

1 week

**1) Introduction to Javascript**

Data Types, Variables, Null and Undefined, Useful Built-in Functions; JS Stalker and Age calculator exercises.

**2) Javascript Basics: Control Flow**

Boolean Logic, Logical Operators, Conditionals, While Loops, For Loops; Guessing game, While Loop exercises, Annoy-o-matic, For loop exercises.

**3) Javascript Basics: Functions**

Arguments, Functions, Higher Order Functions, Scope; functions problem set

**Javascript Basics: Arrays**

Arrays Methods, Array Iteration, forEach; Array problem set

**4) Javascript Basics: Objects**

Comparing Objects and Arrays, Nested Objects and Arrays, Adding Objects to Arrays, The keyword This; api, objects manipulation exercise

**5) DOM Manipulation, Advanced DOM Manipulation, Color Game Project**

2 week

**1) Introduction to Workspace**

Set up vuejs, github, terminal commands,

**Using VueJS to Interact with the DOM**

Understanding vuejs templates, Accessing data in the vue instance, binding to attributes, understanding and using directives, v-once, listening to events, getting event data from the event object, passing arguments to events, listening keyboard events;

Writing javascript in the templates, using two-way bindings, computed, watchers, dynamic styling with css, v-if

**3) Project: The Monster Slayer -- explanation of refactoring**

**4) Understanding the VueJS instance**

Vuejs lifecycle, vuejs instance, mounting a template, using components, components benefits,

**5) Moving to a real development workflow with webpack and vue cli**

3 week

**1) Intro to components**

Storing data in components, registering components locally and globally, creating a components, folder structure,

**Communication between components**

Using props for parent child communication, naming props, validating props, custom events, understanding unidirectional data flow, communicating with callback function, communication between sibling components, centralizing code in an event bus

**Advanced Components Usage**

Slots, dynamic components, lifecycle

**2) Handling user input with forms**

Data binding, radio buttons, checkboxes, dropdowns, v-model;

**Using and creating directives**

Understanding directives

**3) Improving apps with filters and mixins**

**Adding animations and transitions**

A lot...

**4) Connecting to servers via http using vue-resource**

**5) Better State management with vuex**

Week 4

**1) Project: the stock trader**

**2) Firebase**

**3) Project: online chat**

**5) Project: twitter copy**