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Full-Stack Web Developer

Full-Stack Web Developer Program

Code Labs is a local tech education and on-the-job training program provided by experienced software developers to adults in rural communities in **Missouri** and **Kentucky.** Our Full-Stack Web Developer program provides the skills, practical experience, and job readiness to prepare you for high salary, high quality entry-level software developer jobs. **No prior experience is necessary,** and scholarships are provided to those admitted to the program.

About the Software Developer Occupation

Annual mean wage of software developers in May 2020*
Southeast Missouri: $67,750 - $92,020
West Kentucky: $54,990 - $80,330

Annual mean wage for all occupations in May 2020
Southeast Missouri: $39,876
West Kentucky: $42,130

*Results may vary, depending on company and position. These numbers are not intended to reflect what a Code Labs participant can expect immediately after graduation.

FULL STACK

Full stack is a layer of software web development which consists of the front-end and back-end portions of an application.

A full-stack web developer is comfortable working with both back-end and front-end technologies which make a website or application function properly.

Front End

Front end is what the users will see or interact with.

We teach you the languages and tools you'll need to create what users see and how they could interact with a Website or a mobile application.

Back End

Back-end is part of the application which the users are not able to see, such as application logic, database, server, etc.

You'll learn the logic on how software application work behind the scene to produce desired contents or results.

Database

You'll understand how user information is stored. You'll learn other relevant information such as setting things up in the cloud.

Essentially a full-stack developer does both front-end and back-end development.

Fastest growing occupation

What is Full-Stack Web Development?

According to Skillcrush.com, a full-stack developer is a web developer or engineer who works with both the front and back ends of a website or application—meaning they can tackle projects that involve databases, building user-facing websites, or even work with clients during the planning phase of projects.

When we refer to the stack, we mean all the different applications that are communicating with one another and all the different programs that are working with each other to take a request from a user's browser or mobile phone and all the APIs and servers and databases that are talking to one another to respond to that request.

But that's not all. They also understand how those pieces work together, and they're able to create the communication that exists between those two sides. A full-stack developer is not just looking at front-end and back-end, but also at how those two pieces communicate and how they integrate together.

Full stack web developers are familiar with

- ✓ HTML
- ✓ CSS
- ✓ JavaScript
- ✓ Ruby
- ✓ PHP
- ✓ Python

Not All Bootcamps are Created Equal

Lots of bootcamps say you don't need any coding experience, and then require a coding test. Or say they are flexible, and require 50-60 hours per week. Or say you can get support, but only at certain times and it's online. Or say it's affordable, but then you have to borrow thousands to participate. We're different. Our program is designed for you to succeed!

Organized for Your Success!

- ✅ **You can do this.** All you need is determination and some basic analytical thinking skills - we will teach you the tech stuff.

- ✅ **Online and personal instruction.** Our 20-week courses include a blend of self-paced online learning and local classroom instruction two nights per week.

- ✅ **Keep earning while you're learning.** You'll only need to dedicate 20 hours per week, so you can keep earning income while you start your new career.

- ✅ **So affordable, it's free.** ALL TRAINEES admitted to our program receive scholarships to attend. That's right, what might cost you $10-$20,000 is paid for by our partners and supporters.

Hands-on Training from Local Pros!

- ✅ **Learn from real software developers.** Your training is by individuals who make their living developing software and love to help others.

- ✅ **Learn. Build. Test.** Learn to code by coding - starting with basics skills and continuing to apply what you learn to real development projects.

- ✅ **Off and online support.** Your instructors are available when you need them, including weekly face-to-face sessions.

- ✅ **8 to 1 instructor ratio.** Your professional trainers work with small teams within each cohort so you get the support you need.

Local and Remote Employment Opportunities!

- ✅ **REAL employer capstone projects.** Complete capstone projects provided by local and remote employer sponsors.

- ✅ **Mock interviews with local employers.** Receive resume and interview preparation mentoring and complete mock interviews.

- ✅ **Membership in the Rural Source National Network.** Connect to employers and clients across the country recruiting developers from rural communities.

- ✅ **Regional professional development.** Get plugged into the tech sector in your region and participate in networking and skill development.

What will you learn?

