IRON HACK

Learning Web Development

WITH IRONHACK // 2023

This is Ironhack

Welcome, aspiring Ironhacker! We're happy to see you here!

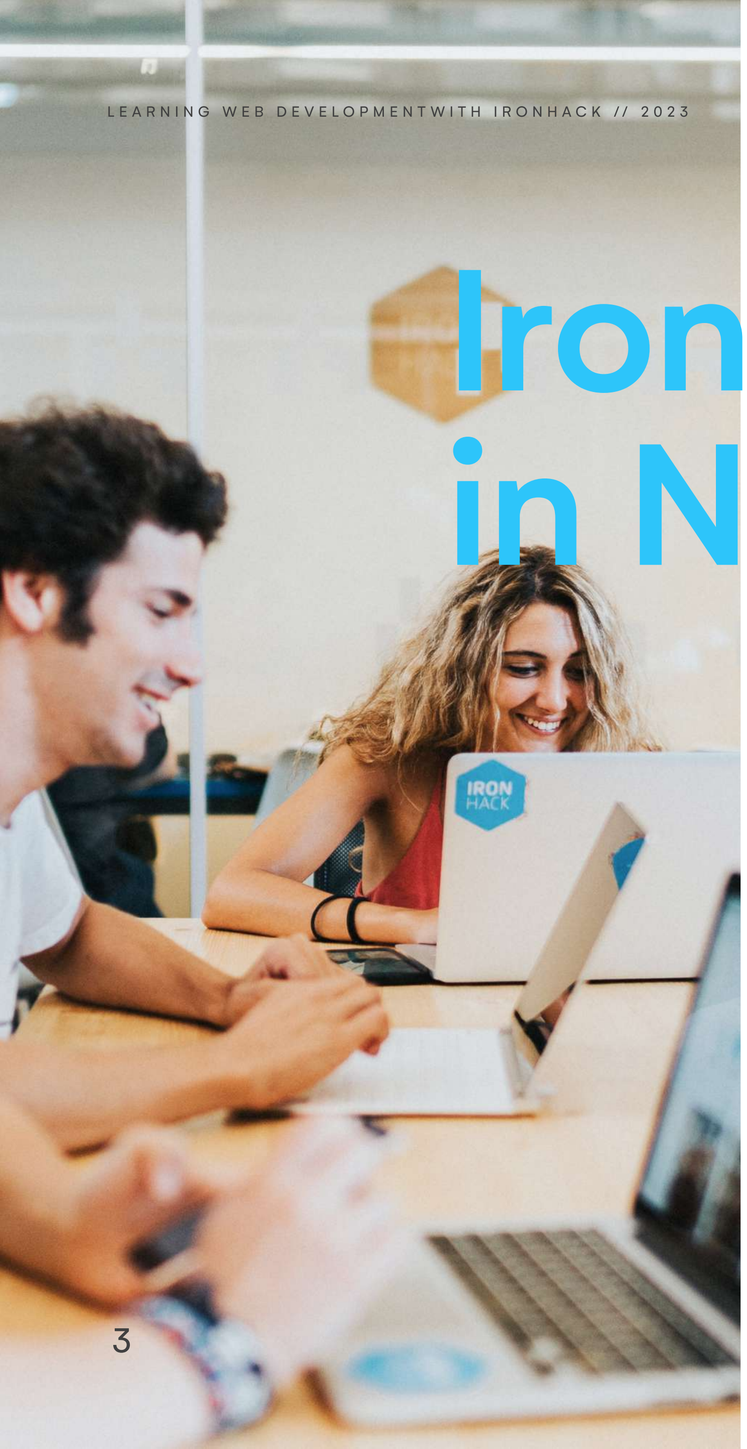
Before we dive into your new Bootcamp, let us tell you a little about who we are and what we do. We help career changers launch their new tech career. How do we do that?

We offer training in the most in-demand skills
Our deep understanding of the market means we know exactly which skills tech companies are looking for, and our alumni walk away with the in-demand skills that'll help them get a job.

We offer life-changing career guidance
We set students on a career path that'll bring them job satisfaction and lead to the role of their dreams.

We're our students' partners, not just a tech school
We're partners for our students beyond graduation, helping them figure out the messy middle of job-hunting.





