

# Programação para Dispositivos Móveis

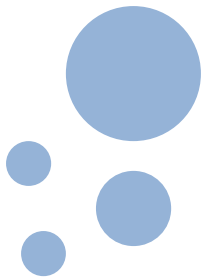


# Componentes Visuais

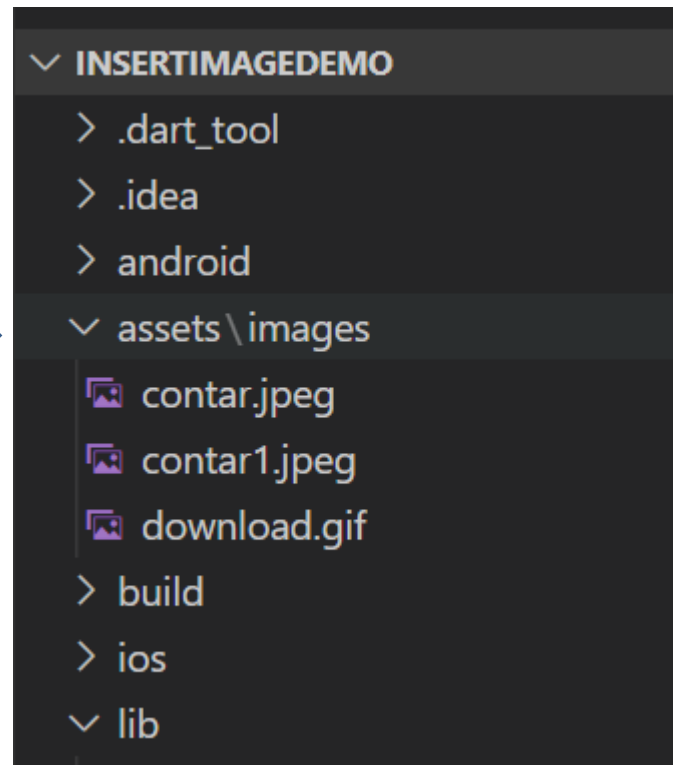
## Assets



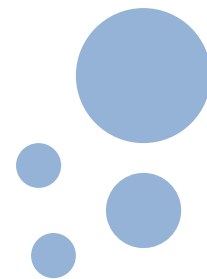
# Images



- Crie as pastas assets e images:

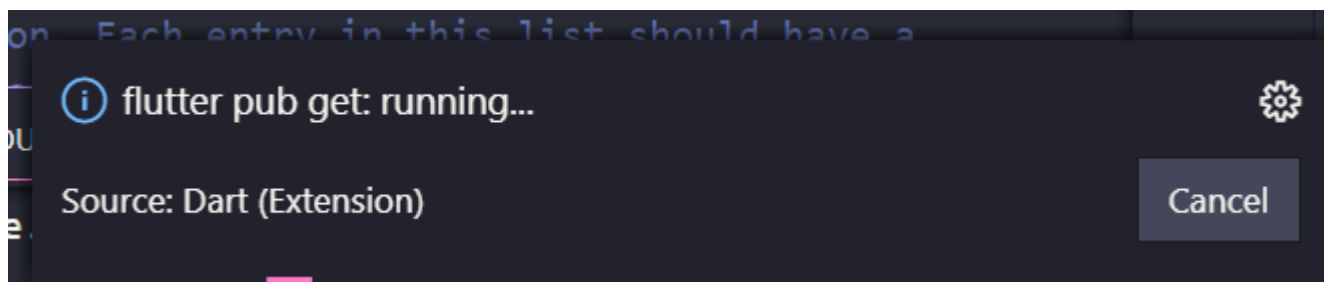


# Pubspec.yaml

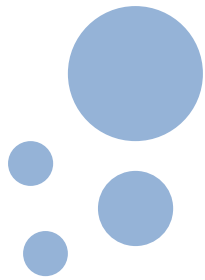


- Cuidado com os tabs/espacos

```
56 # included with your application, so that you can u
57 # the material Icons class.
58 uses-material-design: true
59
60 # To add assets to your application, add an assets
61 assets:
62   - assets/images/download.gif
63   - assets/images/contar.jpeg
64
```



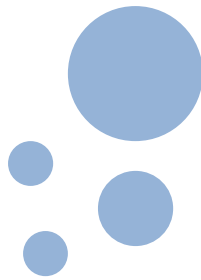
# Stateless



- Crie um Stateless:

```
main.dart X
lib > main.dart > MyApp > MyApp
1  import 'package:flutter/material.dart';
2
3  // function to start app building
   Run | Debug | Profile
4  void main() => runApp(const MyApp());
5
6  class MyApp extends StatelessWidget {
7      const MyApp({Key? key}) : super(key: key);
8
9      // This widget is the root
10     // of your application
11
```

