ONSITE BOOTCAMP

Course Packet



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ONSITE BOOTCAMP

CURRICULUM

COMMITMENT

Web Fundamentals LAMP MEAN Ruby on Rails 12 weeks 50-80 hours/week

The Onsite curriculum is hands-on, intensive, and highly in-depth. Under the mentorship of our professional instructors, you will learn 3 full stacks of web development: the LAMP Stack, MEAN Stack, and Ruby on Rails Stack.

As a student in the Onsite program, during the day you will have access to 7 hours/day of instructor support from Monday to Friday and 24/7 access to our state-of-the-art facility. Our facility includes dual monitor work stations for every student, an immersive learning environment filled with like-minded individuals, a complimentary coffee/tea and snack bar, a fully-equipped kitchen for meals, and more. In the evenings, you will have access to remote instructor support until midnight from Sunday to Thursday and receive an account to access Coding Dojo's online learning platform, which includes volumes of video tutorials for independent studying.

TECHNOLOGIES

SKILLS

WEEK 1-2

HTML5 and CSS3 Twitter Bootstrap, LESS jQuery, jQuery UI/Mobile HTTP Request/Response

Git/GitHub

Basic Algorithms Wireframes and Mockups Responsive Web Design Basic Domain Hosting Code Version Control ERD/Database Design

WEB **FUNDAMENTALS**



WEEK 3-5

PHP MySQL

OOP with PHP

MVC with PHP (Codelgniter) Cloud Server Management

Basic JavaScript Ajax in PHP

Advanced Algorithms Object Oriented Programming

MVC Framework

Building Custom API/crawlers

API Integration Web Security

Deployment, Load Testing, and

Scaling of Web Apps

LAMP



WEEK 6-8

Advanced JavaScript

MongoDB **Express** AngularJS Node.js Socket.IO

Redis

Advanced JS Framework JavaScript Prototypes

Creating Custom JS Libraries OOP and MVC Framework in JS

Building Real-time apps

MEAN



WEEK 9-12

Ruby on Rails

HAML, SASS, CoffeeScript

Ajax in Rails Rails + Node.js

Test Driven Development

Heroku

MVC Framework

Object Relational Mapper Deployment of Rails app

Note: Week 11 to 12 is devoted to project development

RUBY **ON RAILS**



RESIDENCY PROGRAM

WEEK 13-16 The Residency Program is an option we provide to our most dedicated onsite students. It is designed for web developers who wish to strengthen their skills and utilize extra time to build their portfolios, as well as for entrepreneurs who want more time to build their product or develop their unique web application.

During the Residency Program, you will have full access to all of Coding Dojo's resources, including daily lectures, mentorship meetings, and hands-on learning with knowledgeable teaching assistants.

By the end of the bootcamp, the projects that you've built in different languages will become your personal portfolio, which is better than any resume you can write. PREREQUISITES 6

- A passing grade on the Coding Challenge
- Spent 100 hours of learning how to code on his/her own*

Despite our formal requirements, ultimately the only true prerequisite to be accepted and to be successful within the Coding Dojo program is a relentless work ethic. Regardless of prior experience, the students who put the most time into the program, always get the most of out it. It's common for even the most seasoned developers and less experienced students to equally struggle within our program, as we cover 3 full stacks of web development. And for the less experienced, they are highly encouraged to study the pre-bootcamp course work before attending the bootcamp. Naturally they have a bit more catch-up work to do. With every graduating cohort, the students who worked the hardest always found the greatest success – regardless of their formal backgrounds.

^{*}If you have spent less than 100 hours of coding on your own, you may still be accepted into the program. However all students with no experience are required to complete the pre-bootcamp course work.

1. APPLICATION

Prospective students must first submit an admissions application. This is a brief 2-4 minute application that requires you to answer basic questions about your professional background. Don't worry, we aren't looking for coding experience specifically. This is simply a chance for us to learn more about you.

2. CODING CHALLENGE

Step two is to pass the Coding Challenge. The Coding Challenge is a brief 8 multiple choice quiz, that is designed to gauge your current proficiency and ability to problem solve. A score of 5 out of 8 is required to pass. If you score lower than a 5, you may study more and retake the quiz when you are ready.

3. INTERVIEW

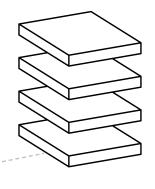
After passing the Coding Challenge, you will need to schedule an interview with an admissions advisor. At this point in the application process, our staff will decide if the program is the right fit for you. This is also an opportunity for you to learn more about our program and to see if Coding Dojo is the right fit for you as well.

4. ACCEPTANCE LETTER

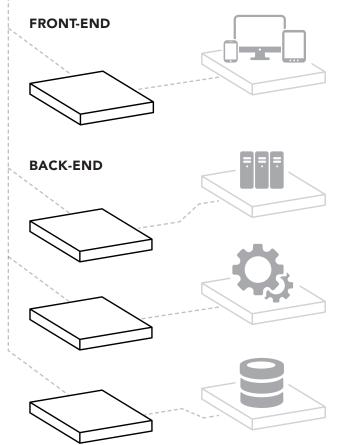
If selected to attend, you will receive an acceptance letter through email and a link to submit your safety deposit, which will reserve your seat in the Coding Dojo program. You will also receive instructions concerning the required preparation for your upcoming program.

