



JONAS.IO
SCHMEDTMANN

NODE.JS, EXPRESS & MONGODB

THE COMPLETE BOOTCAMP



@JONASSCHMEDTMAN

SECTION

INTRODUCTION TO BACK-END WEB
DEVELOPMENT

LECTURE

STATIC VS DYNAMIC VS API

STATIC WEBSITES VS DYNAMIC WEBSITES



Frontend - everything that happens in the web browser.
Designing everything that is going to be visible to the user

Backend - everything that is invisible for the client. Server based
- is a computer connected to the internet that stores files (html, css, js, images) and runs an http server that is capable of understanding url requests and delivering responses. The http server then communicates to the browser (frontend) using requests and responses.

Static website - files on the webserver (html, css, js, images). These are the exact files that the server will send to the browser when a website is requested. Browser will take the files and render them as they are. There is no backend code and no application running

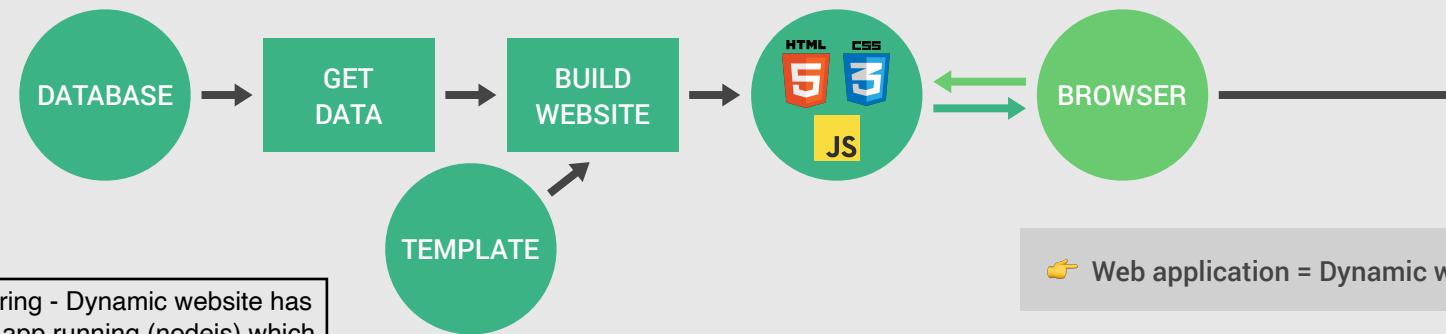


👉 JavaScript ≠ Dynamic

Dynamic website - is built in the server whenever a new request is coming in