Ironhack in Numbers

Ironhack was born in: 2013

7

Campuses around the world

1000+

Global hiring partners

12,500+

Students graduated



The Course

Length

400+ total hours
9 Weeks – Full time
24 Weeks – Part time

Format and Schedule

Remote
On Campus; In-person

Learning Outcomes

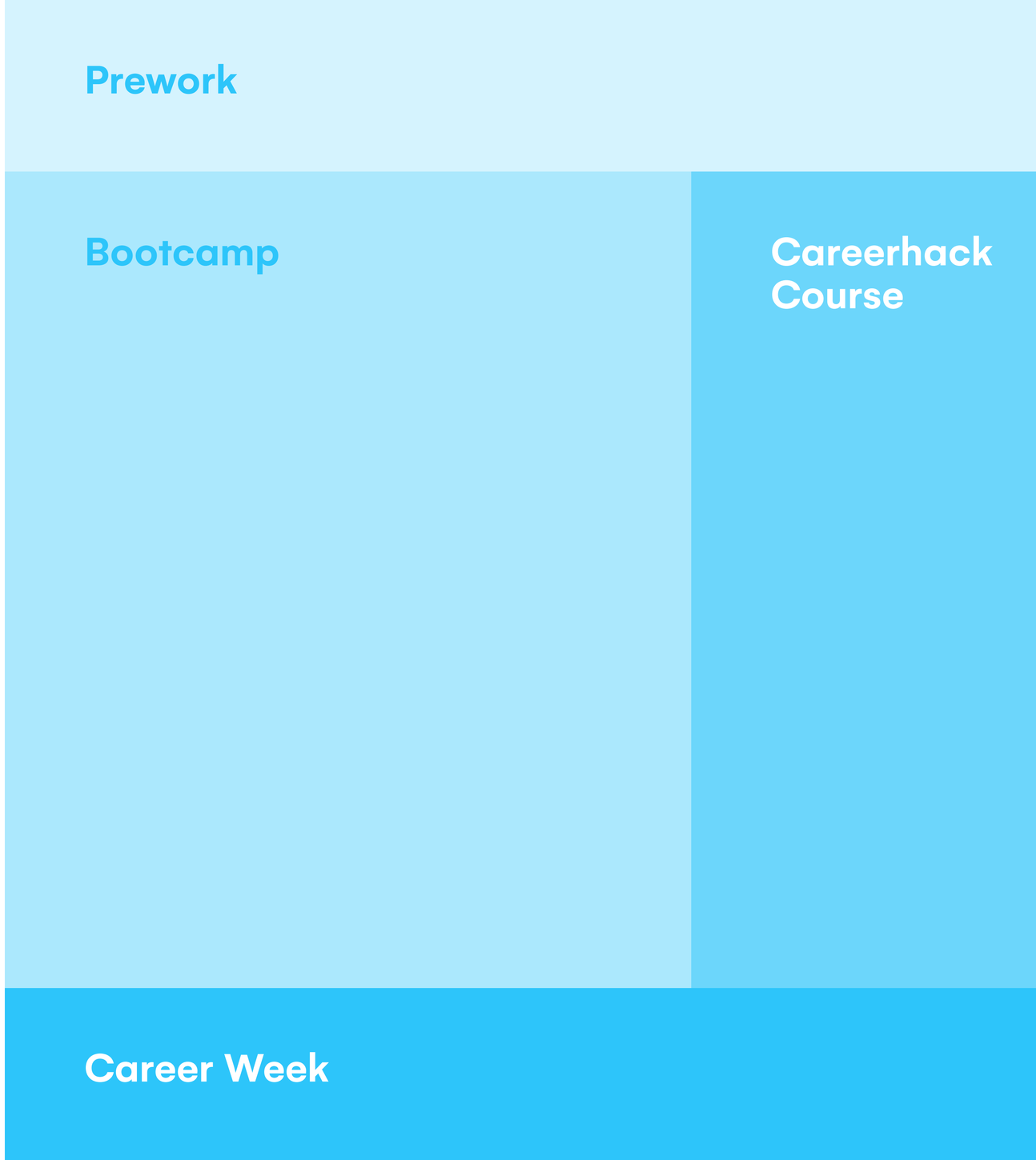
- Use the fundamental components of JavaScript to write programs and applications: Variables and Data types, Conditionals, Loops, Objects and Arrays, Functions, Scope, Event Loop, DOM, Events, and Classes.
- Develop JavaScript applications employing intermediate-level concepts: Prototypal Inheritance, Closures, `this` keyword, Promises, and Async/await.
- Use fundamentals of Object-oriented programming based on JavaScript.
- Create front-end applications using the following technologies and techniques: HTML5, CSS3, JavaScript, Responsive Web Design, and React.
- Create back-end applications using the following technologies and techniques: NodeJS, ExpressJS, REST APIs, and MongoDB.
- Create full-stack applications using a range of techniques and software architectural styles such as REST, SPAs, and Server-Side Rendering.
- Work with MongoDB and write queries to extract information from databases and manipulate data: set up the database, implement CRUD operations, and reference documents.



