

Flutter Animations Cheat Sheet



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A n i m a t i o n s

Flutter Animations Cheat Sheet

Since writing [Flutter Layout Cheat Sheet](#) article, I intended to create a similar article about Flutter's animations.

Unfortunately using GIFs or videos is not the greatest way to show the potential of animations. I was not able to teach animations compellingly... until now, thanks to [Flutter Web](#).

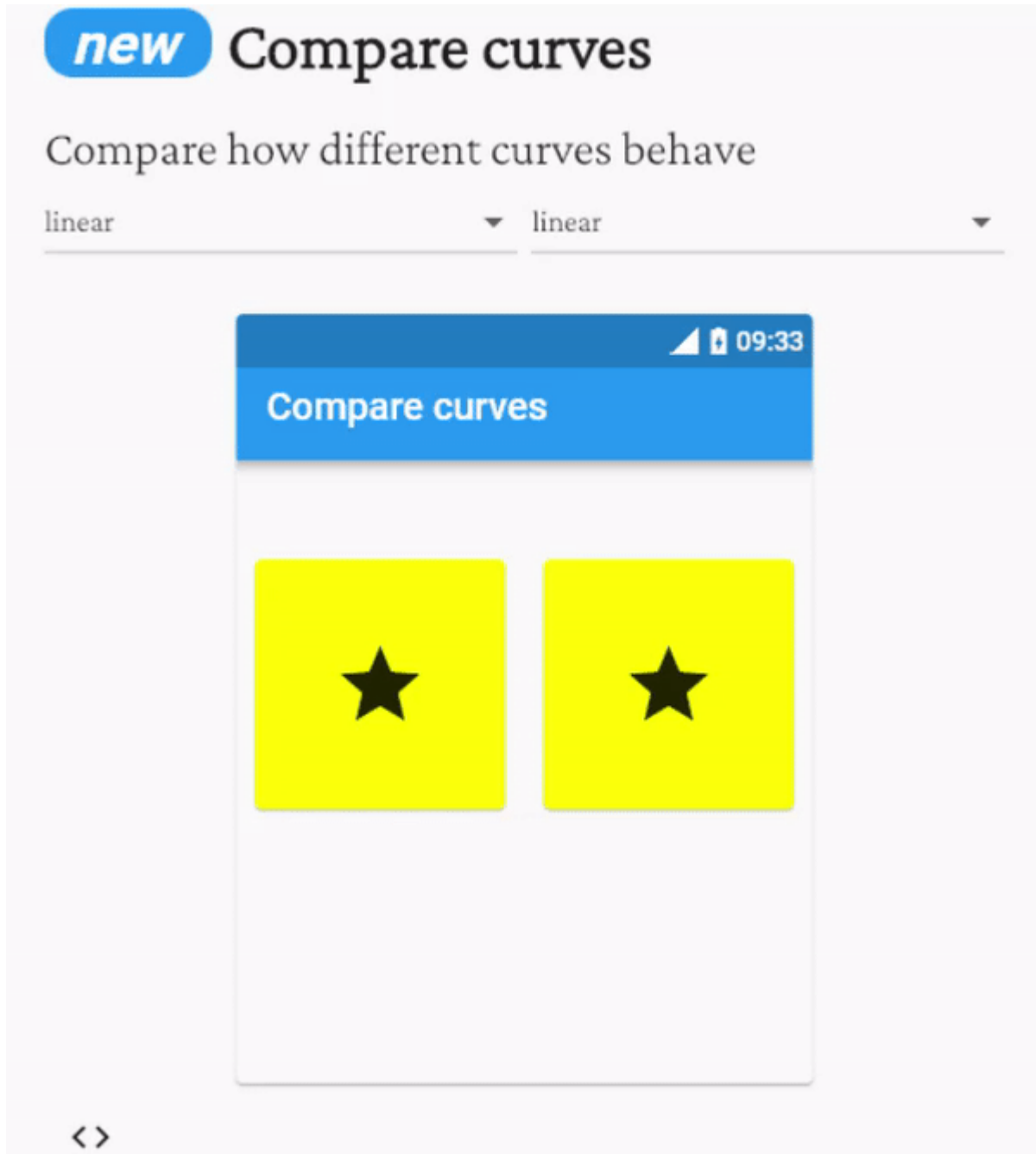
If you want to check out [Flutter Animations Cheat Sheet written in Flutter](#), please visit that article.

Let us know how you like it!

Curves

An integral part of animations are Curves. They allow specifying when animation speeds up and when it slows down.

Now at [Flutter Animations](https://flutter-animations-cheat-sheet.codemagic.app/#/), you have an easy way to compare them:



<https://flutter-animations-cheat-sheet.codemagic.app/#/>

Transitions and Animated Widgets

When doing animations in Flutter you will come across approaches: *Transitions* and *Animated Widgets*.

Transitions

(e.g. `SlideTransition`) are lightweight and you can more easily combine them. They do not need to be placed in a `StatefulWidget` to work, but they need to have access to an `AnimationController` object (usually is an `AnimationController`).

In the beginning, *Transitions* might be harder to use vs *Animated Widgets*, but in the long run, they end up with cleaner code when creating more advanced animations.

Current *Transitions* in Flutter Animations:

```
SlideTransition, ScaleTransition, RotationTransition, SizeTransition,
FadeTransition, PositionedTransition, RelativePositionedTransition,
DecoratedBoxTransition, AlignTransition, DefaultTextStyleTransition
```

Animated Widgets

(e.g. `AnimatedCrossFade`) are more compound, prebuilt solutions. They might integrate multiple animations — `AnimatedContainer` can animate size, colour, border, ... at the same time. To create similar animation with *Transitions* it would require much more code.

The downside of *Animated Widgets* is that they are much less flexible to change and they need to be in a `StatefulWidget` as `setState()` needs to be called.

Animated Widgets are created with *Transition* internally — in case you need more custom widget, just use *Transitions*.

Current *Animated Widgets* in Flutter Animations:

```
AnimatedCrossFade, AnimatedContainer, AnimatedPadding, AnimatedAlign,
AnimatedPositioned, AnimatedPositionedDirectional, AnimatedOpacity,
AnimatedDefaultTextStyle, AnimatedPhysicalModel
```

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<https://flutter-animations-cheat-sheet.codemagic.app/#/>

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While Flutter Web is in preview, the page works the best with Chrome on desktop.

- Cheatsheet
- Flutter
- Flutter Web
- Animation

Medium

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