Lottie vs Rive

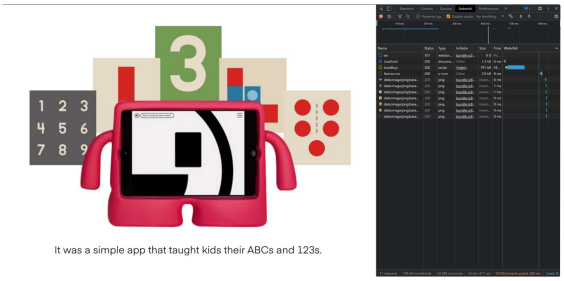
Recently, we discovered Rive animations and were intrigued by the claims made on their website. With the help of @Cryssac Franson Aldo, I decided to test it out. Below are the results we produced while testing a complex animation.

Pros

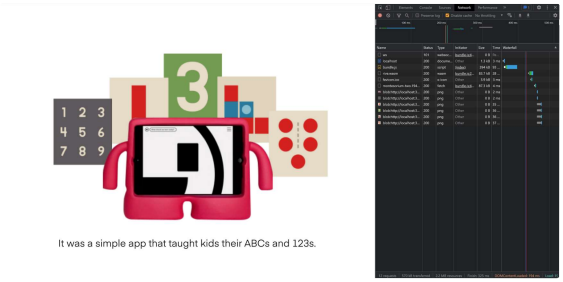
- The Rive file size is much smaller than the Lottie file for the same animation. For our example animation, the Rive file is almost 1/5th the size of the equivalent Lottie file. 👇

- The Rive output is a binary file, whereas Lottie uses JSON files..
- The bundle size of Rive is much smaller than Lottie, which improves performance scores. This was verified through the network tab and with the Webpack Bundle Analyzer. 👇

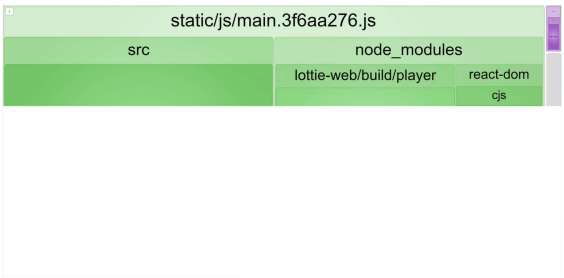
Lottie file - network tab 👉

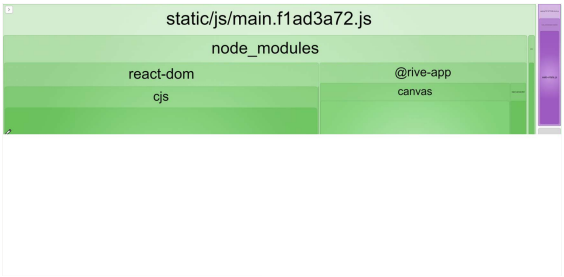


Rive file - network tab 👉



Lottie file - Webpack Bundle Analyzer 👉





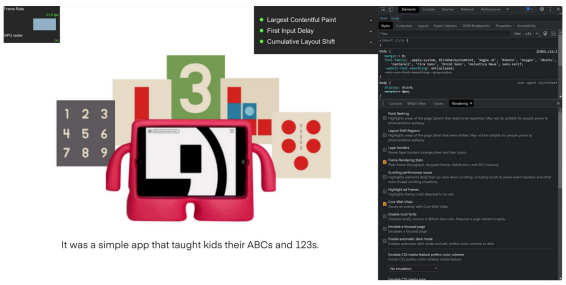
Rive file - Webpack Bundle Analyzer 👉

- Rive allows for higher interactivity compared to Lottie..

