9/25/24, 9:44 PM CS375 Fall 2024-25

<u>CS375</u> <u>Readings</u> <u>Labs</u> <u>Homeworks</u>

Reading 1b: Intro to JavaScript

These readings will introduce the JavaScript (JS) programming language's basic syntax. Later on, we'll use JS to add interactivity to webpages and write webservers.

- 1. How to execute JavaScript
- 2. <u>Variables, types, operators</u>
- 3. Basic syntax, conditionals, if-statements, functions
- 4. Objects, undefined/null, arrays

Reading questions

Write the following functions in a file named test.js and submit that for grading. For each problem, you can assume the user will always call the function with valid input.

Write a function named evenIdxPositiveSum that takes a list of numbers as input and returns a sum of all the elements at even indices if they're positive. For example, evenIdxPositiveSum([-2, 3, 1, 24, -8, -9, 10]) should return 1 + 10 = 11.

Q2 Write a function named filterer that takes a list and a function (which returns a boolean) as input, and returns a new list containing only the elements from the original list for which the function returned true. For example:

```
let isEven = x => x % 2 == 0;
filterer([1, 2, 3, 4, 5, 6], isEven); // should return [2, 4, 6]
```

Your function cannot use the filter method.

Q3 Write a function named builder which takes two lists (each with the same length) as input, and returns an object where each of elements in the first list are keys and each of the elements in the second list are values. For example:

```
let keys = ["a", "b", "c"];
let values = [1, 2, 3];
builder(keys, values); // should return {a: 1, b: 2, c: 3}
```