**Quiz1**

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**Part 1**

Copy these three questions into a new Word document and answer them in **long-form**.

1.1 Describe in your own words how the web works! In as much detail as you can, describe **all** the sequences of events that take place from the time a user presses Enter on the keyboard after typing in [www.rpi.edu](http://www.rpi.edu) into the address bar to when the webpage is finished rendering in the browser. Specifically, tell me in great detail the protocols in action. (10 points)

1.2 What is the difference between a property and a method in JavaScript? (3 points)

Property in JavaScript is a value stored in hash key of an object while a method is a function(logic) that is stored in hash key. Property generally holds value while method is to take certain action on object.

1.3 Explain how your browser chooses which CSS rule to apply to a tag in the case where there are multiple rules that could apply. (3 points)

If there are multiple CSS rules conflicting toward the same element, the browser should follow the most specific rule. Since Id is more specific than class tag, so id wins out. For the same reason, class tag wins over an element tag. If there are multiple css rules at the same level, the one declared the last should be applied.

1.4 State **four** total advantages of “separation of concerns,” for any permutations of that term we discussed in class. (4 points)

It is the idea that computer programs should be separated into distinct sections that deal with single feature. For system’s behavior it is beneficial to have an external js implementation to only take care of the system’s action. For styling, having external css style will help with easily modifying style features when required. For overall page, it is required to build html neatly to debug well in the progress.

**Part 2**

Here is documentation for a totally free, no sign-up required, API: <https://www.frankfurter.app/docs/>

You are going to make me an app to display the monetary conversion rate from Euro to many other currencies.

You must use the /latest endpoint (<https://api.frankfurter.app/latest>). You may make an API call or you may download the data to your hard drive (make sure the file name ends in .json) to then be served. In either case, you must use an AJAX request to retrieve the JSON data when displaying it in your app.

You must create buttons for **at least 5** of the different currency conversions that the API request gave you. When clicking on a button, an event must trigger that toggles display of that particular currency conversion.

Be creative! In the grading rubric, half of the score for HTML/CSS and JS is creativity. The other half is implementing the above correctly. I want to see a lot more than black text on a white background.

Finally, write a README.md file explaining everything you did and documents your creativity. This file should be several paragraphs in length, at a minimum. Good long-form paragraphs have at least 4 sentences in them.

**Submission**

1. Create a new **branch** in your individual lab repo on GitHub named **quiz1**.
2. Push everything you want us to grade into your **quiz1** branch.
3. **Do not** merge that branch into main.
4. Failure to use a separate branch will result in a 15 point reduction from your quiz grade.
5. Failure to name the branch correctly will result in a 20 point reduction from your quiz grade.
6. Merging the quiz1 branch into main will result in a 30 point reduction from your quiz grade.
7. The above 3 items are cumulative in the case of multiple errors.
8. **Pushing to your quiz1 branch with a timestamp after 2:00 PM (Section 1) or 4:00 PM (Section 2) will result in an automatic 0 for the quiz.**

**Rubric**

* Part 1: 20 points
* Part 2: HTML & CSS (35 points), Javascript (35 points), README.md (10 points)
* **TOTAL: 100 points**

**Extra Credit (+5 points)**

1. In what year did Prof. Plotka graduate from RPI? What was his major?

1987, Computer Science