

1.1.5 PLTW Part II Essay

The computing innovation that we found to be very interesting and relevant in this day and age is the use of HTTP Cookies (or just 'cookies'). Cookies are text files that are used to retain certain data and information about a computer/website user. They are the things that help websites remember your password, or personal information you type into an online form. Our artifact demonstrates the common cookies found on the web, and exactly what they do to help. Our video also shows how third party cookies can make your information less secure, and how your information can be used to personalize ads in your browser.

To create our video for this project, we used screen capture tools like Screencastify to record our computer screen to show how the use of cookies can alter your user experience in websites and in your browser. We also used a voice recording tool so that along with the visual portion of our video, we had our own voices to explain the function of cookies and the effects of using them. Before recording, however, we planned out a script of what we were going to say and what would appear on the computer screen we were recording. After finalizing the script and our information, we went on to produce the final artifact, our video.

The use cookies stirs major political controversy by both affecting individual's privacy and the benefits it can give to online companies, giving two different sides to cookies benefits and setbacks. Cookies can be helpful to people who have trouble remembering passwords, and can also be used to fill out forms really fast, using pre-entered information that the website has saved using cookies. This is a personal benefit of cookies. One economic benefit of cookies that is not necessarily socially beneficial is how third party cookies can personalize advertisements that a user sees in their browser or web page by tracking the individual user's previous browsing history. Because the ad is showing what you want to see, you may spend money that you otherwise would not have. "If you want to keep a secret, you must also hide it from yourself." This is a quote from the book 1984 by George Orwell. The quote describes how all digital information is becoming insecure, and even with technologies not relating to cookies, people's' personal lives are no longer so personal. This relates to the harmful aftermath of cookies. Cookies allow people and companies to look into your personal information that you may not want revealed, damaging an individual's personal privacy online. Normalizing a detrimentally harmful notion that cookies can track your every online move is a negative social effect we are imprinting into the mass population, allowing more and more people to access our history. While most cookies are not intentionally malicious, and can be very helpful, this does change the fact that privacy is becoming less and less protected, and third party cookies are only helping this issue grow. Cookies invading privacy can have a benefit to the government, however, as will all the information they collect. Personal information can be used to find threats and prevent bad things from happening.

Cookies are used to track data; it's their primary function. Companies are on a need-to-know basis on every inch of your life to see how this day can be used in advertising and customizing their website to service your needs. Cookies are used by nearly 50% of all websites, and they store information as text strings "on your computer by a web server. The web server sends you a cookie and the browser saves it on the hard drive. The browser then returns the cookie to the server the next time the page is referenced"

(<https://computer.howstuffworks.com/cookie.htm>). Websites we use on a daily basis enable cookies to follow your online footprint from Amazon to Youtube to Reddit. Although this allows the benefit to companies to organize their website and advertising so they can extract the most amount of money from your wallet, it's still invading your privacy. Not only is your privacy being invaded by these companies storing your customized, personal information, but much of this information is not being protected. At minimum, you would expect that cookies would be secure, but devastatingly nearly 95% of websites with cookies use non-secure cookies. Your privacy is being taken from you then flaunted around the web because these companies are presenting little security to this information as they are stored on text string accessible to your web server and possibly intruders stealing your data to ruin you for their personal gain.

Citations

Brain, Marshall. "How Internet Cookies Work." *HowStuffWorks*, HowStuffWorks, 26 Apr. 2000, computer.howstuffworks.com/cookie.htm.

Orwell, George. 1984. Propyläen-Verl., 1984.

"Usage of Cookies for Websites." *W3Techs*, w3techs.com/technologies/details/ce-cookies/all/all.