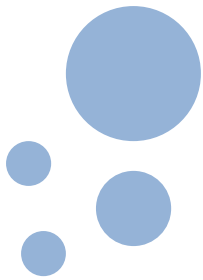
# Stateless



- Crie um MaterialApp, um Scaffold e um AppBar:

```
12  @override
13  Widget build(BuildContext context) {
14      return MaterialApp(
15          home: Scaffold(
16              appBar: AppBar(
17                  title: const Text(
18                      'Insert Image Demo',
19                  ), // Text
20              ), // AppBar
```

# Image.asset

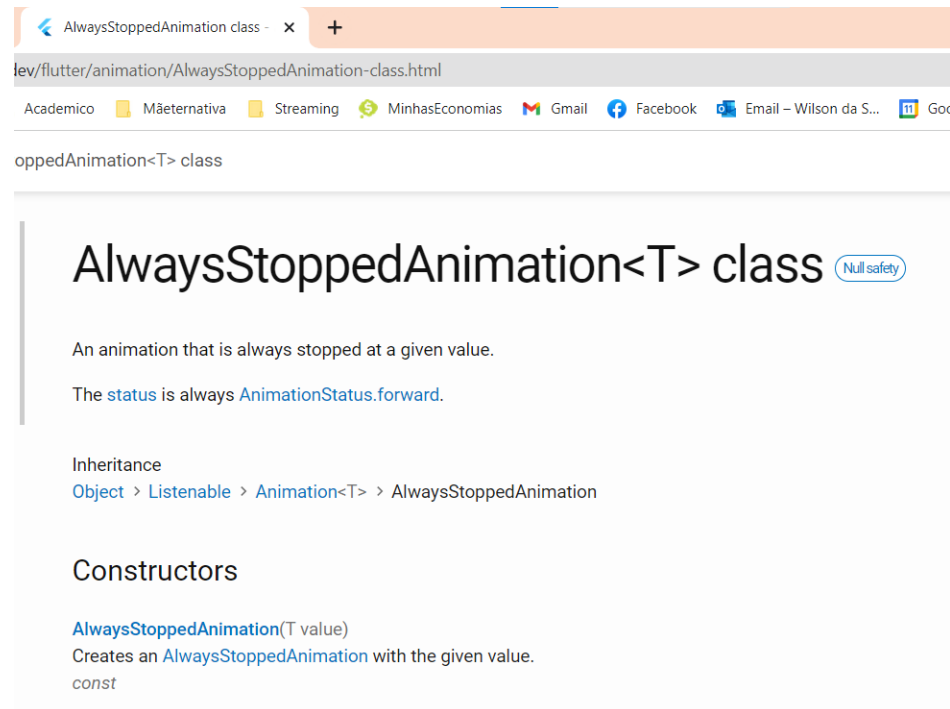


- Crie um asset:

```
body: Center(  
  child: Column(  
    children: <Widget>[  
      Image.asset('assets/images/download.gif',  
        height: 200,  
        scale: 2.5,  
        opacity:  
          const AlwaysStoppedAnimation<double>(0.5)),
```

# AlwaysStoppedAnimation

<https://api.flutter.dev/flutter/animation/AlwaysStoppedAnimation-class.html>



The screenshot shows a web browser displaying the Flutter API documentation for the `AlwaysStoppedAnimation` class. The browser's address bar shows the URL `dev/flutter/animation/AlwaysStoppedAnimation-class.html`. The page content includes the class name `AlwaysStoppedAnimation<T> class` with a "Null safety" badge. Below the class name, there is a description: "An animation that is always stopped at a given value." and "The `status` is always `AnimationStatus.forward`." The "Inheritance" section shows the hierarchy: `Object` > `Listenable` > `Animation<T>` > `AlwaysStoppedAnimation`. The "Constructors" section lists the `AlwaysStoppedAnimation(T value)` constructor, which "Creates an `AlwaysStoppedAnimation` with the given value." and is marked as `const`.

AlwaysStoppedAnimation class - x +

dev/flutter/animation/AlwaysStoppedAnimation-class.html

Academico Mãeternativa Streaming MinhasEconomias Gmail Facebook Email – Wilson da S... Goc

oppedAnimation<T> class

## AlwaysStoppedAnimation<T> class Null safety

An animation that is always stopped at a given value.

The `status` is always `AnimationStatus.forward`.

Inheritance

`Object` > `Listenable` > `Animation<T>` > `AlwaysStoppedAnimation`

### Constructors

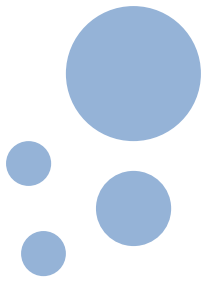
`AlwaysStoppedAnimation`(T value)

Creates an `AlwaysStoppedAnimation` with the given value.