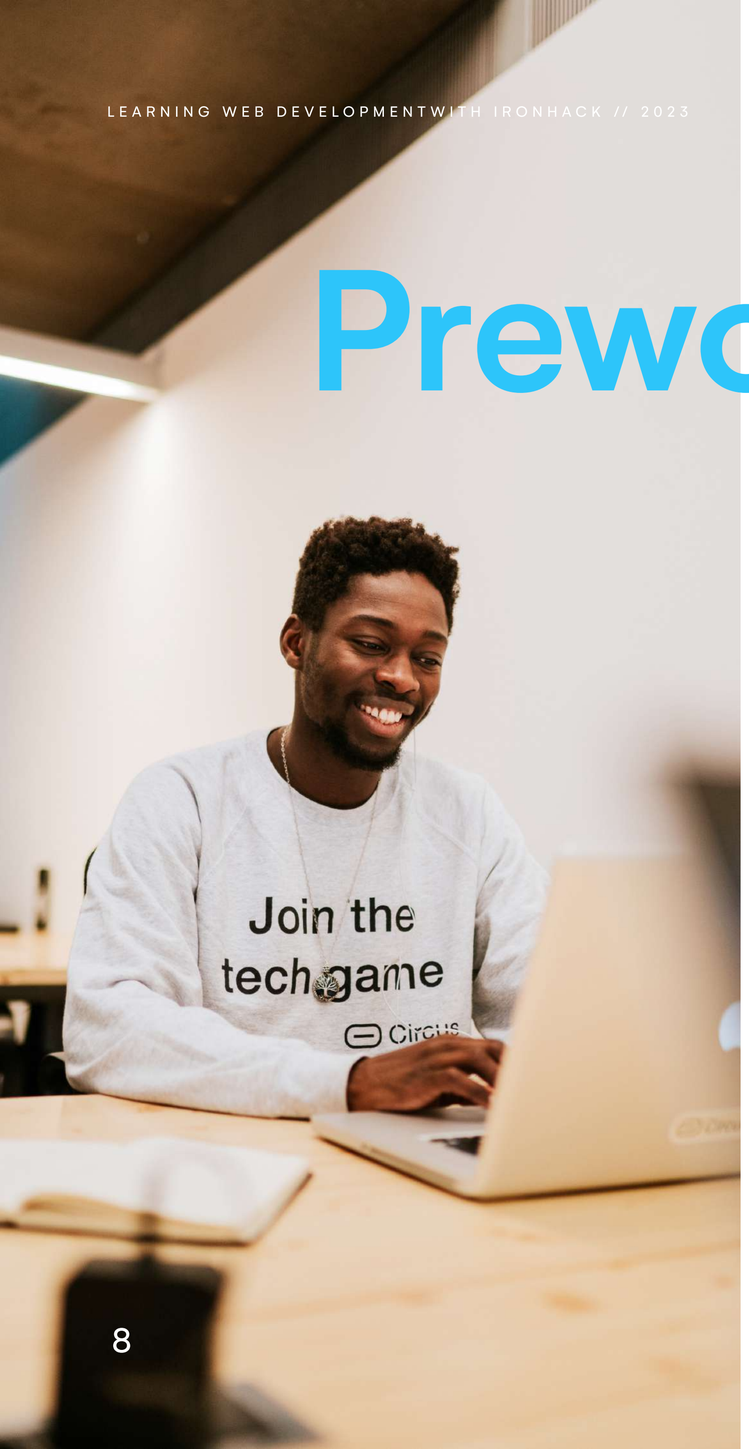
- Create schemas and data models for the MongoDB database using an ODM.
- Implement Authentication & Authorization in a Web application.
- Integrate third-party services (APIs) with an existing front-end or back-end JavaScript application.
- Use Command line, Git, version control, GitHub, and the Gitflow branching model to manage and deploy projects.
- Deploy front-end and back-end applications to a Cloud Service.
- Write clean, modular, and efficient code following best practices (KISS, YAGNI, DRY & SOC).
- Use Agile & Lean as frameworks for product management: standups, retros, MVP, constraints vs. scope, etc., to ensure good collaboration and workflow.
- Employ communication, critical thinking, professionalism, and teamwork skills in a project-based setting.

Course Overview

“Learn by doing” is the best way to describe Ironhack’s educational methodology. We aim to have our learning experiences translate into real-life experiences. One way we deliver this idea is through creating learning activities and projects that require on-the-job skills. Furthermore, we challenge students to be problem-solvers, collaborators, and initiators. Ironhackers leave bootcamps experienced. Period.

