

CS211 JavaScript Programming

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Lesson Objectives

- New FALL2018 Requirements
- Why Learn JavaScript?
- Front-End vs. Back-End vs. Full-Stack
- Top Programming Languages 2018
- Reply to Email that Syllabus received on Day 1.
- Online Resource: www.w3schools.com
- In Class Exercise: HTML Basics

Microsoft Technology Associate (MTA) Certifications



Starting Fall 2018

Changes to the Associate in Computer Science Program

OLD Course	NEW Course
CS102 Computer Operations	CS212 Python Programming
CS103 RPG	CS213 PHP Programming
CS110 Introduction to Internet	CS211 JavaScript Programming
CS252 Advanced RPG	CS299 Computer Science Capstone

Why Learn JavaScript?

JavaScript is one of the 3 languages all **WEB DEVELOPERS** must learn:

1. HTML is to tell the browser what **content** is being displayed.
 - **HTML – HyperText Markup Language**
2. CSS is used to add color and **style** to the web page.
 - **CSS – Cascading Style Sheet**
3. JavaScript to program the behavior of web pages to make it **dynamic** and **interactive**.

Why Learn JavaScript?

- Not to be confused with Java, JavaScript allows you to build **interactive** websites.
- You must learn JavaScript if you want to get into:
 1. **Web Development**,
 2. if you're planning on being a **Front-End** developer
 3. or on using JavaScript for **Back-End** development.

Front-End vs. Back-End vs. Full-Stack

- **From** <https://blog.udacity.com/2014/12/front-end-vs-back-end-vs-full-stack-web-developers.html>
- **Front-End Developer**
 - The front end of a website is the part that users interact with.
 - Everything that you see when you're navigating around the Internet, from fonts and colors to dropdown menus and sliders.
 - The web site is a combo of HTML, CSS, and JavaScript being controlled by your computer's browser.

Front-End vs. Back-End vs. Full-Stack

- **Back-End Developer**

- So what makes the front end of a website possible?
- Where is all that data stored?
- The back end of a website consists of a server, an application, and a database.
- A back-end developer builds and maintains the technology that powers those components which, together, enable the user-facing side of the website to even exist in the first place.























Front-End vs. Back-End vs. Full-Stack

- **Full-Stack Developer**

- Can work cross-functionally on the full “stack” of technology
- Both the Front-End and Back-End.

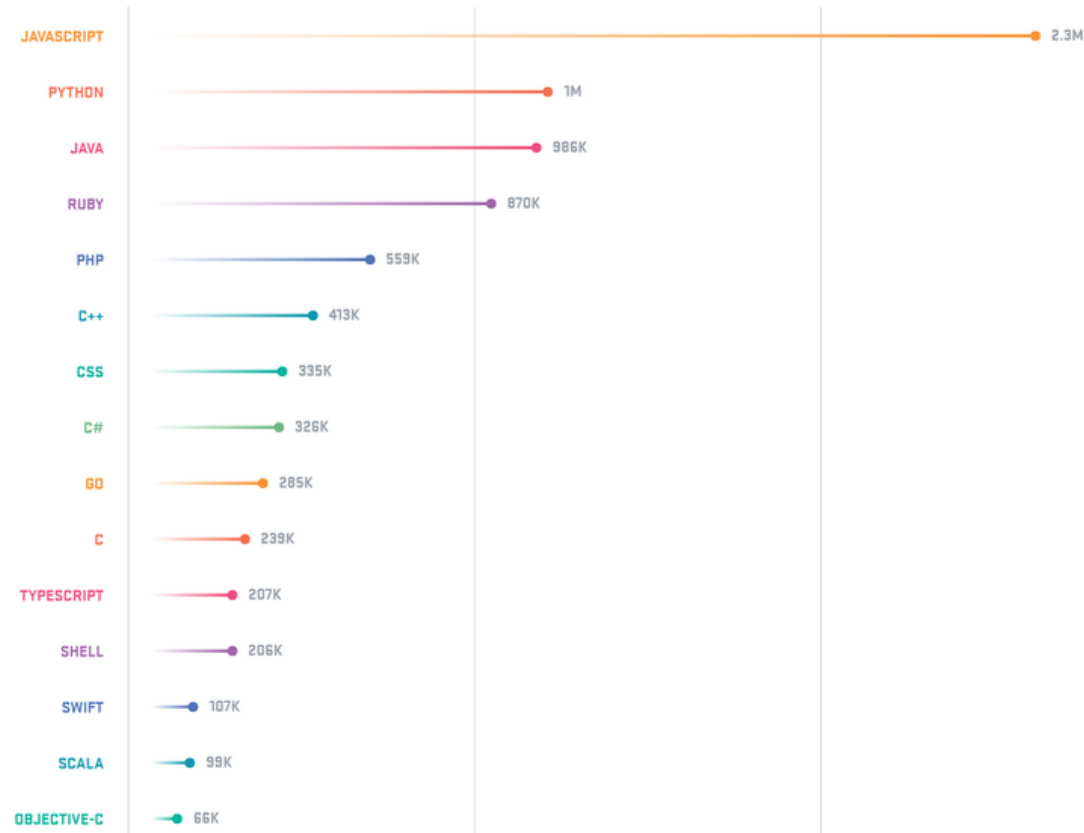
2018 Top Programming Languages (List from IEEE Spectrum (July 2018))

Source: <https://spectrum.ieee.org/at-work/innovation/the-2018-top-programming-languages>

Language Rank	Types	Spectrum Ranking
1. Python	  	100.0
2. C++	  	98.4
3. C	  	98.2
4. Java	  	97.5
5. C#	  	89.8
6. PHP		85.4
7. R		83.3
8. JavaScript	 	82.8
9. Go	 	76.7
10. Assembly		74.5

15 Most Popular Language on GitHub (July 2018)

Source: (<https://octoverse.github.com/>)



GCC Web Page Source (www.guamcc.edu)

1. View HTML Code

- `<html>`, `</html>`

2. View CSS Code

- `<style>`, `</style>`

3. View JavaScript

- `<script>`, `</script>`

BEST ADVICE

- Use the many Internet resources to view examples of how to write code in JavaScript.