



Introduction to Node.js

Web Development Boot Camp

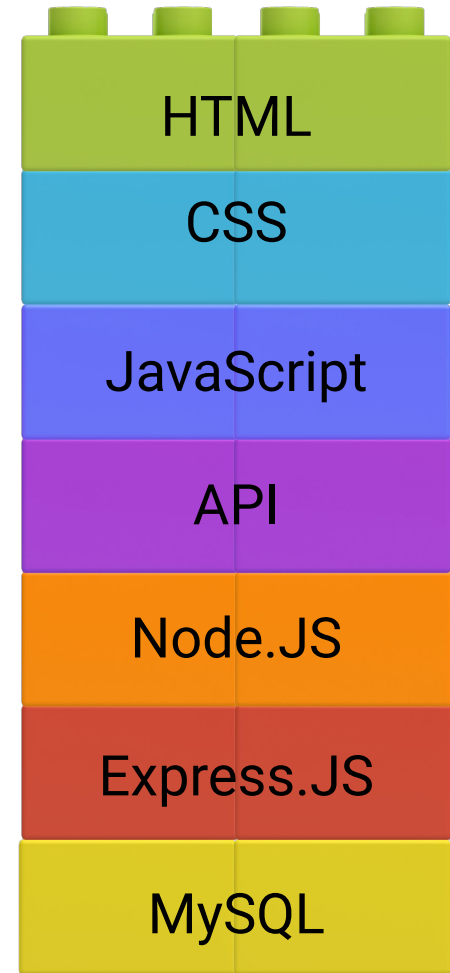
Lesson 9.1



What Is Full-Stack Web Development?

Full-Stack Web Development

Full-stack web development encompasses the suite of tools required to build both the front and back ends of a web application.



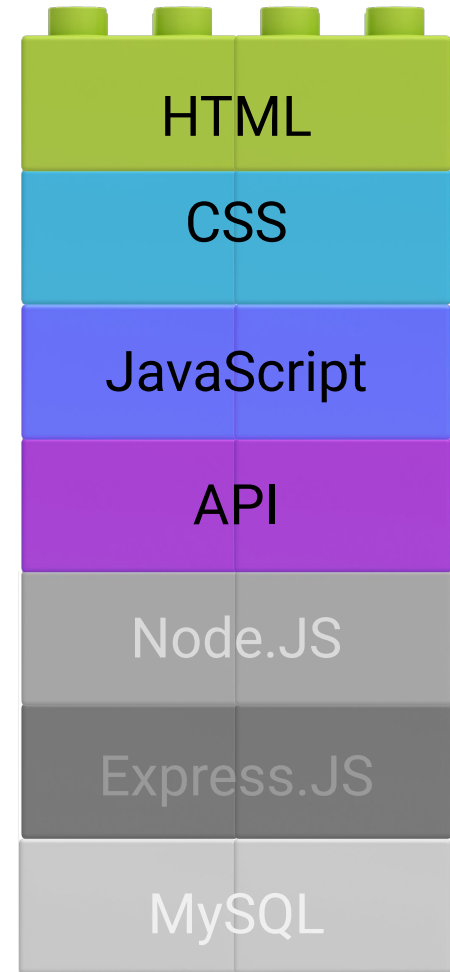
How Much of the Stack Do We Know?

Client-Side

- HTML
- CSS
- JavaScript
- APIs

Further reading:

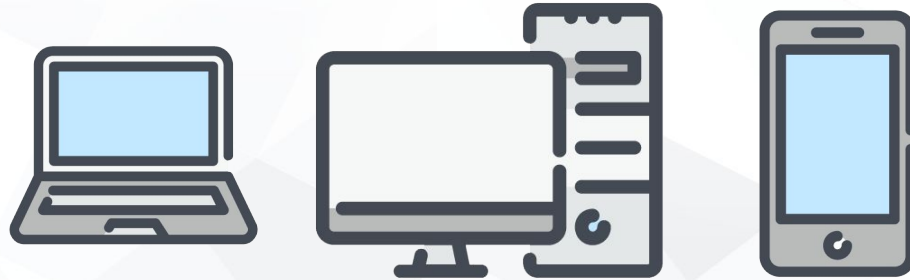
wikipedia.org/wiki/Client-side



What Is a Client?



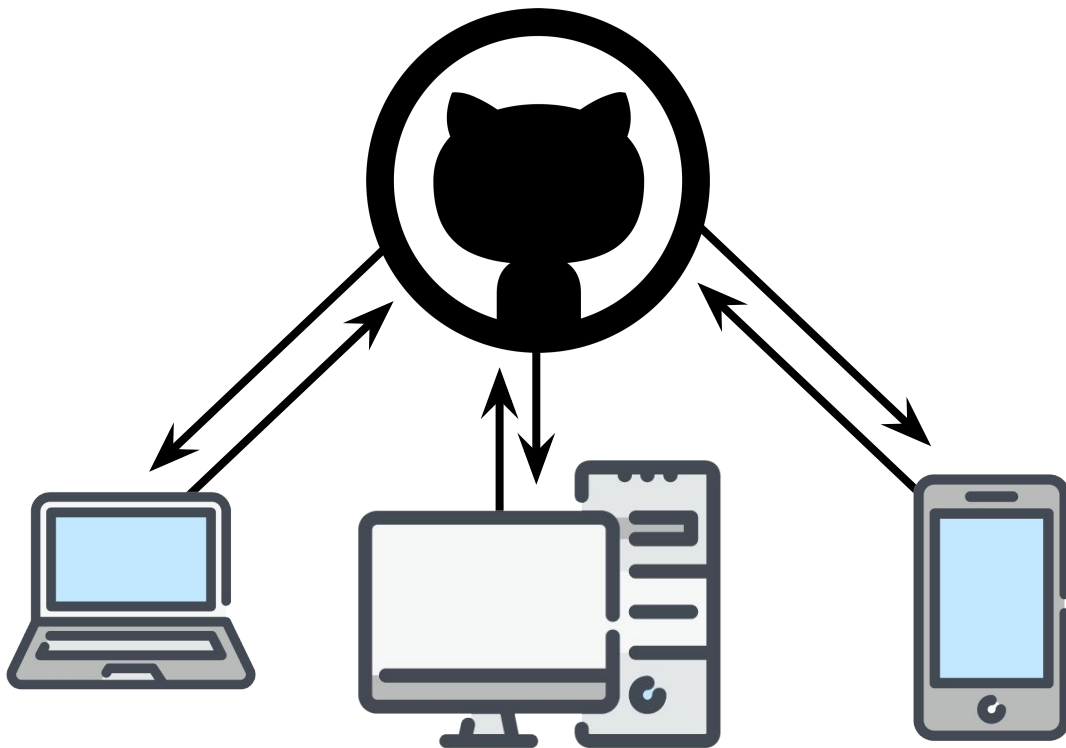
A **client** is a piece of computer hardware or software that accesses a service made available by a server. It can be a desktop computer, laptop, mobile device, and beyond!
[Further reading.](#)



