Setting up

✓ **Video:** Introduction to Programming with JavaScript
3 min

✓ **Video:** How is JavaScript used in the real world?
4 min

Discussion Prompt: What do you hope to learn?
10 min

Reading: Course syllabus
5 min

✓ **Reading:** How to be successful in this course
10 min

Reading: How to Position Yourself for a New Career
10 min

Reading: How to uncover job opportunities
10 min

▷ **Video:** Setting up VS code (Optional)
5 min

Welcome to Programming

Conditionals and Loops

Course syllabus

This course is the second of a series that aims to help you learn more about web development.

In this course, you will explore the following:

Module 1: Introduction to JavaScript

In this module, you are introduced to JavaScript. You'll learn why JavaScript is so integral to software development. And you'll get an overview of how to write JavaScript code inside the browser. Furthermore, you will learn about the most common operators as well as conditional statements and loops.

After completing this module, you will be able to:

- Explain the importance of JavaScript in software development
- Demonstrate how to write JavaScript code inside the browser
- Demonstrate how to write basic JavaScript code
- List common operators, conditional statements and loops
- Demonstrate how to use variables and output their value in the console

Module 2: The building blocks of a program

Here you'll learn how to use objects, arrays and functions. In addition, you will learn about the most common built-in methods, and the difference between undefined, null and empty strings. And you'll explore both error handling and defensive programming.

After completing this module, you will be able to:

- Build and use objects, arrays, and functions
- List some common built-in methods on built-in objects
- Describe handling bugs and errors using try, catch, throw, and defensive programming
- Explain the difference between undefined, null, and empty strings
- Demonstrate how to write basic code using arrays, objects and functions

Module 3: Programming paradigms

This module is about functional programming and the object oriented programming paradigm. You will learn what scope is in JavaScript. You'll explore the differences between var, let and const. And you'll learn how to use classes and inheritance in object oriented programming. Additionally, you'll explore how to use write JavaScript using modern features like spread and rest. You will build code that can manipulate the DOM and handle events. And you will use JSON in JavaScript.

After completing this module, you will be able to:

- Outline the tenets of the functional programming and object oriented programming paradigm
- Describe how scope works in JavaScript
- List the differences between var, let, and const
- Use classes and inheritance in OOP in JavaScript
- Write JavaScript code using more modern features like spread, rest, template strings and modules
- Build code that manipulates the DOM and handles events
- Use JSON in JavaScript

Module 4: Testing and compatibility

Here you will learn about Node.js and npm. And you will explore how to install npm packages and how to work with package.json. Furthermore, you will learn about testing in JavaScript and you'll code a simple unit test in Jest.

After completing this module, you will be able to:

- Describe Node.js and npm
- Explain how to install npm packages
- Describe how to work with package.json
- Explain the process of testing in JavaScript
- List the three most prevalent kinds of testing
- Demonstrate how to code a simple unit test in Jest

Module 5: Graded assessment

In the final module, you'll learn about the graded assessment. After you complete the individual units in this module, you'll synthesize the skills you gained from the course to create code for the "Little lemon receipt maker ".

You'll also have to opportunity to reflect on the course content and the learning path that lies ahead.

[Mark as completed]