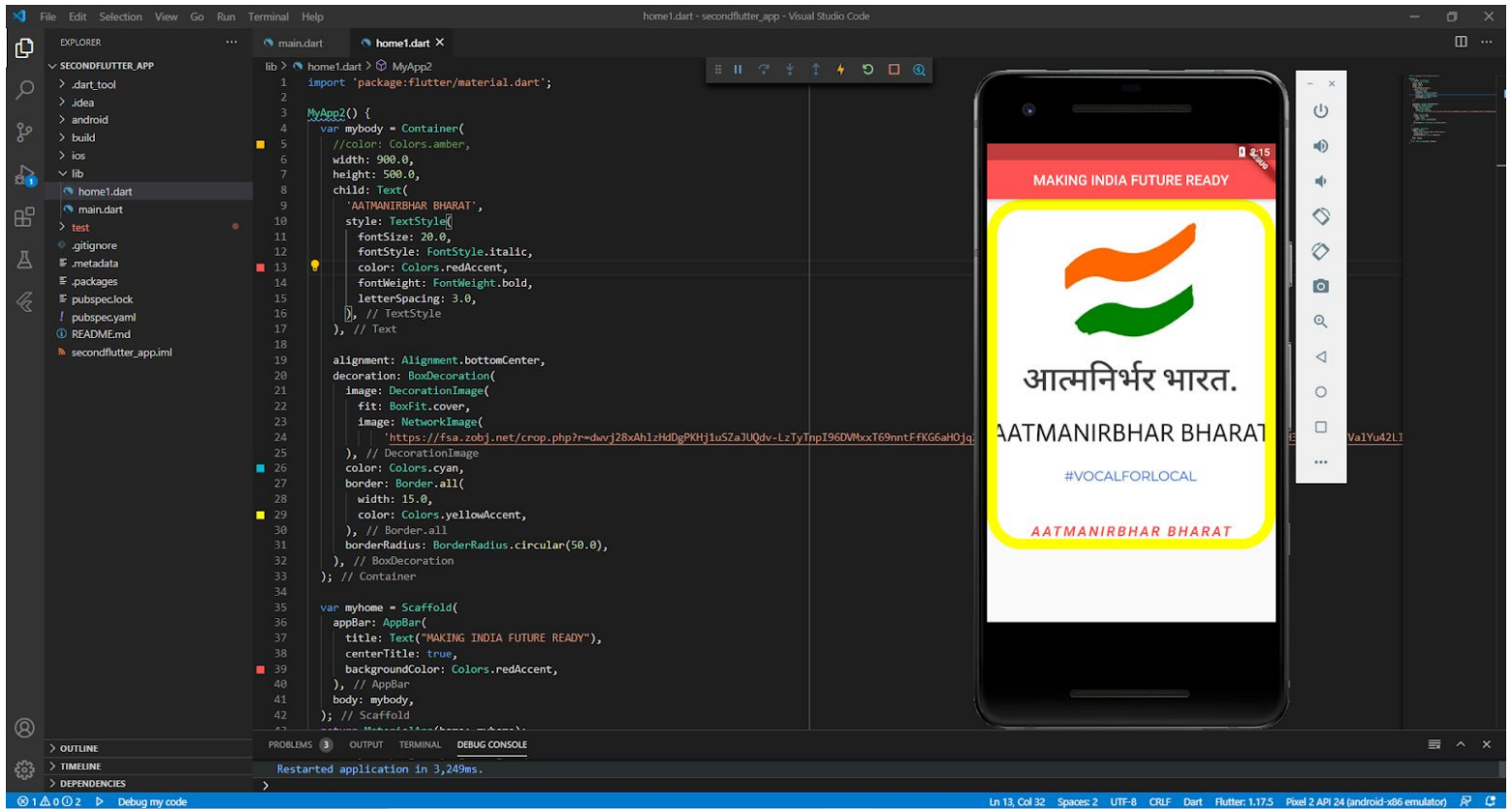
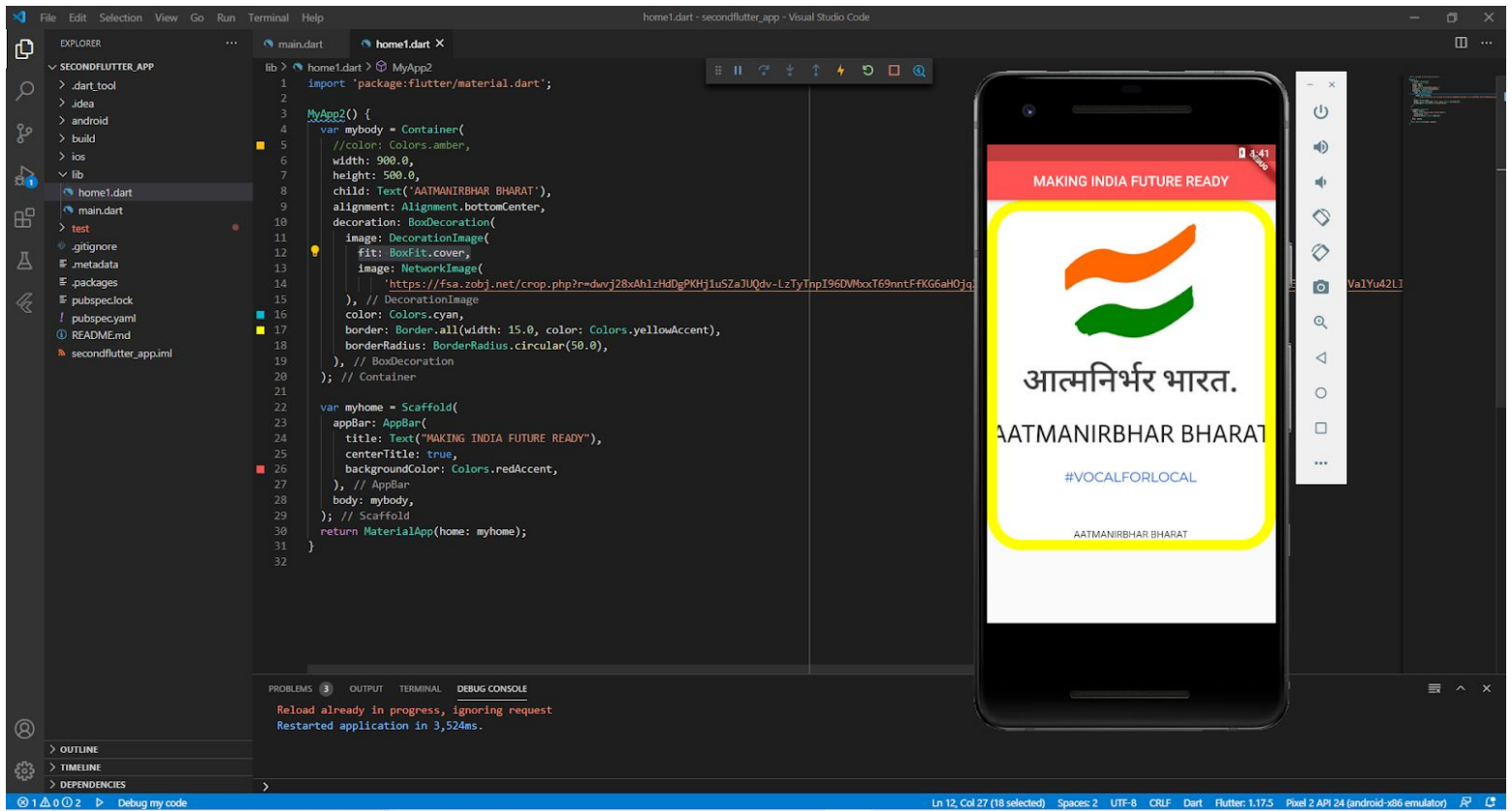

```
import 'package:flutter/material.dart';
```

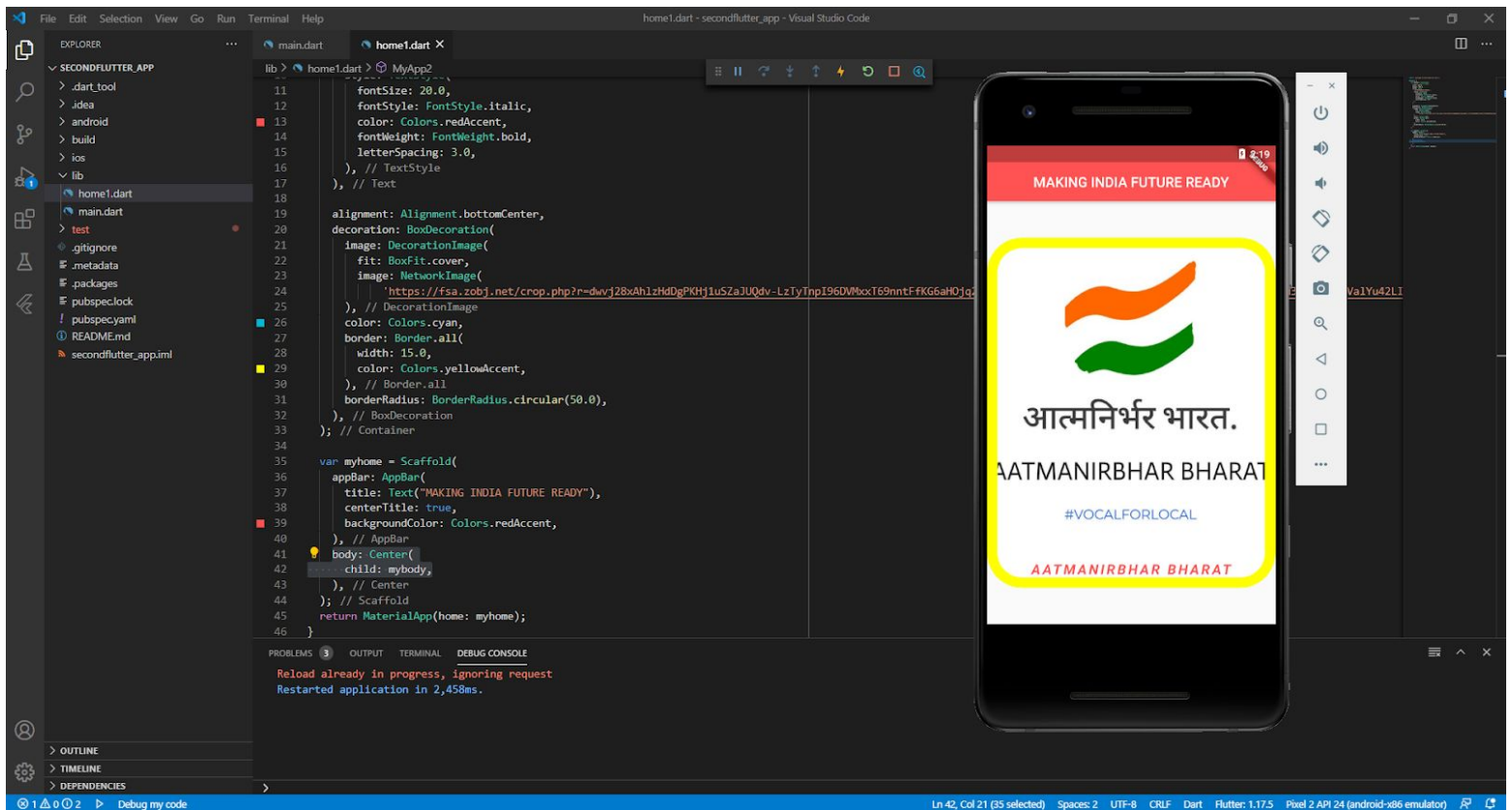
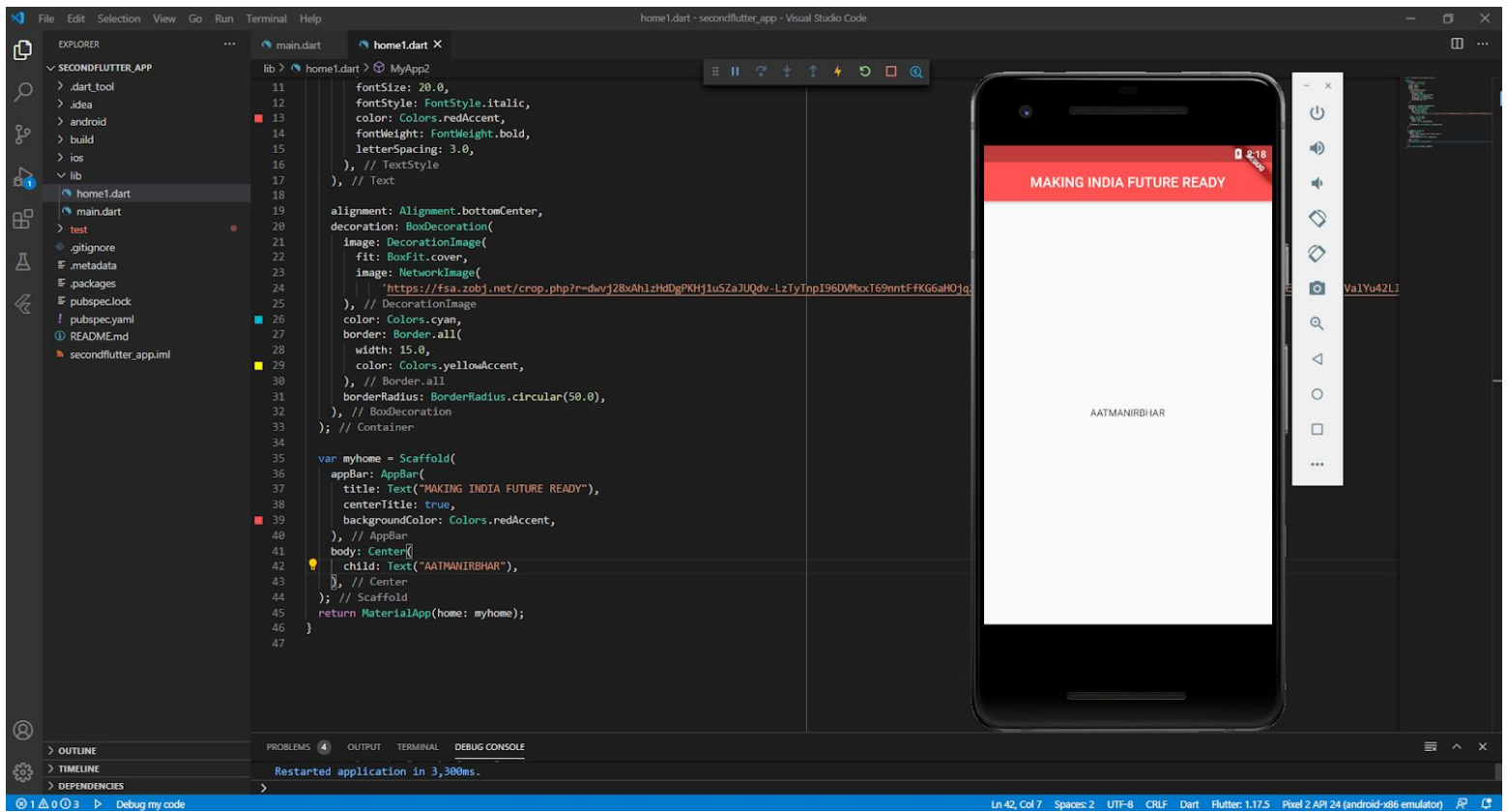
```
MyApp2() {  
  var mybody = Container(  
    //color: Colors.amber,  