What Is GitHub Pages Doing?

Awesome Project Deployed to GitHub Pages

GitHub Pages is *serving* content to clients.



What Is a Server?

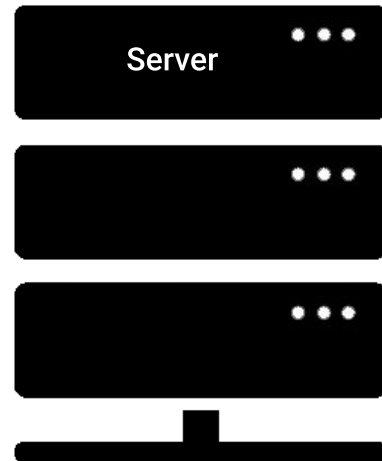
Server Definition

Depending on the context, a server is both the physical hardware *and* software that hears requests from users and returns something, such as an HTML or image file, or completes a process.

```
var http = require("http");
var PORT = 8080;

function handleRequest(request, response) {
  response.end("It Works!! Path Hit: " + request.url);
}

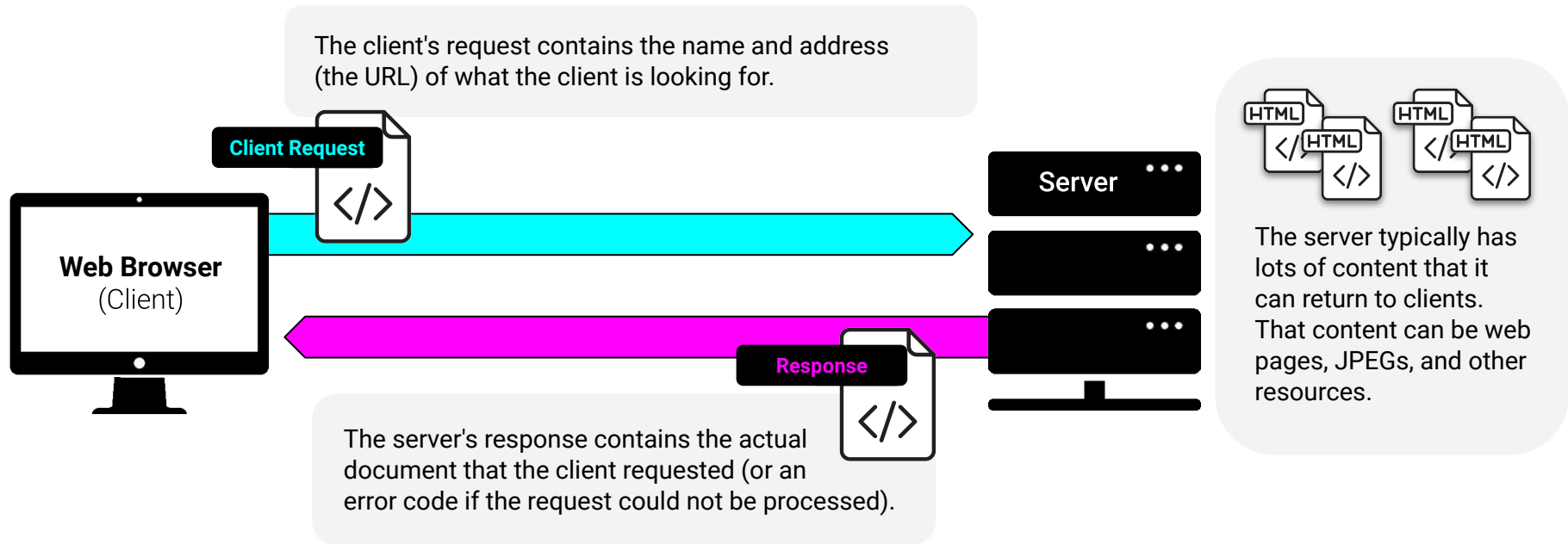
var server = http.createServer(handleRequest);
server.listen(PORT, function() {
  console.log("Server listening on: http://localhost:" + PORT);
});
```



What Is the Client-Server Model?

The Client-Server Model

In modern web applications, there is constant back-and-forth communication between the visuals displayed on the user's browser (the front end) and the data and logic stored on the server (the back end).



Key Question:
So What Is ?

Definition of NodeJS

Node.js is an open source, cross-platform JavaScript runtime environment designed to be run outside of the browser.

It is a general utility that can be used for a variety of purposes including asset compilation, scripting, monitoring, and **most notably as the basis for web servers.**