`const`



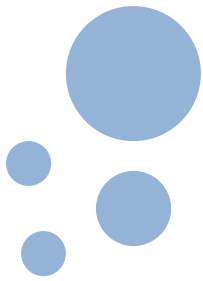
# Image.asset



- Crie outro asset:

```
29 Image.asset(  
30     'assets/images/contar.jpeg',  
31     height: 400,  
32     width: 400,  
33 ), // Image.asset
```

# Image.network



- Crie outro asset:

```
34 Image.network(  
35   'https://picsum.photos/250?image=9',  
36 ) // Image.asset // Image.network
```

# Widget Image

- <https://api.flutter.dev/flutter/widgets/Image-class.html>

## Image class

A widget that displays an image.

Several constructors are provided for the various ways that an image can be specified:

- `new Image`, for obtaining an image from an `ImageProvider`.
- `new Image.asset`, for obtaining an image from an `AssetBundle` using a key.
- `new Image.network`, for obtaining an image from a URL.
- `new Image.file`, for obtaining an image from a `File`.
- `new Image.memory`, for obtaining an image from a `Uint8List`.

The following image formats are supported: JPEG, PNG, GIF, Animated GIF, WebP, Animated WebP, BMP, and WBMP

To automatically perform pixel-density-aware asset resolution, specify the image using an `AssetImage` and make sure that a `MaterialApp`, `WidgetsApp`, or `MediaQuery` widget exists above the `Image` widget in the widget tree.

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

### Sample

The default constructor can be used with any `ImageProvider`, such as a `NetworkImage`, to display an image from the internet.



# Widget Image

← → ↺ api.flutter.dev/flutter/widgets/Image-class.html

Flutter > widgets > Image class

## CLASSES

- AbsorbPointer
- Accumulator
- Action
- ActionDispatcher
- ActionListener
- Actions
- ActivateAction
- ActivateIntent
- Align
- Alignment
- AlignmentDirectional
- AlignmentGeometry
- AlignmentGeometryTween
- AlignmentTween
- AlignTransition
- AlwaysScrollableScrollPh...
- AlwaysStoppedAnimation
- AndroidView
- AndroidViewSurface
- Animatable
- AnimatedAlign
- AnimatedBuilder
- AnimatedContainer
- AnimatedCrossFade
- AnimatedDefaultTextStyle
- AnimatedList
- AnimatedListState

The image is painted using [paintImage](#), which describes the meanings of the various fields on this class in more detail.

