

HackerYou Course Syllabus

Advanced Full Stack

CLASS 1

Back-End Development (Overview)

Welcome to Advanced Full Stack Web Application Development! Today we will learn about the structure of an HTTP request, and get an overview of Node and Rails. And finally we'll explore the difference between an API and HTML backend.

CLASS 2

Intro to Express

What's a framework? What's a library? Today we're diving into the Javascript framework ecosystem!

CLASS 3

Routing and JSON

In this class, you'll learn about Express routes. Students will select an existing API and integrate it into an Express app.

CLASS 4

Express and React

We're building on what we learned last class, and exploring how we can use Express with a React application.

CLASS 5

Intro to Mongoose

Today we're going to learn about the database ecosystem, and examine the differences between a relational database and a non-relational one. We will start working with MongoDB to create schemas and models with Mongoose.

CLASS 6

Mongoose - Validation

Building on what we learned last class, today we are going to tackle validation in its various forms.

CLASS 7

Mongoose - Associated Models

Wrapping up Mongoose, today we will learn all about embedding and linking documents in our database, and how we can use Mongoose to do this.

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CLASS 8

Redux I

In this class we'll discuss the differences between Redux and 'pure' React. We will explore the Flux pattern and how Redux helps us control application state. We'll walk through a number of exercises that will help us build our first action, and then create our first store.

CLASS 9

Redux II

Today we'll introduce your final project. Students will build a full-fledged single-page-application using React and Express. We'll add routing and navigation, user authentication, and a backend complete with a REST API.

CLASS 10

Express - Authentication

In this class, students will explore authentication in Express, and develop the skills needed to make an application secure.

CLASS 11

Deployment

This class will be entirely devoted to testing each other's work! Get feedback on your project and prioritize how to fix errors and handle feedback.

CLASS 12

Final Projects & Next Steps

As we wrap up this course, we'll talk about the reality of being a professional application developer, why testing is important, and what the next steps are for those who want to keep learning.

PROJECT TWO

PROJECT TWO

Students will build a single-page-application using React and Express. We'll add routing and navigation, user authentication, and a fully-fledged backend complete with a REST API. Example projects could include blogs, Google maps integrations, online databases, or social tools.