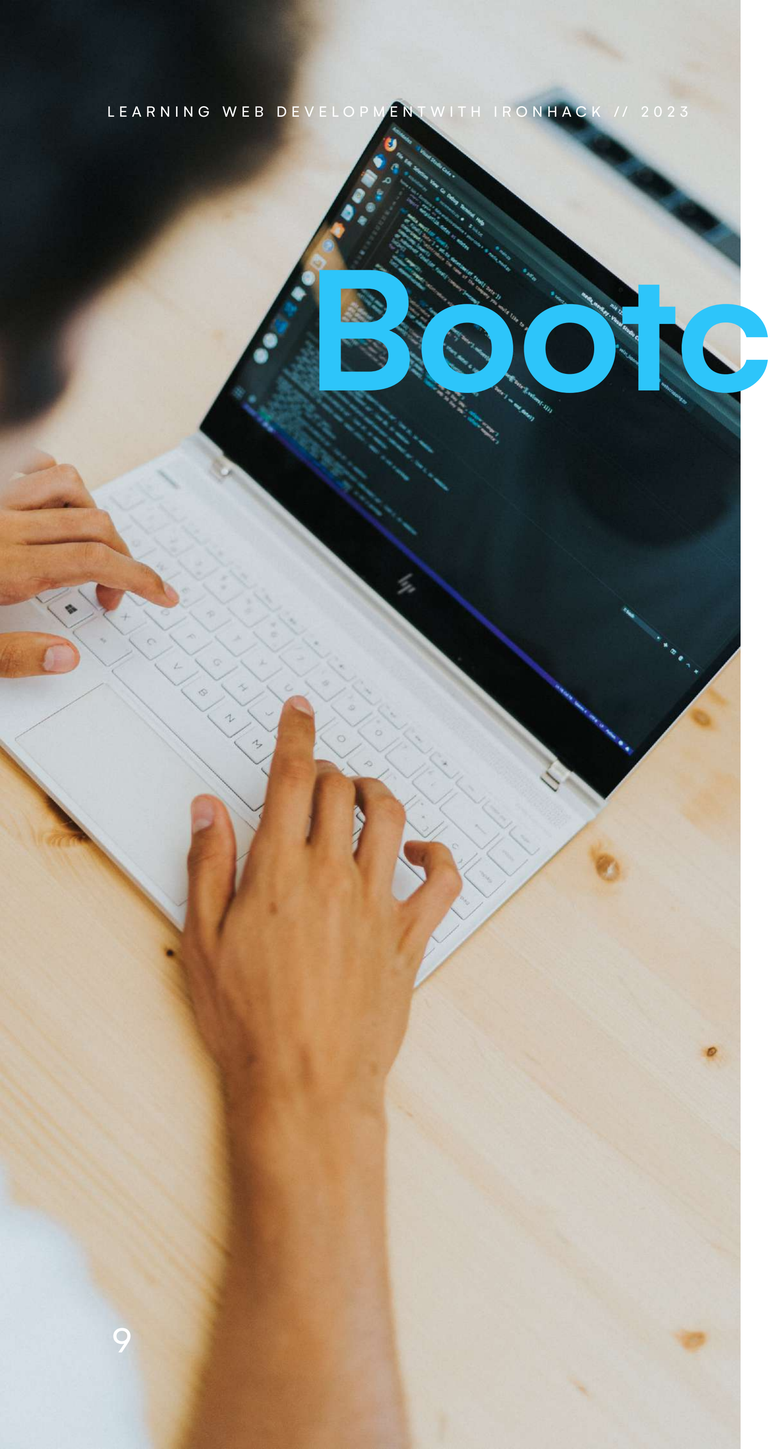


Prework



Get Bootcamp-ready and hit the ground running with 50 hours of fundamental training in JavaScript, HTML, CSS, Git, and GitHub. No matter your previous tech knowledge (or lack of it) this first week will make sure every Ironhacker is set up for success.

Full time students will get 50 hours of training in a combination of self-paced and group activities, guided by an instructor in the week leading up to Bootcamp. **Part time** students will receive the same training, but entirely self-paced for maximum flexibility. You can get started as soon as you become an official student.



Bootcamp

360 + hours // Here, you will start your learning journey with other classmates. Utilizing cohort-based learning, you will cover the following topics and skills:

Client-side development

HTML, CSS, Flexbox, Responsive Web Design, DOM manipulation, Events, Debugging, CSS Frameworks, Static website deployment, Sending form-data, Client-side form validation.

Server-side development

Internet, HTTP, APIs, NodeJS, ExpressJS, Server-Side Rendering (SSR), Authentication & Authorization, CORS, REST, Deployment, API Testing.

Databases

MongoDB, CRUD, ORM/ODM (Mongoose), Data modeling (Model relationships).



JavaScript fundamentals

Variables, Primitive Data Types, Conditionals, Loops, Functions, Arrays, Objects, Classes, Value vs. reference.

Intermediate JavaScript

Higher-order functions, Scope, Hoisting, JavaScript Prototypal, Inheritance, Error handling, Asynchronous JavaScript, Promises Async/await, Fetch API, ES6+.

