

TINYHOUSE

Week 1

Week 1 is all about **getting started**. In Week 1, we'll look to complete the entirety of Part I of the TinyHouse course where we'll be introduced to all the different tools we'll need to build an entire application. By the end of Week 1, we'll find ourselves having the boilerplate of a fully functioning client and server application.

In week 1, we'll:

- Build our server with [Node](#) & [Express](#).
- Introduce and use [TypeScript](#).
- Set up a [GraphQL](#) API with [Apollo Server](#).
- Persist data with [MongoDB](#).
- Create a [React](#) project with [create-react-app](#).
- Introduce and use [React Hooks](#).
- Use [Apollo Client](#) to make our GraphQL requests.
- Finally, use the [Ant Design UI](#) framework to help style our client application.

Here is a further breakdown of our first week.

Day 1

 Go [here](#) for a detailed breakdown of Week 1 | Day 1.

Module 0

- **Topic:** Course Syllabus & Environment Setup
- **Environment Setup:** [Link](#).

Module 1

- **Topic:** Course Syllabus & Environment Setup
- **Description:** Use Node, Express, TypeScript to build a basic REST API.
- **Introduction Video:** [Link](#).

Day 2

➡ Go [here](#) for a detailed breakdown of Week 1 | Day 2.

Module 2

- **Topic:** Comparing GraphQL/REST APIs
- **Description:** Learn core concepts of GraphQL and understand the difference between REST & GraphQL APIs.
- **Introduction Video:** [Link](#).

Module 3

- **Topic:** Using Apollo Server
- **Description:** Create a GraphQL API with the Apollo Server utility.
- **Introduction Video:** [Link](#)

Module 4

- **Topic:** Storing Data with MongoDB
- **Description:** Use a database to contain any data we want to be persisted.
- **Introduction Video:** [Link](#).

Day 3

➡ Go [here](#) for a detailed breakdown of Week 1 | Day 3.

Module 5

- **Topic:** Getting Started with React
- **Description:** Introduce React as the main tool to build our client application and use the `create-react-app` utility to scaffold a new React application.
- **Introduction Video:** [Link](#).


Module 6

- **Topic:** Building out Listings
- **Description:** We'll have our client application make API requests to our server using GraphQL.
- **Introduction Video:** [Link](#).

Module 7

- **Topic:** GraphQL and React Hooks
- **Description:** Get introduced to React Hooks to display data in our UI as well as handle our GraphQL API requests.
- **Introduction Video:** [Link](#).

Day 4

 Go [here](#) for a detailed breakdown of Week 1 | Day 4.

Module 8

- **Topic:** Introducing React Apollo
- **Description:** We'll take everything we've learned from our custom Hooks implementation and now switch over to using React Apollo to make our GraphQL requests.
- **Introduction Video:** [Link](#).

Module 9

- **Topic:** Styling with Ant Design
- **Description:** In the last module of week 1, we'll see how we can make our app look a little bit nicer by introducing a CSS/UI library.
- **Introduction Video:** [Link](#).