Velocity

Node & React Bootcamp Syllabus

Aug 22nd - Sep 3rd
Mon - Fri

Velocity

Dan Kwon
Instructor

Dan is a full stack developer focusing on building MVPs for early stage startups in New York. As a consultant, he has worked with several startups and development agencies over a three year span. Dan specializes in iOS, backend technologies such as Node.JS, Google Compute Engine, Heroku, and AWS as well as front end MVC frameworks such as Angular JS. Dan graduated from Cornell University where he walked to class in the snow, uphill both ways.

Overview

Intro
The Node & React Bootcamp is a 6-week program designed for working professionals who aim to switch careers into software. We will cover all aspects of server and front end development. The server stack is Node JS - a highly popular JavaScript based platform for developing web services (API) and dynamic sites. The front end stack is React - a quickly growing front end library developed by Facebook which is revolutionizing the way UIs are created. Both Node and React will be part of the software landscape for the foreseeable future.

Outcome
Towards the end of the bootcamp, we shift our focus towards two areas:

1) Developing your portfolio
2) Finding entry level positions

There is no greater way to demonstrate your skill than by publishing an actual site with real users. The last six weeks of the bootcamp will be devoted to development of fully featured site with real functionality. This portion will include user acquisition strategies, basic SEO techniques and content marketing.

Tuition
Tuition for the course is $6,500 with a $1,500 deposit. We offer tuition assistance and discounts for qualified students. For more information, email katrina@velocity360.io.

Course Outline

Unit 1 - JavaScript Fundamentals, HTML/CSS
- Variables, objects, methods, properties
- Object Oriented Programming
- HTML elements
- CSS styling
- Bootstrap
- DOM mutations with JS
- JS events

Unit 2 - Node JS, Express, MongoDB
- The Express framework for Node
- Node Package Manager
- Client-Server Architecture
- Model-View-Controller
- HTTP Requests
- JSON
- MongoDB and Mongoose

Unit 3 - REST API's
- Principles of RESTful design
- GET, POST, PUT, DELETE
- Model-specific controllers
- Querying our database
- Error handling
- Defining our endpoints

Unit 4 - React
- React View Components
- Component lifecycle methods
- Nested components
- Communicating between components
- State vs Props
- Handling user interaction in components
- React based styling
- Using third party components
- Webpack, Babel, Gulp
- Writing React in ES6

Unit 5 - Redux, Server-Side React
- Unidirectional data flow with Redux
- Actions, Dispatcher, Stores, Reducers
- Making API calls to your backend
- Updating app state with Redux
- Server actions vs View actions
- Server-side rendering
- Performance optimization

Unit 6 - User Flow
- Maintaining user profiles
- Logging in, sessions, cookie storage
- Logging out