Advanced JavaScript

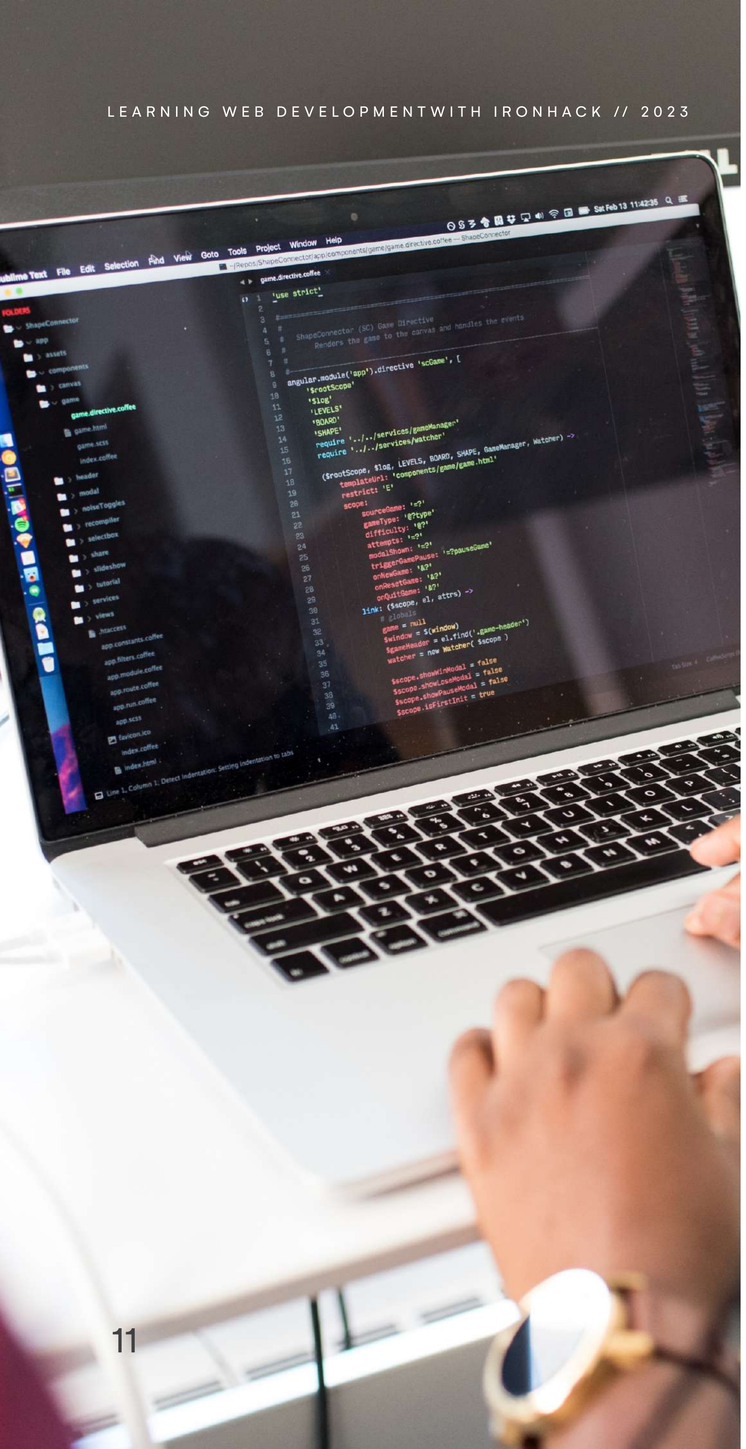
Function Constructor (ES5), Context (this), Closure.

Version Control

Git version control, GitHub, Writing Git commit messages, Git Flow.

Programming fundamentals

Command Line, Object-oriented programming (OOP).



Code Quality

Coding conventions (JavaScript), Code style guide, KISS, YAGNI, DRY, SOC, Project structure.

Software Architecture

Client-server , Model-view-controller (MVC), Multi-page applications (MPA), Single-page applications (SPA).

Project Management

Agile, MVP, Stand-up.

Career development

Pair programming, Code challenges, Communication, Professionalism, Team-work, Project presentation.

Problem Solving

Computational thinking , Algorithmic thinking.

