LESSON 02: INTRO TO RESPONSIVE WEB DEVELOPMENT

JAVASCRIPT & RESPONSIVE DESIGN

LESSON 02, SECT. 05 INTRO TO ITERATION ("LOOPING")

JAVASCRIPT & RESPONSIVE DESIGN

LOOPS!

> Sometimes you want to repeat the same task over and over again. Instead of just copying the task over and over we can use a loop to have the computer do it for us.

> The basic syntax is:

```
for (counter; check the counter;
Increment/decrement the counter) {
// codes
}
```

LOOPS!

```javascript
for (let i = 0; i < 5; i++) {
    console.log('hi');
}

// hi
// hi
// hi
// hi
// hi
```

Wait...why did he start at zero?

> Did I make a weird typo?

> Nope.

> Computer Science by tradition starts counting at zero. It's complicated why, and out of the scope for this class, but something to investigate on your own.

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LOOPS!

While Loops

```
while (condition is true) {
    // codes
}



let x = 0;



while (x < 5) {
  console.log(x);
  x++;
}
```

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LOOPS!

Do while Loops

Will run the loop at least once, regardless of if the condition is true, then the check will kick in.

```
let result = "";
let i = 0;

do {
  i = i + 1;
  result = result + i;
} while (i < 5);

console.log(result);
```

LOOPS!

Loops inside of loops!

You can loop inside of a loop

```
for (let i = 0; i < 4; i++) {

  for (let j = 1; j < 6; j++) {
    console.log('hi');
  }
}
```

INFINITE LOOPS

What happens if your loop never ends?

```
for (let i = 0; i >= 0; i++) {
  console.log(i);
}
```

What happens here?

INFINITE LOOPS

> You will have to manually stop an infinite loop. Your computer might crash, but, if not, you will have to do it yourself.

> Generally control-c will stop processes, but if a loop is browser-based you will have to quit the browser. Sometimes you will have to force quit the program.

> In Mac's the force quit is in the apple menu => force quit and choose the program.

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INFINITE LOOPS

For Windows...

> **Step 1:** Open the Task Manager, by pressing **Ctrl + Shift + Esc** keyboard shortcut or by right clicking on your Windows 10 taskbar and then selecting **Task Manager**.

> **Step 2:** If the Task Manager is displayed with a simple interface, click the **More details** button on the lower left corner to display its full screen.

> **Step 3:** Select the **Processes** tab, and you will find the unresponsive program under the Apps section. To force the program to quit, just click on the program to highlight it, and then click the **End task** button in the lower right corner of the Task Manager window, or right click on the program, and select **End task**.

DID YOU GET IT?

> Do you know how to....

— Open the console and use console.log?

— Use basic variables?

— Write a loop?

— Force quit a program?

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