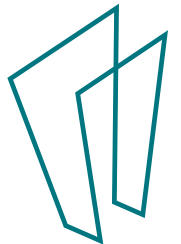SKOKIE
PUBLIC
LIBRARY

JavaScript Basics

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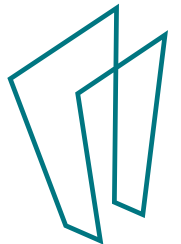
Setting expectations

Coding requires:

- Time
- Patience
- Grit

Good coders are:

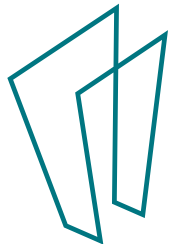- Determined problem-solvers

- Resourceful

- Creative

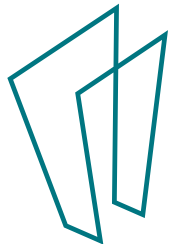# What to learn

Where to start?

- HTML
- CSS
- JavaScript

Where to get help

Stuck?

- Google
- [Stack Overflow](#)
- Documentation
  - https://developer.mozilla.org/en-US/docs/Web/JavaScript
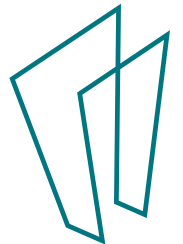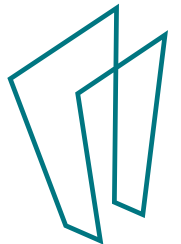
Review

Introducing JavaScript

Syntax

- A programming language's vocabulary and grammar

- Just as a sentence ends in a period, a JavaScript statement ends in a semicolon.

- Once you learn one language, learning another is easier!

Executing a Script

- Statements run one after another.
- The first statement needs to be complete before the next one runs.

app.js

```javascript
1  alert("#1) Hello!");
2  document.write("#2)
•  How are you?");
3
```

index.html

```html
1   <!DOCTYPE html>
2   <html>
3     <head>
4       <title>Example Page</title>
5       <script src="app.js"></script>
6
7       <script type="text/javascript">
8         document.write("#3) I am doing
•         great!");
9         console.log("Program complete!")
10      </script>
11
12    </head>
13    <body>
14
15    </body>
16  </html>
17
```
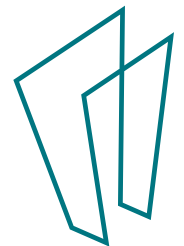
The Console

- Chrome Console Keyboard Shortcuts
  - Windows: Ctrl + Shift + J
  - Mac: Cmd + Option + J
- Firefox Console Keyboard Shortcuts
  - Windows: Ctrl + Shift + K
  - Mac: Cmd + Option + K
- Internet Explorer Console Keyboard Shortcuts
  - F12 key
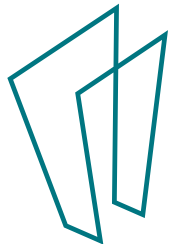- Safari Console Keyboard Shortcuts
  - Cmd + Option + C

Storing and Tracking Information with Variables

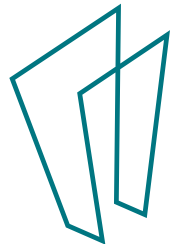# Storing and Tracking Information with Variables

- Creating and naming variables

- Strings and numbers

- Concatenation

Creating and naming variables

- Be descriptive!
- Can contain letters, numbers, the dollar sign ($) and underscores (_).
- Cannot start with a number
- Cannot contain <u>reserved names</u>

-Can separate words with underscores or camelCase

```
1  var fruit = "apple";
2  var quantity_of_fruit = 12;
3
```

Strings

- Within quotes.

- Be consistent with single or double quotes.

- Need to escape a quotation mark or apostrophe?

```
1  var message = "How's your day?"
2  var story = 'And then she said, "Coding is
•  fun!"'
3  var comment = 'It\'s great!'
4
```
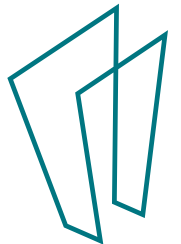
Numbers

- Not within quotes
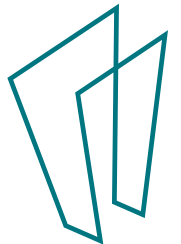- You'll learn more in the next module!

```
1    var score = 150;
2
3
```

Prompt()

- Capture visitor input, store it in a variable

```
1  var first_name = prompt("What's your first
   name?");
2
```
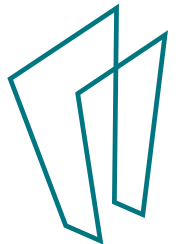
Concatenation

- Combining strings

```
1  var food = "pizza"
2  var message = "My favorite food is " + food +
•  "."
3  // "My favorite food is pizza."
4  var breakfast_foods = "eggs"
5  breakfast_foods += " and waffles"
6  // "eggs and waffles"
```
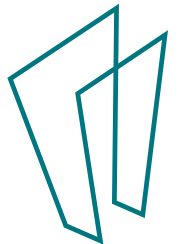
Properties and Methods

- Property:

  - .length returns the number of characters inside a string

Properties and Methods

- Method
    - .toUpperCase() returns a copy of a string with all uppercase letters
    - .toLowerCase() returns a copy of a string with all lowercase letters

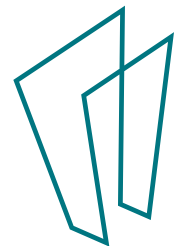# Properties and Methods

```
>  var name = "Stephen"
   name.length
<· 7

>  name.toUpperCase();
<· "STEPHEN"

>  name.toLowerCase();
<· "stephen"
```

Questions?