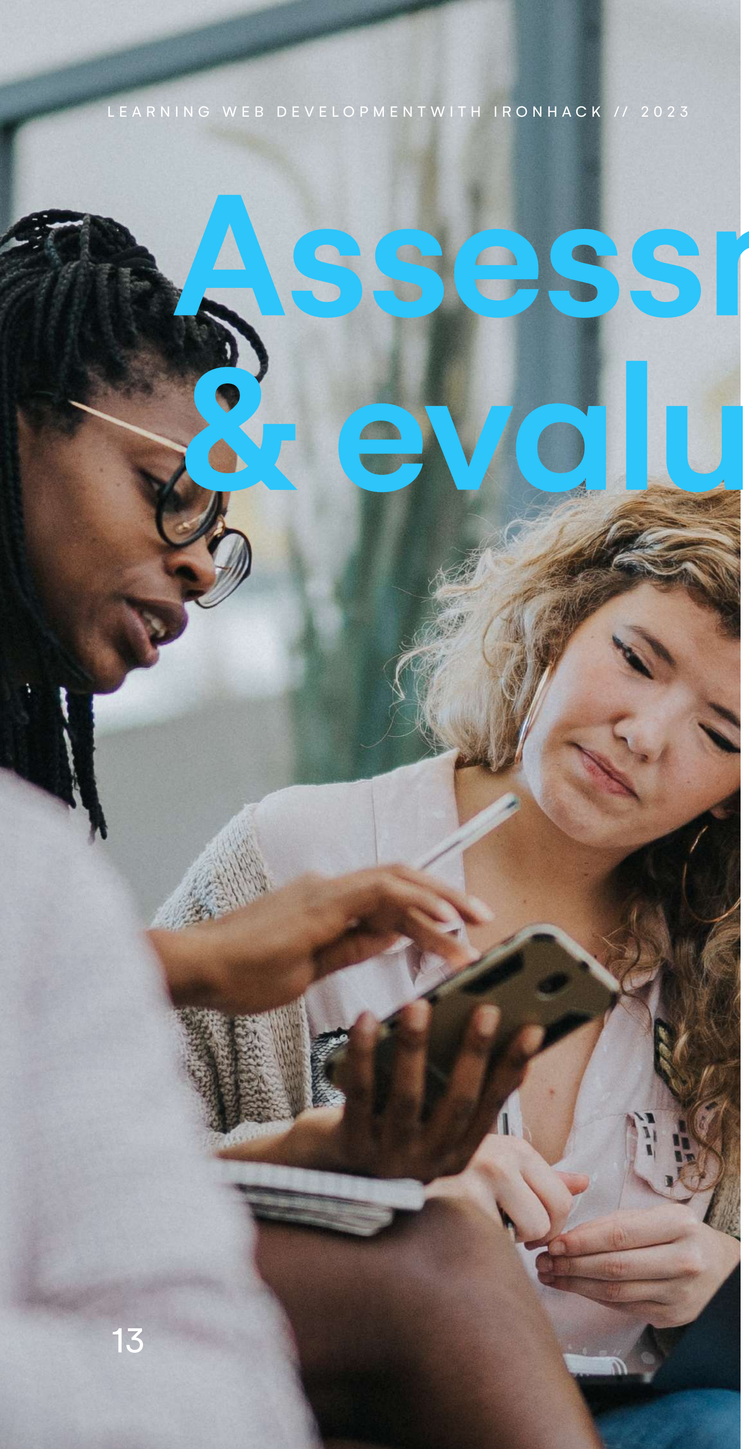


Front-end Applications

Component-based development, Front-end Frameworks - React, JSX, Component State, Component Data Flow, Component Lifecycles, SPA Event handling, SPA & API Integration, SPA - Routing, SPA - State Management.

Throughout the bootcamp, you will do hands-on activities and projects (individual and group) that emulate real-world scenarios. This practice will provide you with experience you can leverage for your professional development. In addition, we provide you with tools to help evaluate your work, so your growth is well guided. Each week is designed with you in mind!

Disclaimer: Course topics are subject to change according to the demands of the job market. We aim to design our curriculum to meet the required skills for junior positions in the tech market. Students who do not complete the activities and final project do not earn a certificate.



Assessment & evaluation

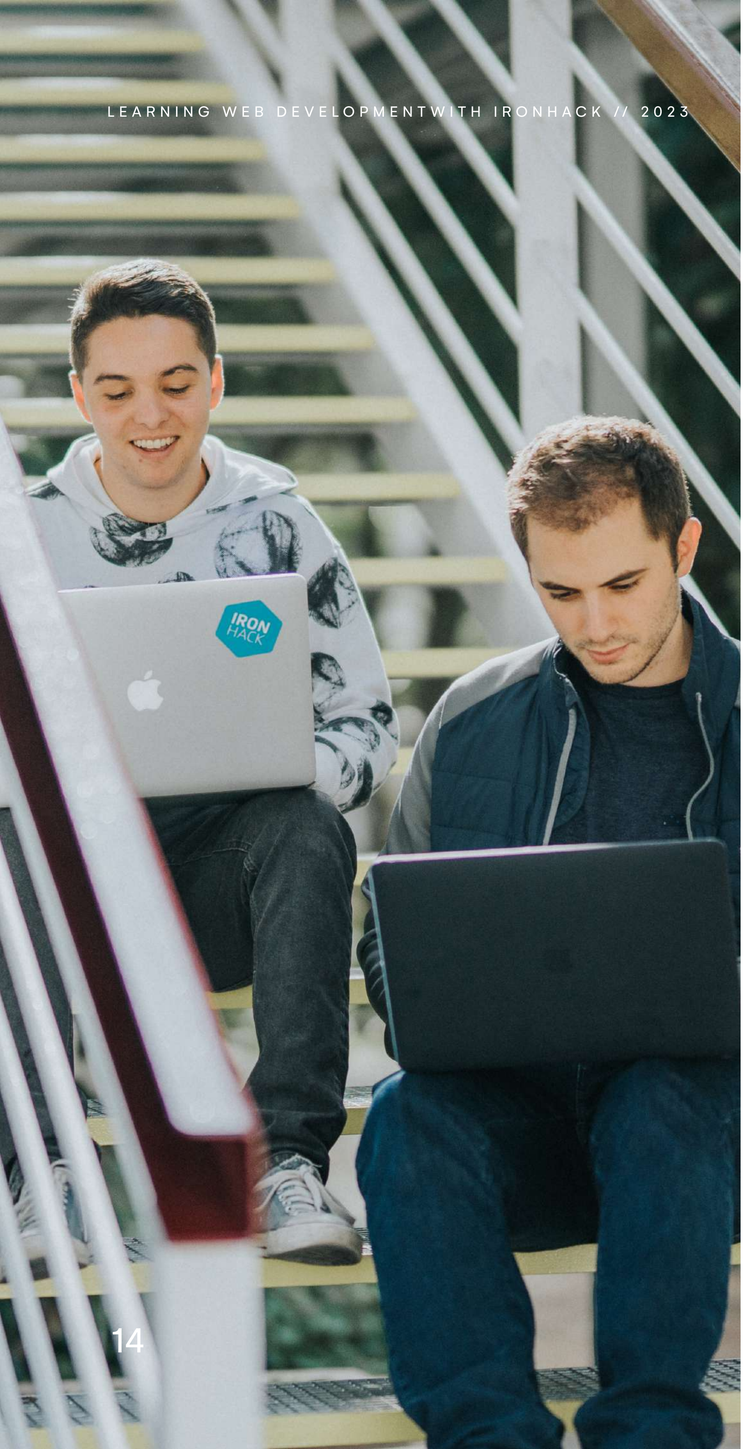
Hands-on activities that will allow you to grow your skills gradually. Most importantly, you can feel yourself progress and understand your strengths and areas where you can improve. This will allow you and the teaching team to make the best plan to achieve your goals: whether that is landing a job in the tech industry or developing your skillset. We perform a mix of formative and summative assessments daily to keep you engaged and on track. The basic components are:

