

## Abstract

This project discusses many aspects of Adobe Flash and how the internet, more specifically the browser-based gaming industry, will be affected by its removal. We discuss the use of Flash in multimedia including animations and games, and how it dominated the internet since the 1990s. This poster also looks at Adobe Flash's downsides, including security issues, possible invasions of privacy due to Flash cookies, and replacement technologies such as HTML5 and CSS3. Flash continues to get older, and more outdated by the date and is now being eliminated.

## What is Flash Player?

Adobe Flash, originally created by Macromedia, is a tool used to display Flash content in browsers. This includes videos and games.



## Why Flash Was Great

Flash was widely adopted and worked across all browsers. Notably, early YouTube used Flash for all of their videos.



Flash was also used to power all those games you played at school when you should've been learning how to use a computer.

From Coolmath Games to Newgrounds, almost every game website of your youth used and still use Flash Player.



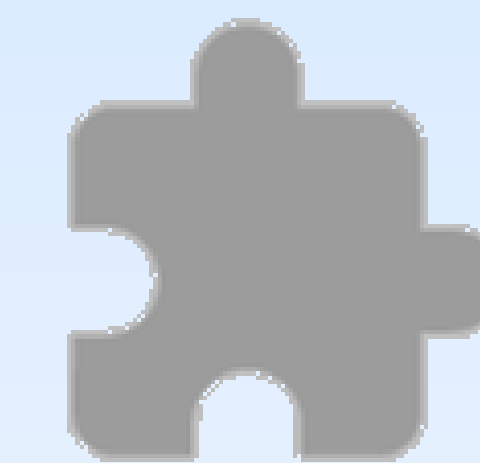
## Downsides of Flash

As great as Flash was, it has become more trouble than it's worth. There have been many exploits based on flaws in Flash, well over 1000. Adobe has decided to stop updating and supporting Flash.

## Downsides of Flash

Many attacks have been launched by running script with Flash Player. This could happen as soon as you open a Word document with an embedded Flash file.

A secondary concern of flash is privacy, as Flash cookies. Cookies are files left on your computer to reduce load time or to track users. These can be deleted for preserving privacy, but Flash cookies are able to restore other deleted cookies.



Click to enable Adobe Flash Player

## Replacement Technology

Flash is not leaving behind a hole as safer replacement technologies already exist. HTML5 and CSS3 are more than capable of everything Flash was. If you'd like to see how games without Flash stack up visit [threejs.org](http://threejs.org). As for videos, YouTube stopped using Flash years ago.

## Conclusion

Adobe Flash Player has dominated animation, games, and more on the internet for years, but it will be discontinued on December 31, 2020. Any Flash content on the internet will become unusable without the aid of special software to run it. Flash Player's lengthy history of security issues has made it's use too risky. While Flash is on its way out, the internet won't change dramatically. Flash has been slowly fading from the Web for years, being replace by more reliable technologies. These technologies are more secure and perform better than Flash. HTML5 with CSS3 in conjunction with other technologies will be able to add animation and games to webpages. Web storage eliminates the need for Flash cookies, and better protects user's privacy. Popular websites will stay online, and the World Wide Web will not miss Flash Player too much.

## References

- Adobe. (2017, September). *Adobe® Flash® Player 27 Administration Guide* [Online]. Available: [https://www.adobe.com/content/dam/acom/en/devnet/flashplayer/articles/flash\\_player\\_admin\\_guide/pdf/flash\\_player\\_27\\_0\\_admin\\_guide.pdf](https://www.adobe.com/content/dam/acom/en/devnet/flashplayer/articles/flash_player_admin_guide/pdf/flash_player_27_0_admin_guide.pdf)
- CVE Details. *Flash Player : Security Vulnerabilities* [Online]. Available: [https://www.cvedetails.com/vulnerability-list/vendor\\_id-53/product\\_id-6761/Adobe-Flash-Player.html](https://www.cvedetails.com/vulnerability-list/vendor_id-53/product_id-6761/Adobe-Flash-Player.html)