    width: 900.0,  
    height: 500.0,  
    child: Text('AATMANIRBHAR BHARAT'),  
    alignment: Alignment.bottomCenter,  
    decoration: BoxDecoration(  
      image: DecorationImage(  
  
        image: NetworkImage(  

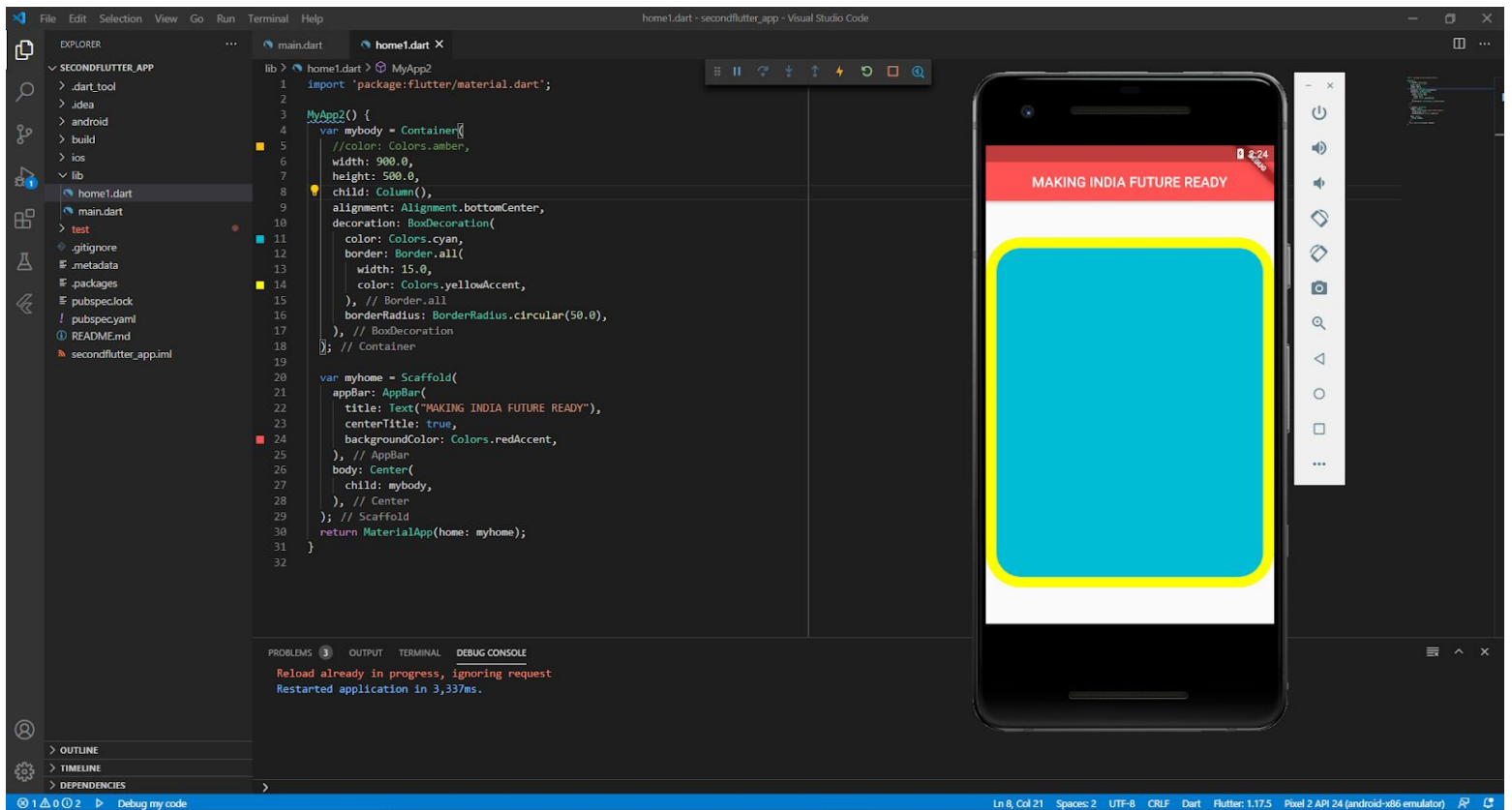