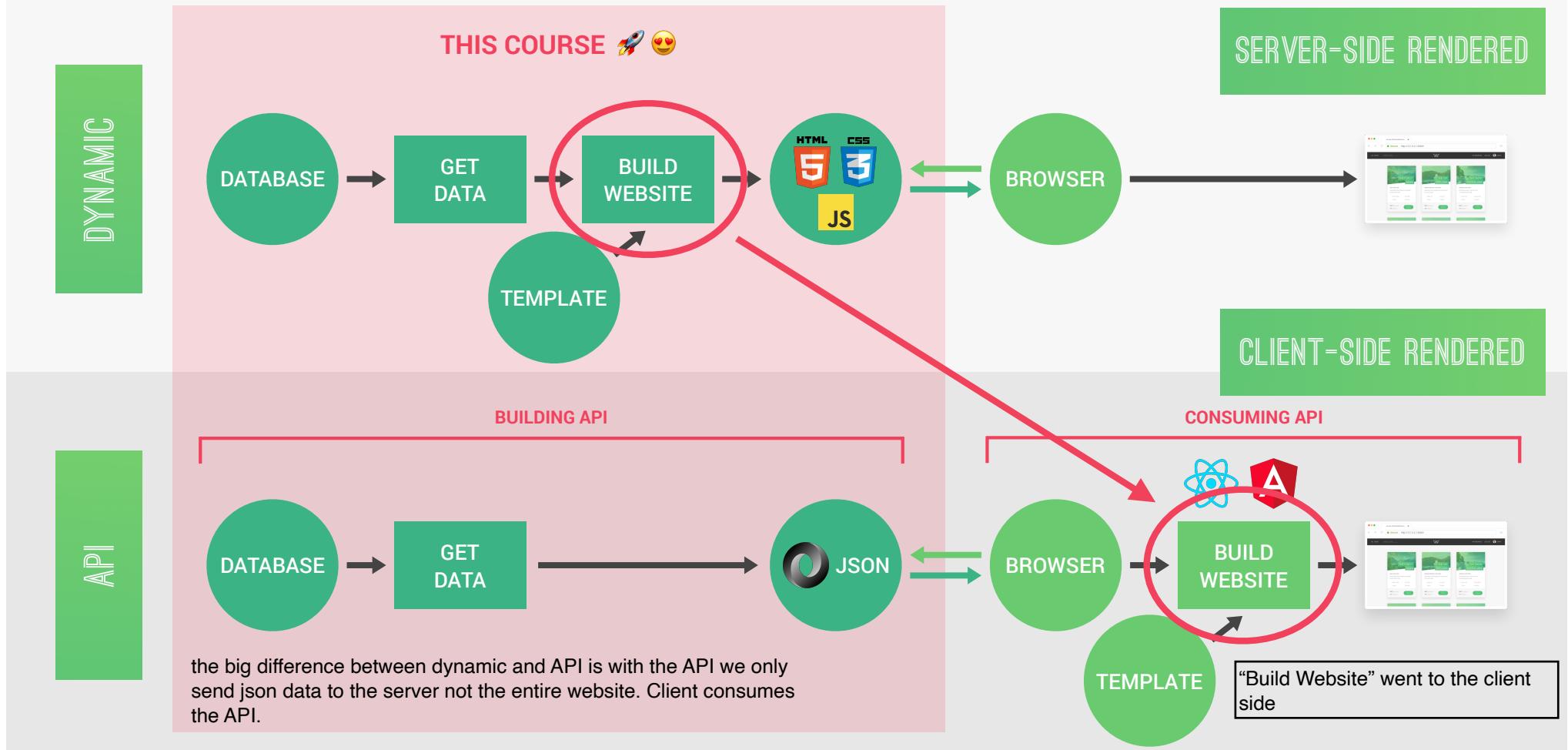
SERVER-SIDE RENDERING



👉 Web application = Dynamic website + Functionality

Server Side Rendering - Dynamic website has a database and an app running (nodejs) which fetches data from the database and together with a template builds each page dynamically. Each time browser requests a page, that page is built as html, css and js files that are sent to the browser

DYNAMIC WEBSITES VS API-POWERED WEBSITES

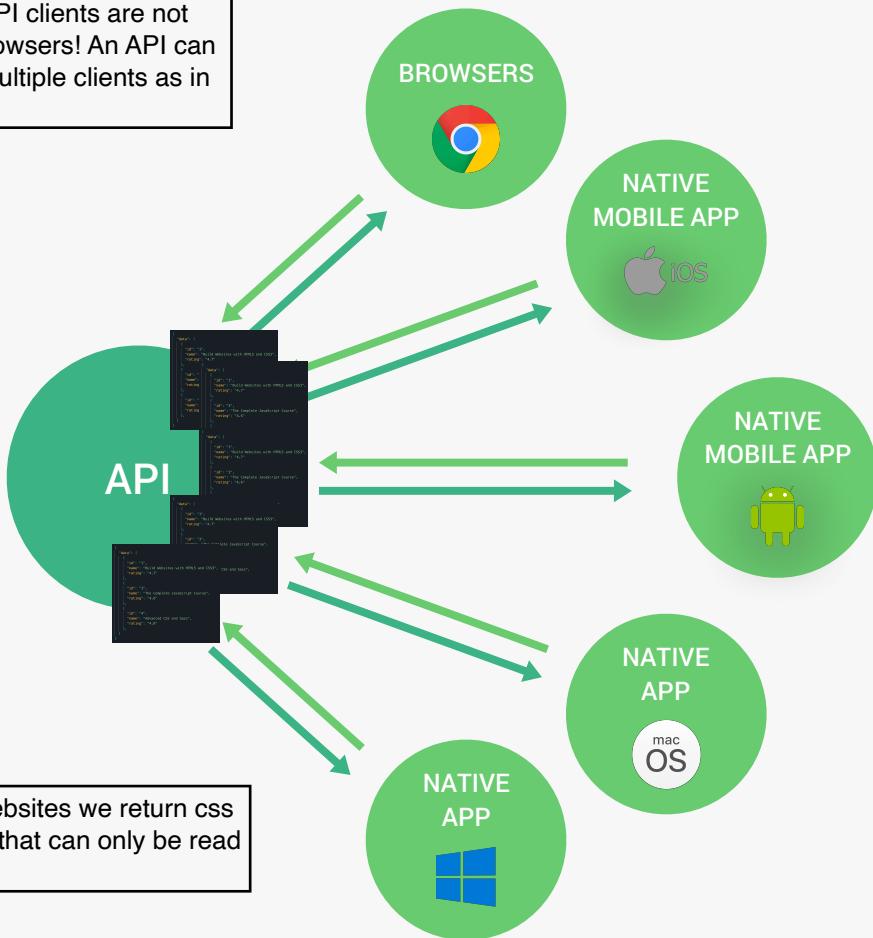


ONE API, MANY CONSUMERS

<https://www.jonas.io/api/myCourseData>

```
{  
  "data": [  
    {  
      "id": "1",  
      "name": "Build Websites with HTML5 and CSS3",  
      "rating": "4.7"  
    },  
    {  
      "id": "3",  
      "name": "The Complete JavaScript Course",  
      "rating": "4.6"  
    },  
    {  
      "id": "4",  
      "name": "Advanced CSS and Sass",  
      "rating": "4.8"  
    }  
  ]  
}
```

In an API clients are not only browsers! An API can have multiple clients as in image.



In dynamic websites we return css and html files that can only be read in browsers