

# Exploring the flutter project

## Main.dart File

The main file looking flutter framework to start run the application.

So don't rename the main.dart file.

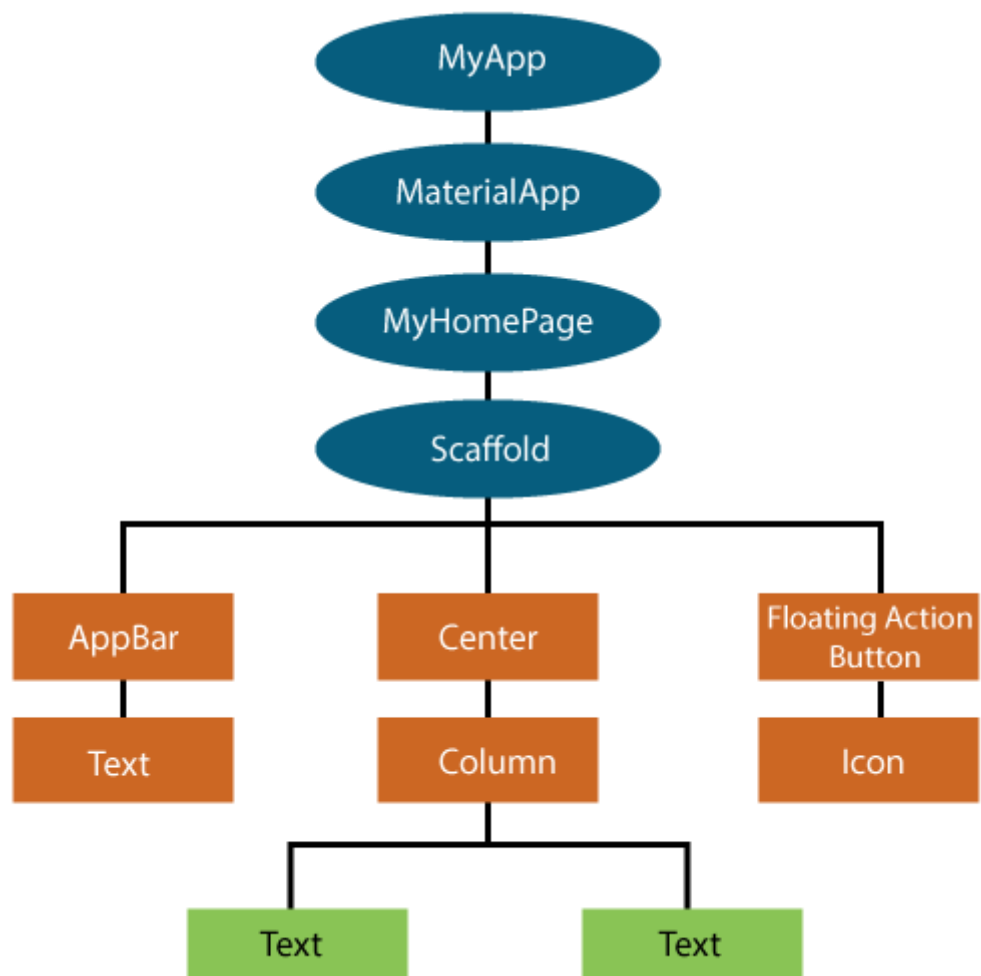
main() function/ method: Entry point of the application.

runApp() Method: Inflates the widget and show it on app screen.

Import Keyword: Inflates the widget and show it on app screen.

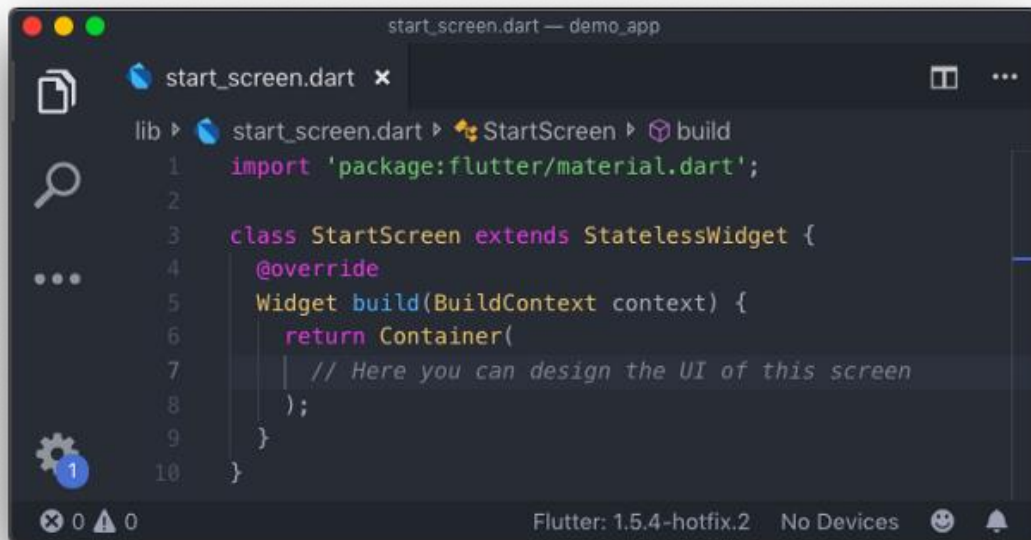
## Widgets

Widgets are building blocks for creating user interface.