Top skills and tools covered:

Front-end Web Development

From Setup to Deployment, this course covers it all! After learning the basics of HTML, CSS, and JavaScript you will learn the comprehensive tools in Angular including Components, Directives, Services, Forms, Http Access, Authentication, Optimizing an Angular App with Modules and Offline Compilation, and much more - and in the end: You'll learn how to deploy an application!

HTML5 CSS3 JS

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What You Will Learn

1: Intro to HTML and CSS

Link: Udacity Free Course - Intro to HTML and CSS

Learning Objective 1 - Learn HTML tags, discover the tree-structure format of HTML, and explore working with a text editor.

Learning Objective 2 - Add headers to structure a page, create a list of items, and add imagery to an existing site.

Learning Objective 3 - Write a CSS rule set, use CSS units to place content on the page, and explore developer tools used to debug CSS.

Learning Objective 4 - Learn to style images and fonts. Create and link a stylesheet.

2: Intro to JavaScript

Link: Udacity FREE Course - Intro to JavaScript

Learning Objective 1 - Learn the fundamentals of JavaScript and what it is.

Learning Objective 2 - Use a variety of data types to represent data in your code and learn how to store data using variables.

Learning Objective 3 - Translate real-life decisions into code using conditional statements. Model more complex problems using logical operators.

Learning Objective 4 - Learn how to execute code with loop and iteration fundamentals.

Learning Objective 5 - Organize code by declaring functions and writing function expressions. Demystify tricky JavaScript behavior by learning about scope and hosting.

Learning Objective 6 - Store collections of data in arrays and manipulate them using common properties and methods.

Learning Objective 7 - Create JavaScript objects to represent complex data types.

3: Intro to Angular

Learning Objective 1 - Learn the basics of Angular, how an Angular App gets started, and explore the importance of components.

4: Master Angular 10

Link: Udemy- Angular, The Complete Guide-guide-to-angular-2/

Learning Objective 1 - Understand Angular error messages and how to debug your code.

Learning Objective 2 - Learn how to split apps into different components. Take a deep dive into data binding and directives.

Learning Objective 3 - Get an understanding of how to use services and dependency injection. Explore ways to use services for cross-component communication.

Learning Objective 4 - Learn the basics of routing: how to set up and load routes, styling active routes, setting up child routes, and more.

Learning Objective 5 - Understand observables, what they are, and how to custom build them.

Learning Objective 6 - Gain knowledge on forms within Angular apps, how to create them, use them, and more.

Learning Objective 7 - Introduction on using pipes and why they are useful. Learn how to create multiple and custom pipes.

Learning Objective 8 - Understand how to make http requests, learn about the anatomy of the request and how to handle errors.

Learning Objective 9 - Learn about authentication and route protection in Angular. Explore how to prepare the backend, manage signup requests, and implement auto functionalities.

Learning Objective 10 - Introduction to components, how to prepare programmatic creation, and learn about data and event binding.

Learning Objective 11 - Understand modules and optimizing for Angular apps. Gain knowledge on lazy loading and implementation.

Learning Objective 12 - Learn how to prepare deployment of an Angular app using environment variables.

Learning Objective 13 - Explore the creation and integration of animation within an app.

Learning Objective 14 - Introduction to unit testing, Angular as a platform, and taking a closer look at the CLI.

5: Employer Interview
Preparing resumes and interviewing skills
Mock Interviews.

6: Capstone Employer-Sponsored Projects
Teams complete employer-led and sponsored projects
Demo day and presentation to employers.

7: Course Graduation

Careers in Front-End Development

Front-end web development is a great place to start your journey into the world of coding. According to Indeed.com, the average annual salary for front-end web developers is $102K and, at the time of this guide, there were over two thousand open, full-time positions available. Practically every organization in existence is online, making the position of front-end developer extremely popular. With your new skills you are prepared to begin a career in front-end development and enjoy ample career opportunities working almost anywhere, limited only by the availability of an internet connection.

We strongly encourage you to continue your training and learn about back-end development.

Start

Intro to HTML and CSS

Intro to JavaScript

Finish

Intro to Angular

Course Graduation

Front-end Web Development
Learning Pathway

Capstone Employer-Sponsored Projects

Master Angular 10

Employer Interview

Back-end Web Development

This course takes a very structured approach of teaching Rails starting with Ruby - the programming language behind Rails. Trainees acquire skills rapidly; utilizing homework assignments, coding exercises, and free web based resources to go with video instruction.