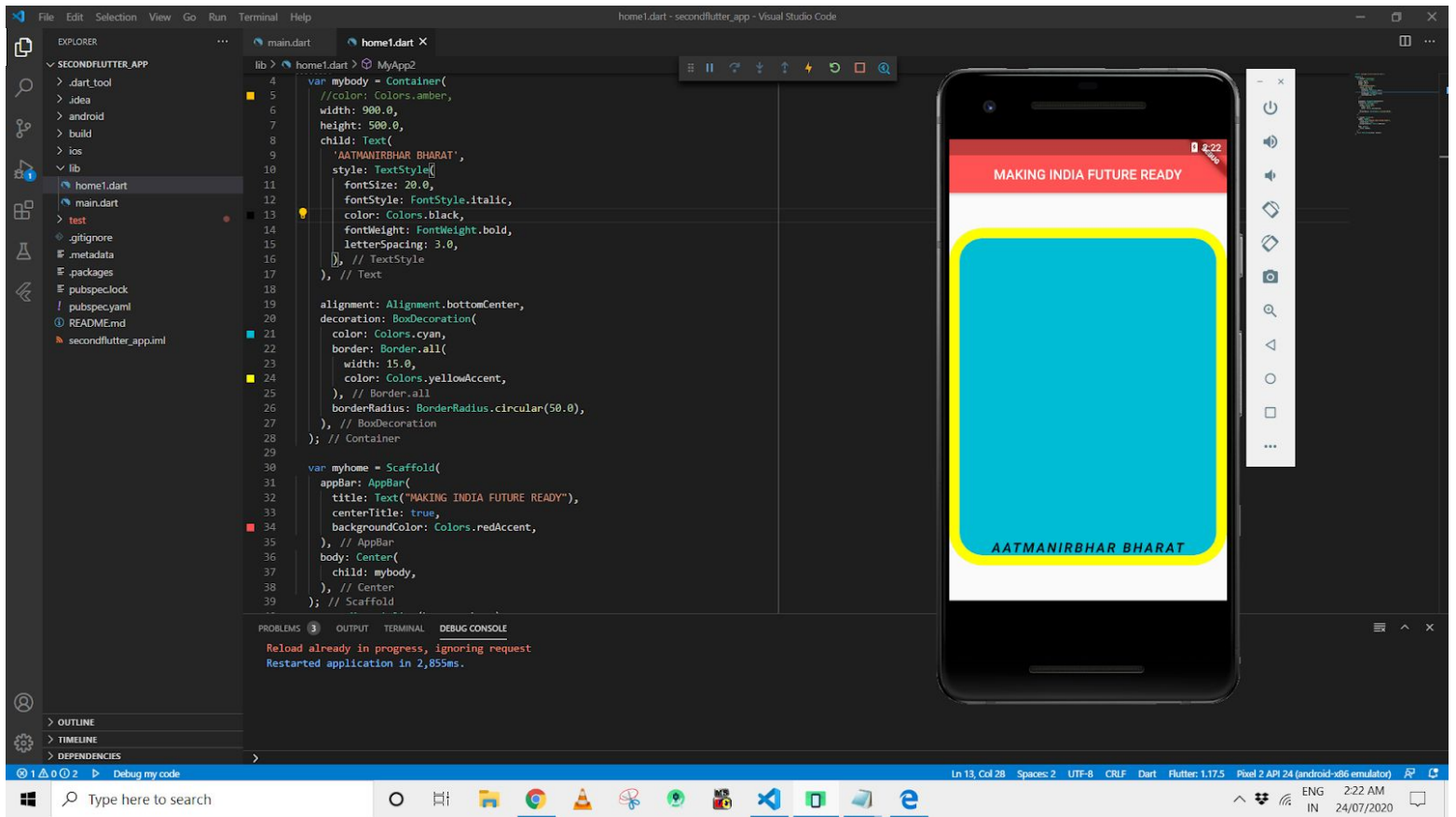
```

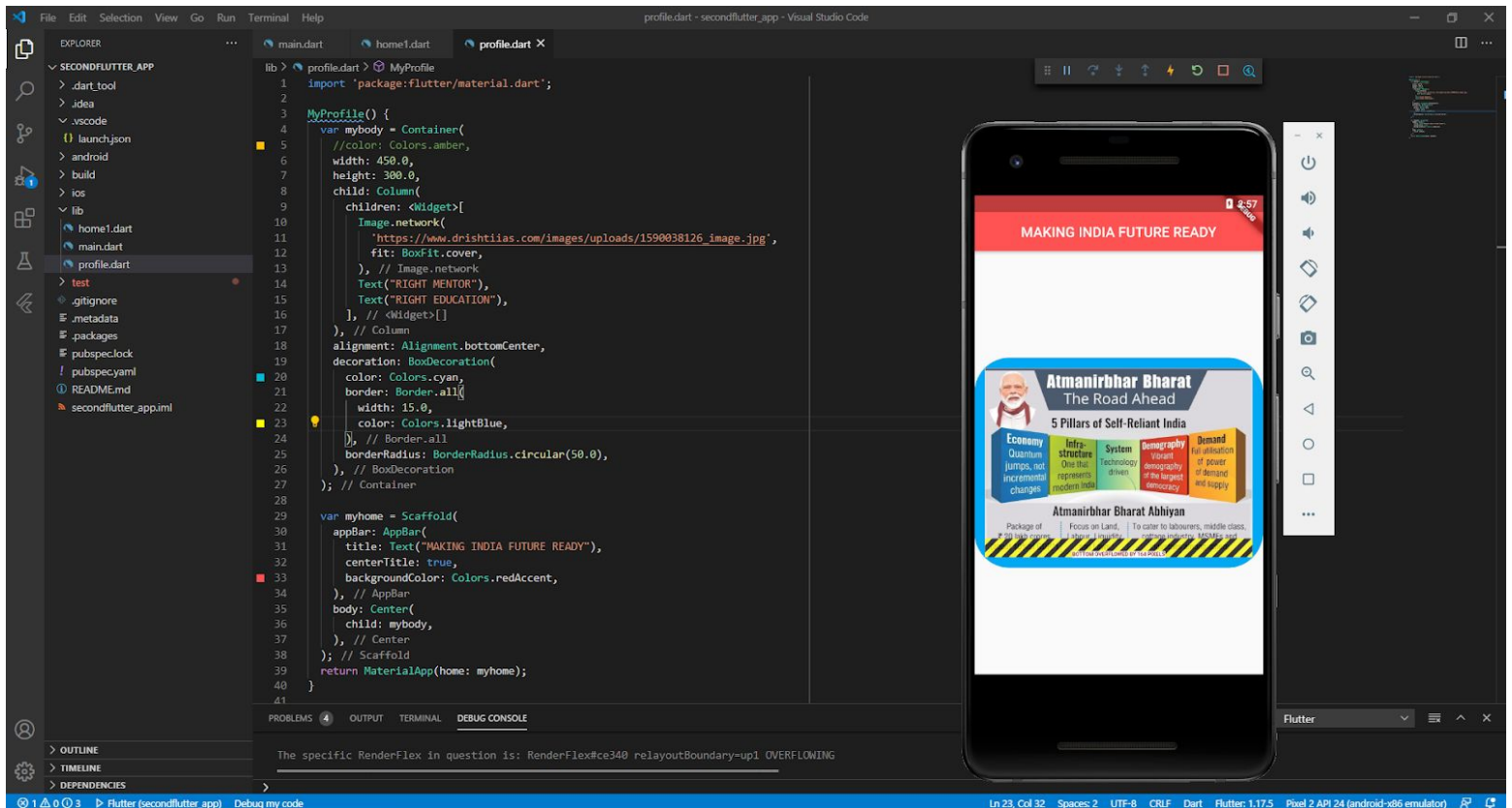
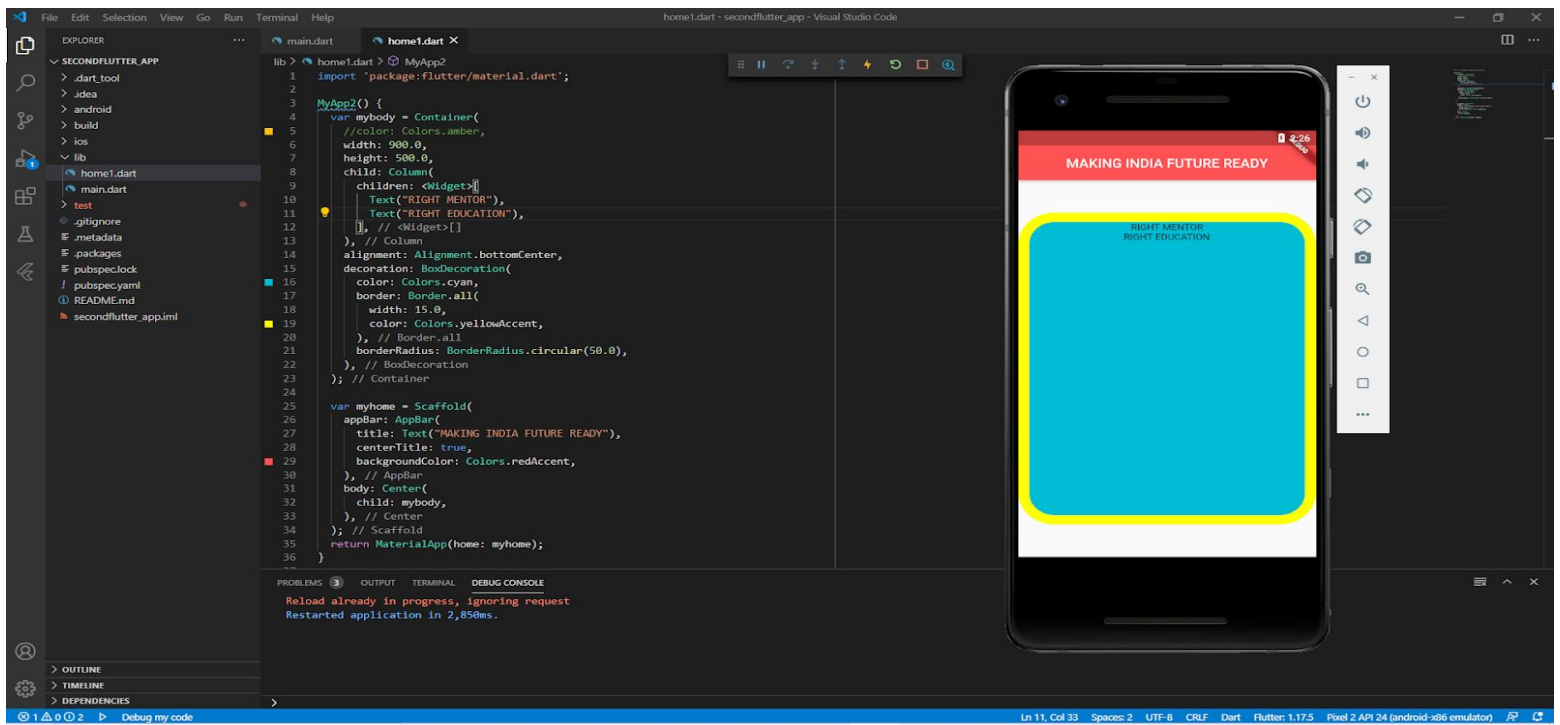
```
'https://fsa.zobj.net/crop.php?r=dwvj28xAhlzHdDgPKHj1uSZaJUQdv-LzTyTnpl96DVMxxT69nntFfKG6aHOjq2eyqeXklY  
1djR-kzXqYKOZhd7GyKkx1CaTgS56eOGGb45-T72LH37bRMscnWVaiYu42LI35ckyodvApAscJ'),  
