# CMPS 2680 Homework 8

Spring 2024

### **More Loops**

- The For Of Loop
- The For In Loop
- The While Loop
- Array.forEach()

#### **More About Functions**

Functions can be stored in variables, and even passed to functions as arguments.

• <u>Callback Functions</u>

Functions can be stored in variables, and even passed to functions as arguments.

A function that is passed as an argument to another function to be called later is called a CALLBACK.

• Anonymous Functions

Callbacks can be predefined/named functions or ANONYMOUS functions that are defined at the time they are passed to another function.

Example:

```
function hello(){
    alert("hello");
}

// Using the predefined hello function as a callback
window.addEventListener("load", hello);

// Using an anonymous function as a callback
window.addEventListener("load", function() {
    alert("world");
});
```

#### **HTML Collections**

- While <u>getElementById</u> returns a single HTML element, some functions like <u>getElementsByClassName</u> and <u>getElementsByTagName</u> return a group of objects called an <u>HTML Collection</u>. An html collection can be iterated through, similar to an array.
- For example, to get all elements on a page and add the class listItem you could do this:

```
const items = document.getElementsByTagName("li");
for (let item of items) {
   item.classList.add("listItem");
}
```

## **Creating HTML Elements**

- To create a new HTML element: <u>document.createElement</u>
- To add the new element as a child to an existing element: appendChild
- For example, to create a element and place it inside the <body> element:

```
const pTag = document.createElement("p");
document.body.appendChild(pTag);
```