At first, all the code is done from scratch, limiting the use of shortcuts and generators so trainees can understand what's really going on under the hood of Rails applications and can design them the way they want. Then with solid knowledge and understanding already in place, rapid prototyping methods are introduced in later parts of the course, showing use of generators and scaffolding, finishing with a complete Software as a Service Application that can be used to launch a startup.

What You Will Learn

1: Complete Ruby on Rails Developer

Learning Objective 1 - Learn how to rapidly prototype ideas and turn them into presentable apps.

Learning Objective 2 - Design and build virtually any web application you can imagine.

2: The Ruby Programming Language

Learning Objective 1 - Start working with strings and numbers in Ruby.

Learning Objective 2 - Learn and explore comparison operators, methods, hashes, and branching techniques like if/elseif/else/end block statements.

Learning Objective 3 - Get an intro to object oriented programming, attributes, getters, and setters.

3: Intro Ruby on Rails

Learning Objective 1 - Explore model, view, controller, and rails application structure. Learn and practice the front- and back-end basics of HTML, CSS, Database, and tables in Rails.

Learning Objective 2 - Learn how to perform CRUD operations from the rails console and how to add validations or constraints to models.

Learning Objective 3 - Implement styles for your rails application using Bootstrap. Build and edit homepages and layout links.

Learning Objective 4 - Get an introduction to associations between models and implementation demo using the rails console. Create user profile and administration elements.

Learning Objective 5 - Create category models and build unit tests.

4: Rails Development Project: Message App

Learning Objective 1 - Use real-time rails to build a MessageMe Chat app using ActionCable and web sockets.

Learning Objective 2 - Learn and explore how to create and manage a social media app used for stock tracking. Build email and custom payment functionalities and file uploads.

5: Rails Development Project 2: SaaS App

Learning Objective 1 - Build a Software as a Service project management app. Set up email, milia, and devise, as well as add bootstrap gems for styling.

Learning Objective 2 - Learn how to build homepages, implement projects for tenants, invite new members, integrate stripe and payment processes.

6: Employer Interview
Updating resumes and interviewing skills
Mock Interviews.

7: Capstone Employer-Sponsored Projects
Teams complete employer-led and sponsored projects
Demo day and presentation to employers.

8: Course Graduation

Careers in Full-Stack Development

According to Indeed.com, the average salary for Full-Stack Developers is $108,909. A full-stack developer is a technological jack-of-all-trades, a person capable of working with every level of the application technology stack from the user interface to the database back end. It's one career path recruiters call likely to remain in high demand despite drastic economic shocks to the job market.

Start

Complete Ruby on Rails Developer

The Ruby Programming Language

Finish

Intro Ruby on Rails

Course Graduation

Rails Development Project

Capstone Employer-Sponsored Projects

Back-end Web Development
Learning Pathway

Rails Development Project 2

Employer Interview

Graduate Testimonials and Employment

Before Code Labs, I was a server looking for change, but I had no coding experience. Some advice on starting Code Labs and learning anything is consistency. Make it a priority. Also take what you learn and apply that to your side projects. The more interested, the more you learn. To take Code Labs seriously, you need to dedicate 20 hours per week. You won't be sorry that you did!

Roy L
Associate Software Quality
Assurance Engineer, Vizient

Going through Code Labs, I realized how hard of a worker I was. I made new friends that helped me. I can tell other women it is possible to do this. It made me want to show that it can be done.

Kayla B
Associate Software
Engineer, Vizient

Working at a factory, I wanted Code Labs to turn my self taught coding skills into professional ones. It was hard, stayed up late, got up early, but I didn't give up. It turned me from factory worker to associate software engineer. It's changed my life. Start learning now to get ahead of the curve.

Jacob J
Associate Software Engineer, Vizient

Code Labs One was just what I needed. The evening schedule allowed me to keep my full-time job while preparing for my new career. The instructors were local developers who helped, not just with textbook learning, but also with the non-textbook skills such as creating a technical resume, what to expect at a technical interview, developer culture, and what local companies are needing when hiring developers. I highly recommend this program to anyone who is interested in starting a code developer career.