      color: Colors.cyan,  
      border: Border.all(width: 15.0, color: Colors.yellowAccent),  
      borderRadius: BorderRadius.circular(50.0),  
    ),  
  );  
};
```

```
var myhome = Scaffold(  
  appBar: AppBar(  
    title: Text("MAKING INDIA FUTURE READY"),  
    centerTitle: true,  
    backgroundColor: Colors.redAccent,  
  ),  
  body: mybody,  
);  
return MaterialApp(home: myhome);  
}
```









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

```

MyProfile() {
  var mybody = Container(
    //color: Colors.amber,
    width: 450.0,
    height: 300.0,
    child: Column(
      children: <Widget>[
        Image.network(
          'https://www.drishtiias.com/images/uploads/1590038126_image.jpg',
          fit: BoxFit.cover,
        ),
        Text("RIGHT MENTOR"),
        Text("RIGHT EDUCATION"),
      ],
    ),
    alignment: Alignment.bottomCenter,
    decoration: BoxDecoration(
      color: Colors.cyan,
      border: Border.all(
        width: 15.0,
        color: Colors.lightBlue,
      ),
      borderRadius: BorderRadius.circular(50.0),
    ),
  );

  var myhome = Scaffold(
    appBar: AppBar(
      title: Text("MAKING INDIA FUTURE READY"),
      centerTitle: true,
      backgroundColor: Colors.redAccent,
    ),
    body: Center(
      child: mybody,
    ),
  );

  return MaterialApp(home: myhome);
}

```

THANKS FOR READING!!!