

ToiletPaper #129

Cross-platform animations with Lottie

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✘ Problem

The implementation of animations for different front-end platforms (e.g.: iOS, Android, React Native, Xamarin etc.) usually differs. Additional development workload per platform is a result. Animations are often created using software such as [Adobe After Effects](#) and then passed on to the programmers as video file. In many cases, the direct integration of the video into the platform might not be possible or not desired for various reasons and the animation must be recreated with the animation framework of the respective platform.

✔ Solution

The animation library [Lottie](#) allows the integration of vector animations as Json files for different platforms, which eliminates additional implementation effort in development. The animation is still created with [Adobe After Effects](#) and is exported as a Json file using the [Bodymovin](#) plugin. This Json file can be integrated into various platforms and is rendered natively by Lottie in real time.

Platforms supported:

Android, iOS, Xamarin, React Native, Vanilla JS, Flutter, ReactXP, NativeScript, Axway Appcelerator

➔ Example

Native Android

```
// via xml view
<com.airbnb.lottie.LottieAnimationView
  android:layout_width="match_parent"
  android:layout_height="wrap_content"
  app:lottie_autoPlay="true"
  app:lottie_loop="true"
  app:lottie_fileName="lottie_anim.json"/>

// via code
var lottieAnimationView: LottieAnimationView = findViewById(R.id.lottie_anim_view)
lottieAnimationView.setAnimation("lottie_anim.json")
lottieAnimationView.playAnimation()
```

Vanilla JS

```
var anim = lottie.loadAnimation({
  container: document.getElementById('lottie'), // the dom element that will contain the animation
  renderer: 'svg', // render anim as svg
  loop: true, // repeat animation
  autoplay: true, // should animation play after loading
  path: 'json/lottie_anim.json' // the path to the animation json
});
```

+ Further Aspects

- Free Lottie animations: <https://lottiefiles.com/>
- iOS lib: <https://github.com/airbnb/lottie-ios>