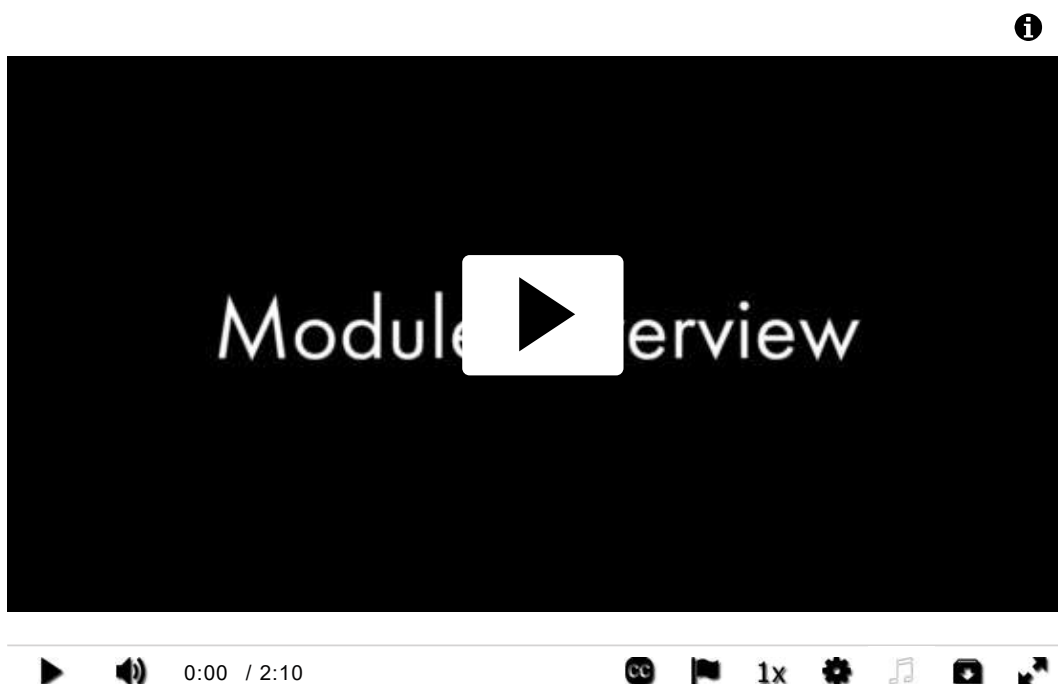


Introduction to JavaScript

Introduction

This module will be the first in a several weeks set of modules on JavaScript (JS). This week, you will set up your JS development environment and learn about the aspects of JavaScript which are similar to C++. In the coming weeks, you will learn about the more eccentric pieces of JS as well as some more advanced programming techniques like asynchronous and event driven programming.



Key Questions ?

What is a dynamically typed language?

What is an interpreted language?

Where can JavaScript be run?

What are the primitive types in JavaScript?

If something is not a primitive type in JS, what is it?

Is the *function* keyword needed to create a callable function? What is its significance?

How are functions defined in JavaScript?

What is JSON? And what is its relationship to objects?

What tools can we use to debug JavaScript?

Assignment Overview

No major assignment this week. Instead, there are smaller activities that will be graded on a pass/fail basis based on if a reasonable amount of effort was put forward. This is all material that you should know, but depending on your comfort with these topics from your intro classes, you may need to spend more time in one area or another brushing up on skills.

Explore the Topics

A Look at the Big Picture JavaScript Features ([javascript-features.html](#))

Getting Your JavaScript Development Environment Developing ([js-dev-environment.html](#))

A Variety of Types (or lack thereof) and Variables in JavaScript ([javascript-variables.html](#))

Functions in JavaScript ([javascript-functions.html](#))

Objects and their Notation in JavaScript ([javascript-objects.html](#))

Additional Resources

Eloquent JavaScript 1-4 (<http://eloquentjavascript.net/>). Read chapters 1-4 of Eloquent JavaScript. It is a lot of material, but much of it is very similar to C++ so you need not read it that carefully. Future chapters will contain a lot more new information and there will accordingly be less reading.

Reflection

Welcome to JavaScript. Lots of stuff looks more or less the same. Some stuff looks different. So far, I have tried to hide the really different stuff that we will talk about later. Think about some programs you have written in C++, then consider what it would look like to write them in JavaScript. Would you write more code or less code? Where do you think you would have an easier time with the flexible type system in JavaScript? Where would you rather have the rigid types in C/C++?