

Assignment: Most Browsers Don't Need to Vibrate

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This assignment is due at 11:59:59PM on Apr. 4, 2019. Please send your writeup and `example.js` to xshi23@jhu.edu.

Disclaimer: This assignment does not need your browser to vibrate.

1 Be a Web API Manager (6 points)

When the authors of this paper created blocking policies, they manually recorded features in JSON files. You can find the JSON files in [this repo](#).

You can see that each JSON file represents a standard, and the file structure is pretty self-explanatory. But here is the problem: When the paper rolled out in 2017, they recorded the API for [User Timing Level 2](#) in [this JSON file](#). However, a new API of [User Timing Level 3](#) was published on Mar. 3, 2019.

Please write a `UTL_new.json` that documents [User Timing Level 3](#), with number 81 in the `id` field. you can use [the instructions here](#) to learn about documentation.

2 Remove Features from the DOM (8 points)

The paper discussed how to disable features directly from DOM. Please look at `index.html` and `example.js`. Suppose that we are filtering out the feature of `document.getElementsByTagName()`. *hint: JavaScript supports overriding.

Please answer the following questions:

- Please provide one line of code in your writeup that disables, nullifies, incapacitates `document.getElementsByTagName()`.
- Does your modification change `div1.getElemebtsByTagName()`? Why or why not?

Next, please modify `document.getElementsByTagName()` in the file `example.js`, so that it filters out the word "space" contained in `<p>` tags - meaning that if it contains the word "space," we will just not include that in the result of `document.getElementsByTagName()`.

You can choose to use the `JavaScript Proxy` object, or you can just record the result of `document.getElementsByTagName()` and then overwrite it.

Yep, I know that the `index.html` is an ugly webpage. Whatever's on the page does not mean anything. Thanks for sticking with it.

3 To vibrate or not to vibrate? (6 points)

Let's go back to the list of standards that the paper is operation on, which can be found [here](#). Pick a standard of your choice and answer the following questions:

- What is this standard? Under what circumstances is it useful?
- What CVEs are related to this standard? Briefly describe two of them.
- Can you think of a scenario that this standard should be blocked? Should it be blocked partially or entirely?