Class activities and checks for understanding

These are small interactions to check that everybody is moving together, getting the concepts and keeping engaged

Labs

Labs help consolidate knowledge and review core concepts that you've learned during that day (or evening). They are designed to help you learn by assessment. You will get regular class feedback on labs.



Projects

Projects are a core part of the learning journey, they summarize the capacities you can demonstrate in different areas. Briefs are adjusted to be engaging, emulate real-world scenarios and portfolio-worthy. By the end of the bootcamp you will be able to include these projects in your portfolio as experience. There's a mix of group and individual projects.

In addition, we provide you with tools to help self-evaluate and peer-evaluate your work. This will allow you to add another skill; self-efficacy, which is key to developing professional autonomy throughout your career trajectory.

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Career Services

By working with a global network of hiring partners, we've got our fingers on the pulse of what companies are looking for in candidates. Our in-house crew of dedicated Career Coaches are HR experts in the tech market, offering one-to-one guidance and support to help you figure out the messy middle of job hunting.

As an Ironhacker, you'll get guidance on how to build your resume, portfolio, and pitch, which we'll also review to make sure you have the best tools for starting the job search. You'll hear from a variety of experts in your field of interest, including tech HR and recruitment experts, to give you a full 360 view of what's up in the tech job market. Get regular email communication with your Career Coach, and attend 1-on-1s to break down blockers or conduct mock interviews.

As an extra boost to your search we'll share your student profile with our network of Hiring Partners, many of whom have already bolstered their tech teams with Ironhack talent! We can also put you in touch with other Ironhack alumni who are working in the same field that you're aiming to get into, so you can learn from their experience.

All Ironhackers have access to our dedicated Career Services as long as they're actively job hunting, for up to a full year post-graduation. Stay connected with your Career Coach, as well as your fellow Ironhackers and our global alumni network.

What are the job roles available to me after bootcamp completion?

