The Curriculum. Web Immersive Bootcamp



Fundamental Fridays

- → Programming Tests
- → Computer Science Topics
- → Research, Reflect & Write



Software Fundamentals (1 - 2)

Week 1

FOCAL: Functions, Objects, Conditionals, Arrays, Loops.

Dev Approach: Code Style & Quality, Testing, Debugging, Problem Solving

FF: Programming Test #1 (Mock) && Recursion

Week 2

Asynchronous Control Flow (Callbacks, Promises). Networking, HTTP & APIs.

NPM and Packages. Unit Testing with Mocha & Chai

FF: Programming Test #2 && Object-Oriented Programming



Web App Fundamentals (3 - 5)

Week 3

Your First Web App -- HTTP Servers, Express.js, Cookies, Basic HTML & Forms

FF: Programming Test #3 && Data Structures (Mostly: Trees)

Week 4

Front-end -- Client-side JS. Browsers. jQuery, HTML, CSS, Box Model. AJAX

FF: Programming Test #4 && Algorithm Complexity

Week 5

Data -- Relational Databases, SQL, Data Design. Postgres.

FF: Programming Test #5 (SQL) && Midterm Kickoff!



Web Frameworks (7 - 10)

Lots of time with Modern Web Stacks & Frameworks!

Single Page Apps with React, Webpack, Babel, JSX

Real-time Apps with WebSockets

Automated Testing For Web Applications ... Going beyond Unit Testing

Class-based / Classical OOP with Ruby

Ruby on Rails

Adopting Existing Code ... Mimic the real world / your first job(s)

FF: Research, Reflect, and Write (a blog post / summary)

Choose from a list of topics

+ Programming Tests #6 and #7



Midterm Project (Week 6)

Good Real World Prep!

We define the teams, stack, and requirements (just like in the real world!)
Practice the fundamentals you've learned
Introduction to Project Management, Lifecycle and Collaboration (with Git)
No Lectures this week!

FF: Demo To Peers on Friday (No Programming Test!) && Career / Resume Prep

Pro tips and details about this week will be communicated in W5



Final Project (11 - 12)

Get Creative, Explore, and Build Your CV!

This time, YOU define the teams, stack, and requirements
Bring everything you've learned together (while going beyond)
More Practice with Project Management, Lifecycle and Collaboration

No Lectures, but some advanced topic lectures!

FF: None

Pro tips and further details about this project will be communicated beforehand.



Christmas Break

WE STRONGLY SUGGEST NOT GOING ANYWHERE...

LOL #bootcamp #LHL

No formal content is scheduled.

But it will be buffer time for your mid-term project and you may need it!



Four Major Solo Projects

W3: TinyApp - URL Shortener (Bit.ly Clone)

W4: Tweeter (Twitter Clone)

W7 & W8: PhotoLabs (React)

W9 & 10: Jungle (Rails; not evaluated)



PROGRAMMING TESTS

6 in total, starting in Week 1. Focused on FOCAL not building apps.

Just as important as the projects. No more. No less.

Mock test on W1D5, our first Fundamental Friday



Two Tech Interviews.

Weeks 3 and 9



Quizzes (Multiple choice) In first 5 weeks



```
assessment = {
  completion:
                     [],
  codeReviews:
                     [],
  techInterviews:
                     [],
  projectEvals:
                     [],
  quizAnswers:
                     [],
  testAnswers:
                     [],
  assistances:
```





Thank you.