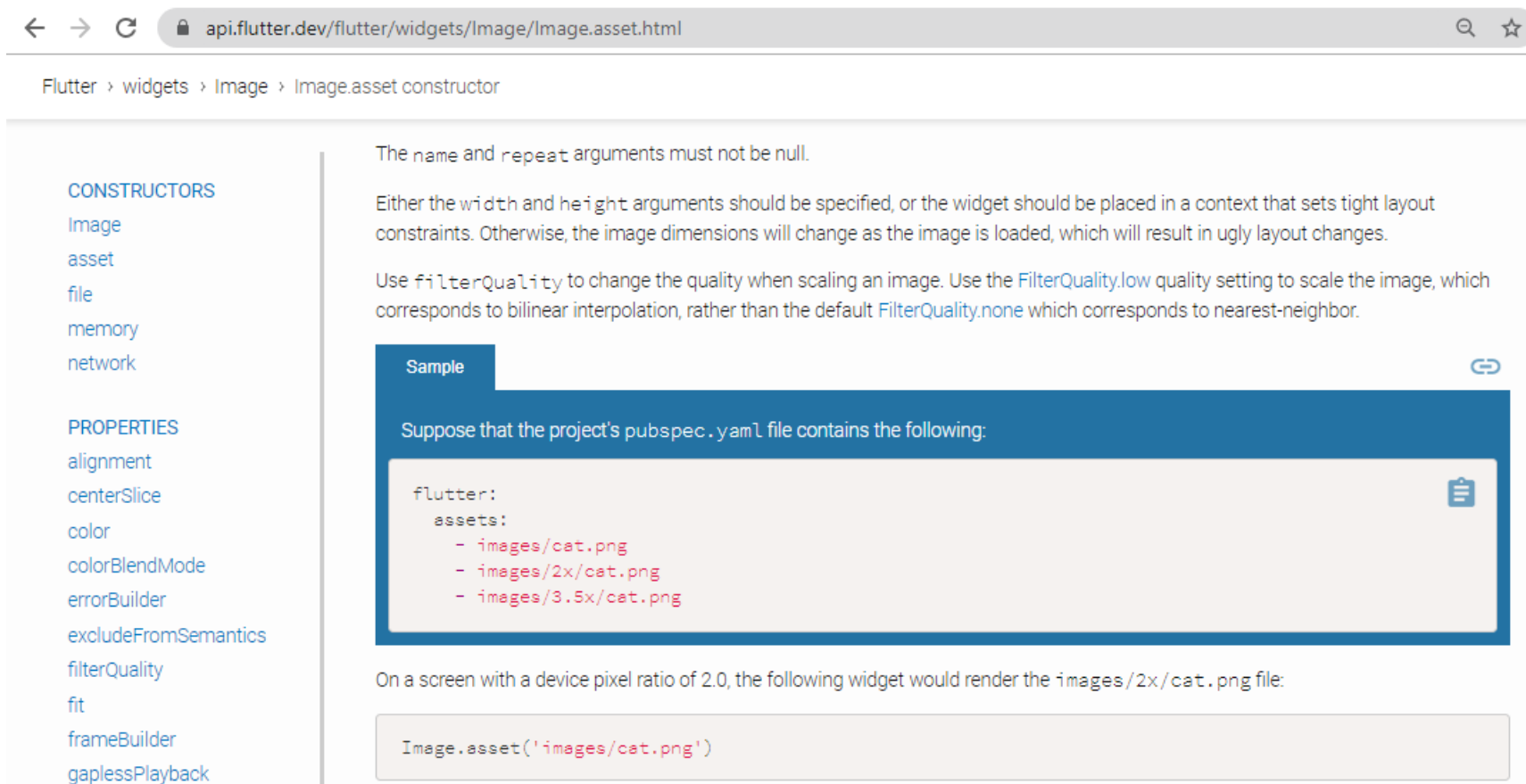
## Sample

The default constructor can be used with any [ImageProvider](#), such as a [NetworkImage](#), to display an image from the internet.



```
const Image(  
  image: NetworkImage('https://flutter.github.io/assets-for-api-docs/assets/widgets/owl.jpg'),  
)
```

# Widget Image



The image shows a screenshot of the Flutter API documentation for the `Image` widget. The browser address bar shows the URL `api.flutter.dev/flutter/widgets/Image/Image.asset.html`. The page title is "Flutter > widgets > Image > Image.asset constructor". On the left, there is a sidebar with "CONSTRUCTORS" (Image, asset, file, memory, network) and "PROPERTIES" (alignment, centerSlice, color, colorBlendMode, errorBuilder, excludeFromSemantics, filterQuality, fit, frameBuilder, gaplessPlayback). The main content area has a note: "The name and repeat arguments must not be null." followed by two paragraphs of text. A "Sample" section shows a code snippet for the `pubspec.yaml` file. Below that, it says "On a screen with a device pixel ratio of 2.0, the following widget would render the `images/2x/cat.png` file:" followed by a code snippet for `Image.asset('images/cat.png')`.

Flutter > widgets > Image > Image.asset constructor

**CONSTRUCTORS**

- Image
- asset
- file
- memory
- network

**PROPERTIES**

- alignment
- centerSlice
- color
- colorBlendMode
- errorBuilder
- excludeFromSemantics
- filterQuality
- fit
- frameBuilder
- gaplessPlayback

The name and `repeat` arguments must not be null.

Either the `width` and `height` arguments should be specified, or the widget should be placed in a context that sets tight layout constraints. Otherwise, the image dimensions will change as the image is loaded, which will result in ugly layout changes.

Use `filterQuality` to change the quality when scaling an image. Use the `FilterQuality.low` quality setting to scale the image, which corresponds to bilinear interpolation, rather than the default `FilterQuality.none` which corresponds to nearest-neighbor.

**Sample**

Suppose that the project's `pubspec.yaml` file contains the following:

```
flutter:  
  assets:  
    - images/cat.png  
    - images/2x/cat.png  
    - images/3.5x/cat.png
```

On a screen with a device pixel ratio of 2.0, the following widget would render the `images/2x/cat.png` file:

```
Image.asset('images/cat.png')
```

# Referências

## Flutter Framework

Desenvolva aplicações móveis  
no Dart Side!



# Dicas para Estudo



Seja “CURIOSO”:

Procure revisar o que foi estudado.  
Pesquise as referências  
bibliográficas.



Seja “ANTENADO”:

Leia a próxima aula.



Seja  
“COLABORATIVO”:

Traga assuntos relevantes para a sala  
de aula.  
Participe da aula.  
Proponha discussões relevantes  
sobre o conteúdo.



Prof. Wilson Lourenço