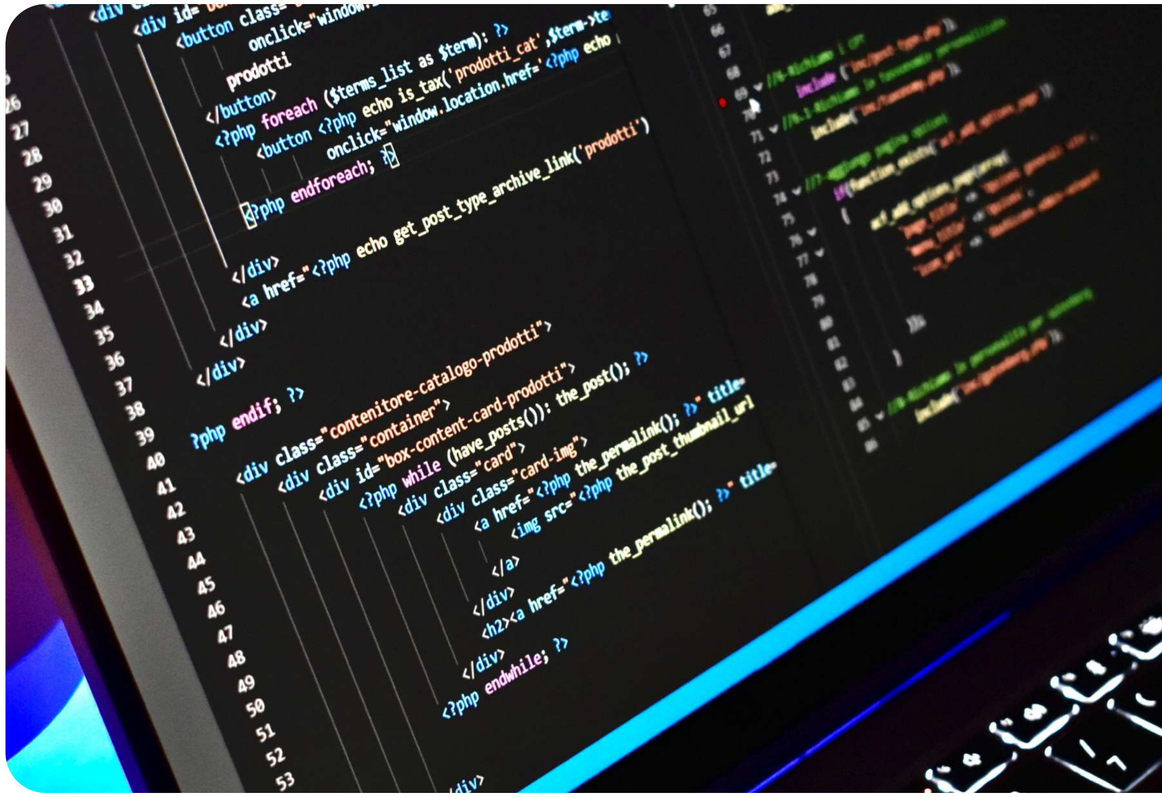
Front-end Developer

Back-end Developer

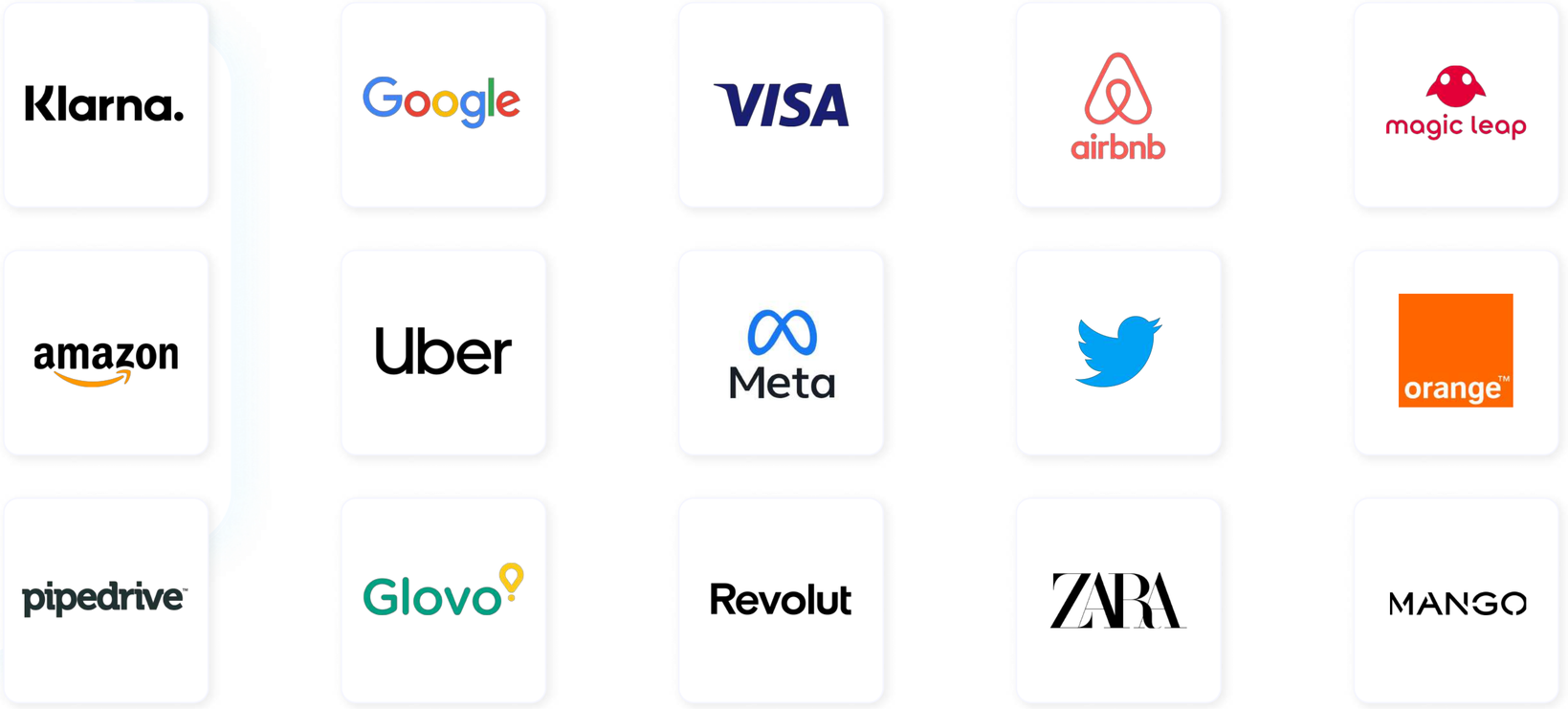
Fullstack Developer

React Developer

Disclaimer: We do not guarantee job placements, but we work very hard to get you employed! Careerweek can run from 3-5 days, depending on the format and campus. Students who do not complete sections 1 & 2 of the Careerhack course before Careerweek are not permitted to join Careerweek.



Hiring Partners





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