There are two types of widget StatelessWidget & StatefulWidget

StatelessWidget: Stateless widgets cannot change their state during the runtime of the app, which means the widgets cannot be redrawn while the app is in action.

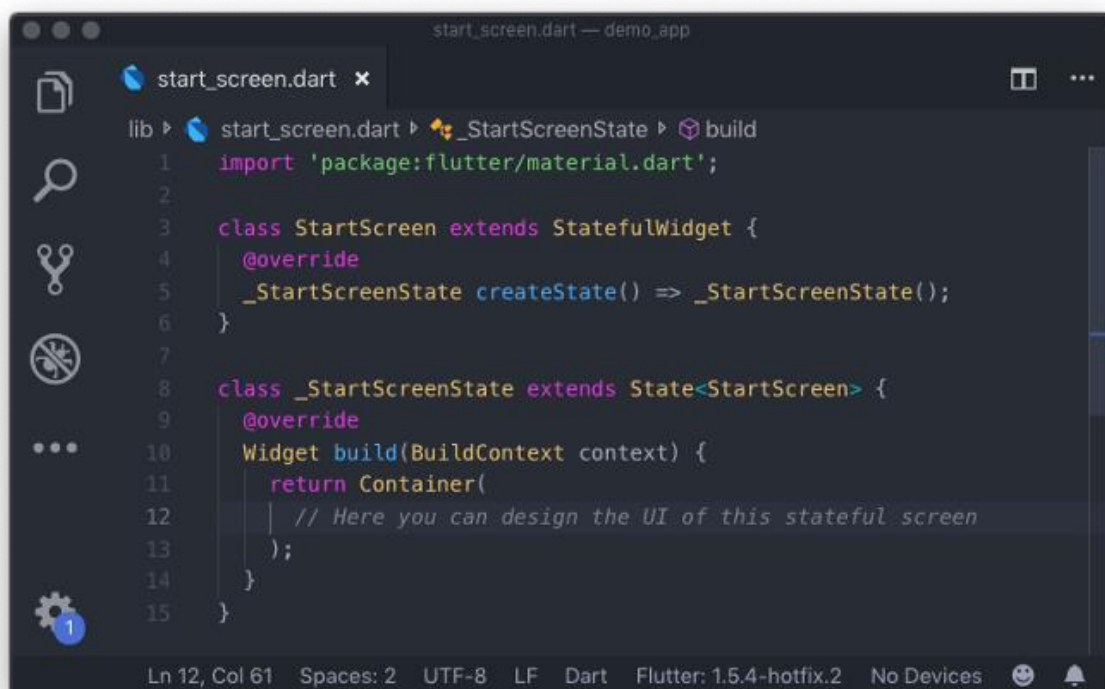
A screenshot of an IDE window titled 'start\_screen.dart — demo\_app'. The file explorer on the left shows the path 'lib > start\_screen.dart > StartScreen > build'. The code editor displays the following Dart code:

```
1 import 'package:flutter/material.dart';
2
3 class StartScreen extends StatelessWidget {
4   @override
5   Widget build(BuildContext context) {
6     return Container(
7       // Here you can design the UI of this screen
8     );
9   }
10 }
```

The status bar at the bottom indicates 'Flutter: 1.5.4-hotfix.2' and 'No Devices'.

Example widgets: Text,Icon etc.

StatefulWidget: They are the widgets which can change their state multiple times and can be redrawn on to the screen any number of times while the app is in action.

A screenshot of an IDE window titled 'start\_screen.dart — demo\_app'. The file explorer on the left shows the path 'lib > start\_screen.dart > \_StartScreenState > build'. The code editor displays the following Dart code:

```
1 import 'package:flutter/material.dart';
2
3 class StartScreen extends StatefulWidget {
4   @override
5   _StartScreenState createState() => _StartScreenState();
6 }
7
8 class _StartScreenState extends State<StartScreen> {
9   @override
10  Widget build(BuildContext context) {
11    return Container(
12      // Here you can design the UI of this stateful screen
13    );
14  }
15 }
```

The status bar at the bottom shows 'Ln 12, Col 61', 'Spaces: 2', 'UTF-8', 'LF', 'Dart', 'Flutter: 1.5.4-hotfix.2', and 'No Devices'.

The name of the widget is again "StartScreen", but now it overrides the "createState" method, instead of the "build" method, which returns the instance of the class "\_StartScreenState".

The class "\_StartScreenState" extends from State<> which takes "StartScreen" as a template input.

Now, this "\_StartScreenState" overrides the "build" method and returns a widget. This is where you can define the UI of the app, which is Stateful. As it is a Stateful widget you can call the build method any number of times, which will redraw the widgets on the screen.

Example Widgets: Checkbox, TextField etc

Videos you can refer:

StateLessWidget: <https://www.youtube.com/watch?v=wE7khGHVYY>

StateFullWidget: <https://www.youtube.com/watch?v=AqCMFXEmf3w>

Flutter Installation (Windows): <https://www.youtube.com/watch?v=fDnqXmLSqtg>

Flutter Installation (Mac): <https://www.youtube.com/watch?v=Xy-gHlaHr6c>

Flutter Installation (Linux): <https://www.youtube.com/watch?v=GFh4xNVLzUM>

Flutter Official YouTube Channel: <https://www.youtube.com/c/flutterdev/videos>

*Format code on VS Code* - shift+alt+F (windows/Linux)

Cmd+alt+F (Mac)

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