Unethical Optimization of Computer Software and the Possible Solutions – The Web

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Abstract

Computer software and hardware has come along way from its initial inception. There a practically to serious bottlenecks to performance. But software developers, either through monetary incentive or negligence, have been abusing those resources at the cost of the end user experience. In the future this will become even more apparent due to Moore’s Law, computer hardware has not been making the same leaps and bounds it once did. The solution to this dilemma is simple but getting the average person to care or understand that they are not getting the most out of their computers hardware.

Research on this subject, specifically for websites, has been done before but was done nearly a decade ago. If time wasn’t enough of a indicator that this area needed to be reexamined, the paper states that around that time the average image size was 2 KB not talking up a massive amount of resources. One would know in this modern age of social media, video hosting, and streaming, that this is simply not true anymore and needs to be reexamined.

Keywords: [Tap here to add keywords.]

Unethical Optimization of Computer Software and the Possible Solutions – The Web

[The body of your paper uses a half-inch first line indent and is double-spaced. APA style provides for up to five heading levels, shown in the paragraphs that follow. Note that the word Introduction should not be used as an initial heading, as it’s assumed that your paper begins with an introduction.]

# [Heading 1]

Websites started out as plain text being able to display only basic information. Overtime images, sound, video, and other types of user interactive data were added to enhance the user experience and what websites could be used for. Although it feels like we have hit a roadblock as website performance has stagnated due to new technology like trackers and bad practices leading to unoptimized code. These both can cause even a new computer with the best specs to be slow. Even with the data collection occurring on almost any website you visit it should not result in your computer becoming a stuttering mess.

I will research how different websites use their computer resources.

Classify videos by content, for example,

The computer I will be using to conduct these experiments is a MacBook Pro Retina 13 inch from early 2015. The processor is a 2.9 GHz Dual-Core Intel Core i5. It has 16 GB of 1867 MHz DDR3 memory and Intel Iris graphics 6100 that is allocated 1536 MB of that memory. The computer is running MacOS Monterey, Version 12.6.3, and the browser being used to run the tests is Google Chrome, Version 110.0.5563.64, using its own code profiler and other developer tools. During testing all background processes are minimized and any processes that are open won’t use up resources that would affect the results of the test. All settings on Chrome are default without any changes or added extensions to simulate how most people will use the browser. The computer will connect to the internet via Wifi.1

## Chosen Webistes1

The websites chosen to be profiled can be put into multiple categories that will theoretically have different usage and levels of usage of the computer hardware. The categories are search engines, news, online shopping, video hosting, social media, user interactive, and other miscellaneous websites that could give insight into specific usage areas. The websites will all be profiled at least once on their home page and a second time if they have any landing pages. The landing pages profiled will be as similar as possible, for example, all search engines will search “google” when profiling their landing page.

For search engines we have Google, Bing, Yahoo, Yandex, DuckDuckGo, DuckDuckGo HTML, DuckDuckGo LITE, SearX, and Swisscows. Google is the primary search engine that people use and will likely use many resources due to the company being a data collection powerhouse. Bing, owned by Microsoft, and Yahoo, owned by Verizon, which are two main competitors to Google that are backed by big Corporations. Yandex is a search engine originating from Russian taking on the likes of Google, it is likely this one will be giving your information to the Kremlin. DuckDuckGo is a pro-privacy and generally “pro-free speech” search engine, that has three different versions to choose from, two of which being non-JavaScript versions. SearX is a search engine that is actually a multitude of search engines combined into one and is hosted across many domains. Swisscows is a search engine that is focused on education and blocks any “inappropriate” search results.

For news we have NBC, NYTimes, Forbes, CBS, CNN, Fox News, and RealClearPolitics. There is no real main website that people go to for news here, besides Fox News for the right side of the aisle, and RealClearPolitics is just and aggregated site of news from the previously mentioned sites and more.

Online shopping includes Amazon, Walmart, eBay, Etsy, Alibaba, and Wish. Amazon is the main online shopping site that people use. Walmart is selected because a short-lived competitor named Jet was integrated into Walmart’s site. eBay is the go-to site for buying and selling used goods. Etsy is focused on the sale of handmade good, Alibaba and Wish can both be described as value product sites where stuff can be bought for cheap but often has scam listings.

Video Hosting has YouTube, Dailymotion, DTube, BitChite, and Odysee (LBRY). YouTube is the biggest video hosting site and to some also considered the second largest search engine, it is owned by Google. Dailymotion was a competitor to during the late 2000s and early 2010s but has gotten anymore popular since and has been over shadowed by YouTube. DTube, BitChute, and Odysee can be described as Alt-Tech sites, created in part due to increased restrictions on the content that is allowed on mainstream sites like YouTube.

The last main group is social media being made up of Twitter, Gab, Rumble, Getter, Reddit, and 4chan. These sites were chosen because of the ability to view them without a profile, one of the reasons Facebook was not included. Twitter while the biggest is not as far ahead of its competitors compared to the other categories. Gab, Rumble, and Getter are another group of Alt-Tech sites created due to restrictions made by Twitter and Facebook alike.

Possible Differences. The inclusion of Alt-Tech sites may be looked down upon by some but they provide us with an excellent contrast. These Alt-Tech sites use frameworks that are different from the mainstream tech sites, some part due to innovation and some forced innovation due to them not being able to used those established frameworks.

[Heading 4]. [When using headings, don’t skip levels. If you need a heading 3, 4, or 5 with no text following it before the next heading, just add a period at the end of the heading and then start a new paragraph for the subheading and its text.] (Last Name, Year)

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References

Last Name, F. M. (Year). Article Title. *Journal Title*, Pages From - To.

Last Name, F. M. (Year). *Book Title.* City Name: Publisher Name.

Footnotes

1[Add footnotes, if any, on their own page following references. For APA formatting requirements, it’s easy to just type your own footnote references and notes. To format a footnote reference, select the number and then apply the Footnote Reference. The body of a footnote, such as this example, uses the Normal text style. (Note: If you delete this sample footnote, don’t forget to delete its in-text reference as well.)]

Tables

Table 1

[Table Title]

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Note: [Place all tables for your paper in a tables section, following references (and, if applicable, footnotes). Start a new page for each table, include a table number and table title for each, as shown on this page. All explanatory text appears in a table note that follows the table, such as this one. Use the Table/Figure style to get the spacing between table and note. Tables in APA format can use single or 1.5 line spacing. Include a heading for every row and column, even if the content seems obvious. To insert a table, on the Insert tab, tap Table. New tables that you create in this document use APA format by default.]

Figures



Figure 1. [Include all figures in their own section, following references (and footnotes and tables, if applicable). Include a numbered caption for each figure. Use the Table/Figure style for easy spacing between figure and caption.]

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