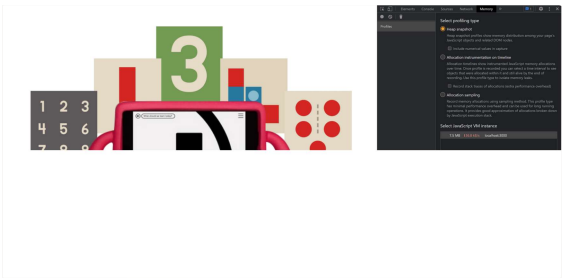
- When compared to Lottie animations, GPU memory, JS heap, and CPU usage are very low. You can verify this by visiting this link. The GPU and JS heap results for our POC are also low. 👇

Lottie file - GPU Memory 👉

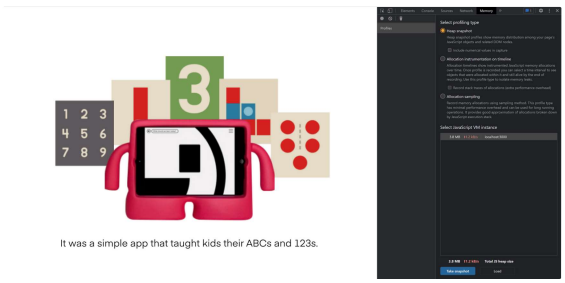
Rive file - GPU Memory 👉



Lottie file - JS heap 👉

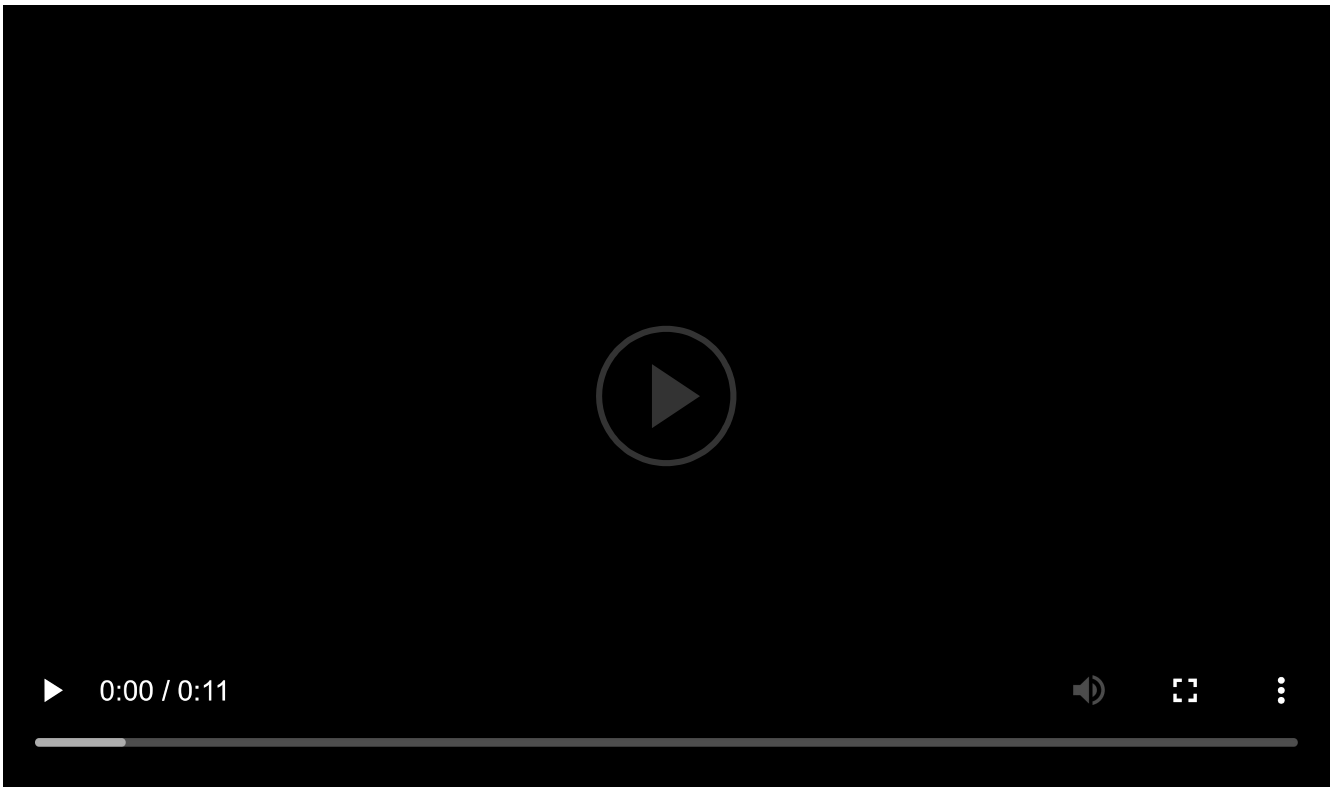


Rive file - JS heap 👉



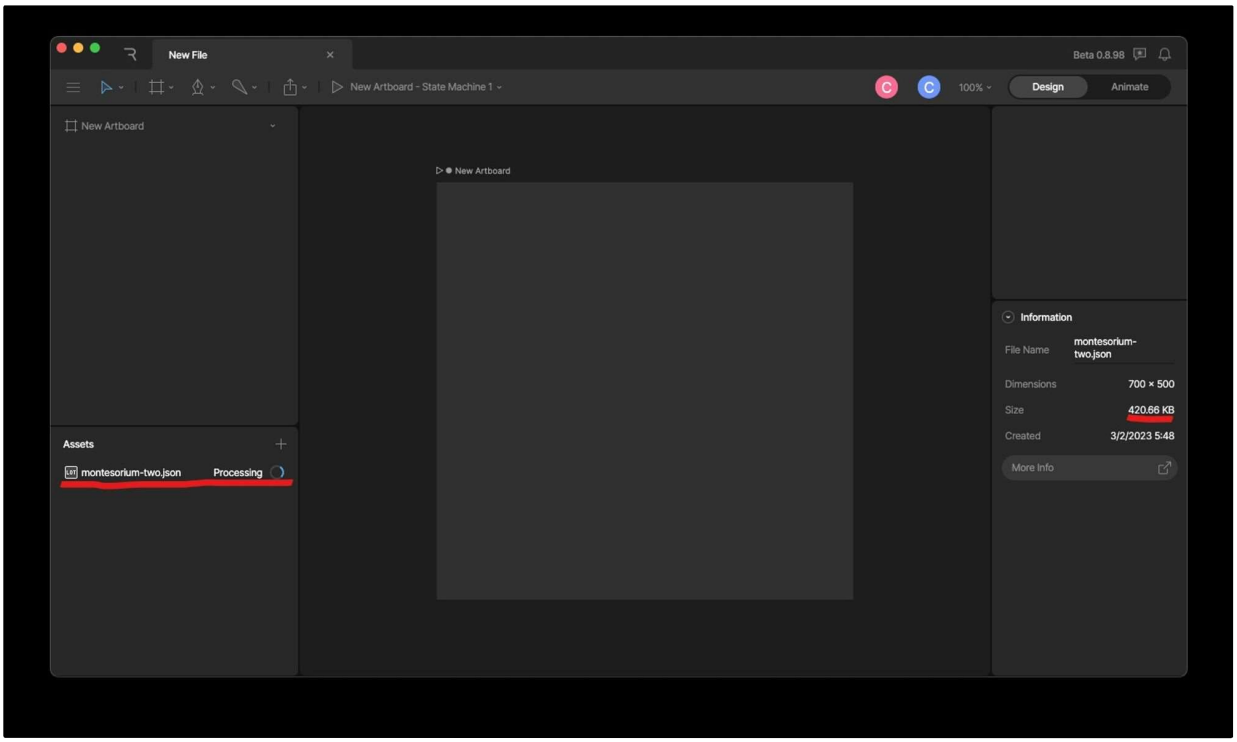
- Rive allows you to import Lottie files, modify them, and export them as Rive files..

- To create these Rive files, designers will need to use the Rive platform in their browser to make the animations. For Mac users, the application has been launched and can be found at this link..
- @Cryssac Franson Aldo is the perfect point of contact for understanding the complexities of creating animations on this platform..
- Here is an animation created from scratch on the Rive platform. 👇



Cons

- Complex animations and large Lottie files take forever to load in the Rive application/platform. As an experiment, when we tried to upload the same Lottie file to the Rive app, the processing time was as follows:



- The Rive application is still in its starting phase for Mac users, and is therefore not yet stable. It is not yet available for Windows users. As for the browser version, Rive is generally stable but requires a good internet connection.

Conclusion

- We were able to produce the following results by running it on our system. However, further steps would be necessary to deploy it and see improved real-time performance..
- These results suggest that Rive can produce high-performance websites with complex animations compared to Lottie animations to some extent. Trying Rive with our projects may lead to further findings.