Debbie A
Jr. Web Developer,
Red Letter Communications

Codefi's Code Labs One took my interest in programming and gave me the skill set I needed to get into the computer coding industry. After years working dead end positions, the knowledge I acquired as a Codefi student allowed me to land my dream job as an App Developer and double my income. Codefi changed my life, because before I had only worked jobs, but now I have a career. The program's unique focus on experiential learning with employers was a huge upside and allowed much more in-depth learning than was possible in the classroom alone."

Alex H
App Developer, WW Wood Products

After eight years of being a registered nurse and 12-hour shifts, I wanted something different in my life. I taught myself basic HTML, but my mind would blank applying it to my own projects. Taking Code Labs, I realized I loved solving problems with creativity. I went from being overwhelmingly exhausted to having fun creating and making more money on the side.

Zack A
Associate Software Engineer, Vizient

How to apply & admission to
Front-End Web Development

1
Submit Application

Begin by completing our application:

Link to Application here

You will be asked a few questions about basic demographic information (e.g. name, address, DOB, etc.), about your previous experience, and your motivation for participating in the training program. We do not share or sell any of your information with third-parties, except with public sponsorship agencies for the data that is collected for reporting purposes so we can continue providing scholarships for our programs. Applications are now open!

2
Complete Application Pre-Work Mini Course

To complete your application and be eligible to be admitted into the program, you must complete the online Introduction to HTML and CSS course, provided by Udacity. This course provides some basic knowledge related to creating and styling websites and serves as a foundation for the remainder of the Front-End Web Development course.

Be sure to check the deadline for the course section you were conditionally admitted, for submission of the required course completion certificate.

3
Admission Decision Notification

Unfortunately, a limited number of slots are available for our scholarshipped training program. We do our best to select applicants with the best probability of success, based on the limited information we collect.

Applicants will be notified of their admission status on or before the decision date specified for each course section. Please do not inquire about your application unless you have not heard by that date. Applicants will receive one of these decisions:

Invitation: You will receive an invitation via email. To be fully admitted and begin the course, you must complete an admission pre-work assignment in the next step before the first meeting of the section. If you are unable to complete this pre-work, please let us know immediately so we can invite another eligible applicant for this slot.

Not Invited: Unfortunately, your application did not meet our criteria for admission or there were limited slots available for the course section you attempted. We encourage you to apply to other courses or sections in the future.

4
Complete Admission Pre-Work Mini Course

To finish the admission process and begin the Front-End Web Development course, you must complete the online Introduction to JavaScript course, provided by Udacity. This course prepares you to begin learning and utilizing Angular, a framework built on JavaScript.

How to apply & admission to
Back-End Web Development

1

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Participants in Code Labs Back-End Web Development must have completed Code Labs Front-End Development, or an equivalent training or education program.

**If you previously completed Front-End Web Development, just check the box on the application form and your application will be complete.

2

Submit Prerequisite Evidence

After completing your initial application you will be prompted via email to submit evidence that you have completed training or an education course equivalent to learning outcomes covered in Code Labs' Front-End Web Development. Follow the instructions provided and submit a description of the learning outcomes, experience, and a completion certificate, transcript, or similar document.

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CODE LABS

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The success and growth of the Code Labs program is due to its innovative organization, delivery, and employer integration. Courses in the program are part time, allowing participants to continue earning while learning, and the hands-on practical curriculum is delivered with blends of online learning and local face-to-face instruction. Uniquely, instructors in the program are professional software developers, who are engaged in use of modern languages and tools and dedicated to around the clock support of trainees. Finally, local and remote employers sponsor Code Labs' capstone projects in each course, providing trainees a "real-world" experience interviewing and working with an employer.

Code Labs is owned and operated by Codefi, a group of tech entrepreneurs located in southeast Missouri who partner with private and public groups to deploy an innovation ecosystem to train digital workers and entrepreneurs, build and attract software-focused companies, and create community spaces to expand the digital economy in rural communities.

MISSION

CODEFI

Codefi's mission is to eliminate the skills and opportunity gaps preventing workers and entrepreneurs in rural regions from thriving in the digital economy. In strong digital economies, workers drive innovation and become entrepreneurs, creating local wealth, more economic diversity, and future-proof jobs and occupations.

FAQ