

# JavaScript for Beginners Syllabus

**OUR PART-TIME, REMOTE, INTRODUCTORY COURSE** 

# **OUR MISSION**

Our mission is to disrupt the way software engineering is taught and to develop an exceptional network of software engineers, who are technically brilliant, collaborative, supportive, and passionate about pushing the engineering community forward. JavaScript for Beginners is designed to be an accessible starting point for anyone looking to begin their software engineering education.

### **ABOUT JAVASCRIPT FOR BEGINNERS**

JavaScript for Beginners is a part-time, remote program, consisting of two consecutive Saturday sessions and homework in between. The program is designed for those with no coding experience, so it will cover JavaScript fundamentals and offer a broader context to how coding works. The program gives students a launching point to continue their JavaScript studies, prepare for CS Prep, and build a future in software engineering.

#### CLASSROOM EXPERIENCE

JavaScript for Beginners is a completely remote course. We use an immersive learning environment, where you'll be able to interact directly with your instructor and ask questions

during lecture. One instructor will lead your time in the course and be your main mentor as you learn to code.

Our online learning environment also offers functionality to facilitate pair programming, allowing close connections to form with your classmates. You'll be part of a slack team where you can ask questions during the week between classes, so you can continue to push through blocks and advance your coding knowledge.

# **CURRICULUM OVERVIEW**

The curriculum for JavaScript for Beginners is carefully constructed to give both a broad introduction to what programming is, as well as cover fundamental JavaScript concepts, so you can solve challenges and build projects with confidence.

# Curriculum components:

- Programming basics
  - Variables storing and using data
  - Control flow looping and when to run code
- JavaScript principles
  - Functions saving and using code
  - Objects and arrays storing more complex data
- Programming culture
  - How the web works
  - A history of programming why learn JavaScript?
- Projects and soft skills
  - Build a unique text adventure game
  - Pair programming

#### **DAILY SCHEDULE**

JavaScript for Beginners is a combination of live lectures and pair programming sessions, where you'll work through challenges to cement the concepts covered.

- Saturday 1 Part 1 Lecture: Welcome, Why JavaScript, Intro to Programming
  - After meeting your cohort mates, you'll dive right into the background of programming, so you can understand the whole picture before focusing on JavaScript.
- Saturday 1 Part 2 Lecture: Variables, Primitive Data Types, Objects & Arrays
  - After you understand the background of programming, we'll cover core
    JavaScript concepts that will create the foundation for the topics covered
    throughout the course. You'll cement these concepts through pair
    programming a core aspect of all Codesmith courses and the best way to
    learn how to program.
- Saturday 1 Part 3: Lecture & Pair Programming: Loops & Control Flow
  - We'll go over how to control the flow of our code by building logic that allows it to make decisions about when to run blocks of code and repeat tasks until specified criteria are met. You'll start pair programming on challenges and then continue working through these concepts in your homework.
- Sunday through Friday
  - To advance your learning between sessions, you'll be assigned coding challenges related to concepts covered on day 1.
- Saturday 2 Part 1 Lecture: How the Web Works
  - To kick off Day 2, we'll jump into a background on how the web works, covering the client-server relationship, the cloud, and how HTML, CSS and JavaScript work together to display webpages.
- Saturday 1 Part 2 Lecture & Pair Programming: Functions, Execution Context & Scope
  - We'll continue through fundamental JavaScript, covering functions, one of the key concepts in programming. You will pair program and work on your technical communication with your partner.
- Saturday 2 Part 3 Project: Text Adventure Game
  - Building projects is essential to your growth as a developer because it forces
    you to hit blocks, whereas coding challenges will not! We'll finish this course by
    building a text adventure game and showcasing your new JavaScript skill set.
    You'll also have the option to do a technical presentation on your project to the
    rest of your cohort on the Monday after the course finishes.

# PREPARE FOR JAVASCRIPT FOR BEGINNERS

This course is designed for those with no JavaScript or coding experience! You're eligible to apply without ever writing a line of code. Before the course begins, we recommend completing the <a href="Precourse - Part 1 Unit">Precourse - Part 1 Unit</a> on CSX, our free online learning platform. Having a basic familiarity

with the concepts we'll cover in the course will help with your ability to absorb the information and ensure you're getting the most out of it.

# AFTER JAVASCRIPT FOR BEGINNERS

This course is the perfect stepping stone to <u>CS Prep</u>, our part-time, online program that is designed to prepare you for advanced coding bootcamps, like our full-time immersive program. The content covered in JavaScript for Beginners will give you the foundation needed to get the most out of CS Prep.

If you are accepted into CS Prep, and later into the <u>Software Engineering Immersive Program</u>, your JavaScript for Beginners tuition will be applied to the next program you take.

We also recommend continuing your education with our free, weekly workshops, hosted in-person in LA and NYC, as well as streamed online. You can see the upcoming events schedule <a href="here">here</a>.