5. SAFETY DEPOSIT

To reserve your seat you must submit your safety deposit before the deposit deadline. Due to strict scheduling restrictions and high demand, the safety deposit is non-refundable.



A full stack, also known as a software stack or bundle, is a set of software components needed to create a complete web application. A web application can be divided into two areas: front-end and back-end. The front-end contains client-side languages and frameworks. The back-end consists of web servers, back-end languages/frameworks, and databases.



CLIENT-SIDE LANGUAGES/FRAMEWORKS

HTML*
CSS
JAVASCRIPT
ANGULAR
JQUERY

WEB SERVERS

APACHE* NGINX IIS NODE.JS

BACK-END LANGUAGES/FRAMEWORKS

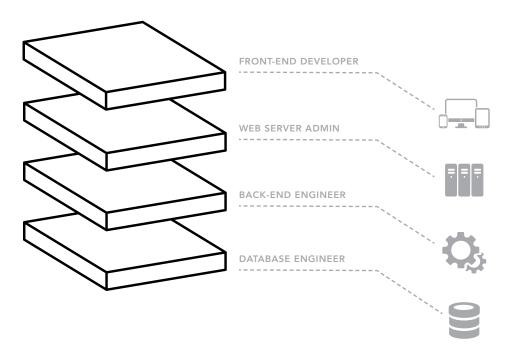
PHP/CODEIGNITER* RUBY/RAILS PYTHON/DJANGO

DATABASES

MYSQL* MONGODB REDIS

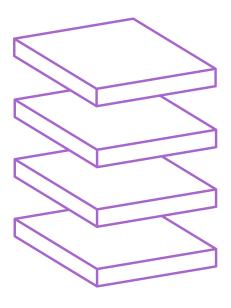
^{*}Popular languages and technologies

FULL STACK DEVELOPER



Full Stack Developers are well-rounded software engineers who have the know-how to independently build fully functional platforms, from the front-end to the back-end. Conventionally, web development requires several variations of engineers: front-end developers, web server administrators, back-end engineers, and database engineers. However a full stack developer is all of the above, and whether in a large or small engineering team, s/he can add value and insight to all layers of the project.

LAMP



The LAMP stack, also known as the PHP stack, is a full stack for building dynamic web applications that is centered around the PHP language. LAMP is an acronym for an archetypal model of web service solution stacks, originally consisting of interchangeable components: Linux, the Apache HTTP Server, the MySQL relational database management system, and the PHP language.* As a full stack, LAMP is well known for fostering solid programming fundamentals. Historically, it is also older than most full stacks and is very well documented.

Companies using LAMP:









HTML/CSS JAVASCRIPT AJAX



WED SERVERS

APACHE



BACK-END LANGUAGES / FRAMEWORKS

PHP CODEIGNITER

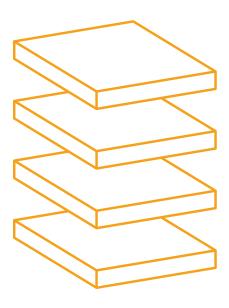


DATABASES

MYSQL

^{*}Certain components of this full stack are interchangeable with comparable technologies.

MEAN



The MEAN stack, often referred to as the Javascript stack, is an open-source full stack for building dynamic web applications centered around the Javascript language. MEAN refers to the four components of the full stack: MongoDB, Express, Angular.JS, and Node.JS.* The MEAN stack is well known for its speed to build web applications, steep learning curve due to its relatively young age and lack of solid documentation, and its growing popularity among startups.











HTML/CSS JAVASCRIPT ANGULAR.JS



NODE.JS



BACK-END LANGUAGES / FRAMEWORKS

EXPRESS SOCKET.IO NODE.JS

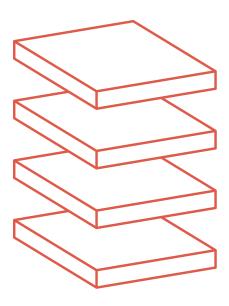


DATABASES

MONGO DB

^{*}Certain components of this full stack are interchangeable with comparable technologies.

RUBY ON RAILS



The Ruby on Rails stack is an open-source full stack for building dynamic web applications that is centered around the Ruby language.* This stack is intended for experienced developers, and is well known for its emphasis on the MVC framework and ability to build applications quickly with the use of "gems". Therefore, we teach Ruby on Rails last within the curriculum to ensure that our less-experienced students have the foundational skills necessary to understand the underlying complexities.

Companies using Ruby on Rails:









HTML/CSS
JAVASCRIPT
COFFEESCRIPT



WEB SERVERS

HEROKU NGINX



BACK-END LANGUAGES / FRAMEWORKS

RUBY RAILS



DATABASES

REDIS POSTGRESQL

^{*}Certain components of this full stack are interchangeable with comparable technologies.