

Intro to Web Dev

Goal:

This aims to give you a brief introduction to web development with React and Node.

You are encouraged to utilize ChatGPT as much as possible.

Background Information:

When building a website, there are two main parts. The 'Front End' and the 'Back End'. The Front end generally consists of all the code necessary for the front-facing user interface, such as the website layout. On the other hand, the backend is only responsible for managing the data for the website (such as user information, product info, etc.). The front end 'talks' to the backend to retrieve relevant data to display to the user (such as showing some statistics) and sends data from the user to the backend (such as when a user uploads a file). This communication between the front and back ends can happen in many ways, but a common method is through HTTP API calls.

In this guide, the tool for building the backend is [Node](#).

1. Install Node from this [link](#)
2. Follow this [tutorial](#) to build a simple API with node

The front end will be made with [React](#), a JS framework for efficiently building front ends.

3. Install Node.js and npm (a package manager used for managing JS packages) with this [tutorial](#)
4. Create your first React app with this [tutorial](#). Remember that npm is the package manager. Here is another helpful video that explains the parts of a [react project](#)

Now you should have a working backend server with an API endpoint and a working front end.

5. Make a new API endpoint on the backend. Call it whatever you want. Make it receive a list of words, and return the words in alphabetical order. This should be a POST request
6. On your front end, add 3 text fields for users to input words, an output text box, and a button
7. Set up the app such that, when the button is pressed, the front end calls the backend API to sort the words, and displays them to the user.