

ITI0205: Veebirakendused

13. Nodejs. Sissejuhatus

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Node.js is a JavaScript runtime built on Chrome's V8 JavaScript engine.

<https://nodejs.org>

npm (originally short for Node Package Manager) is a package manager for the JavaScript programming language. It is the default package manager for Node.js.

<https://www.npmjs.com/>

Ryan Dahl

NodeJS Looja

https://en.wikipedia.org/wiki/Ryan_Dahl



Installeerimine

- Windows: <https://nodejs.org/en/download/>
- Linux: `sudo apt install nodejs npm`
- Mac'ile: <https://treehouse.github.io/installation-guides/mac/node-mac.html>

Kasutamine

Veendume installatsioonis

```
node --version
```

```
npm --version
```

Skripti käivitamine

```
node mingifail.js
```

Node.js

Node.js Core Library (JavaScript)

Node.js (Binding)

Google V8 (C++)

Open source JavaScript Engine,
Optimizer, JIT

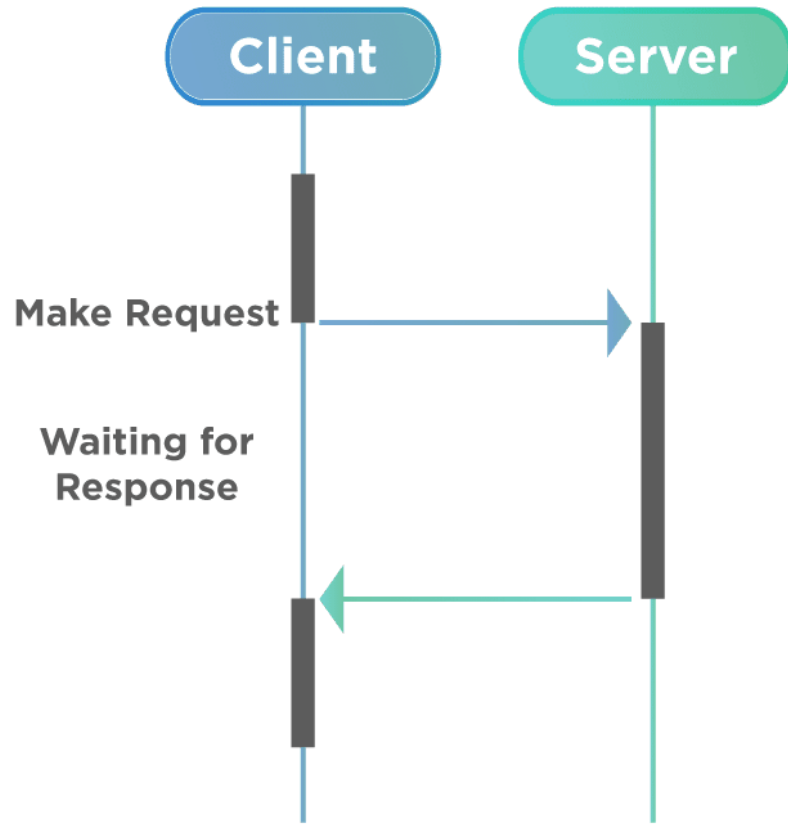
libuv (C)

Cross-Platform
Asynchronous I/O

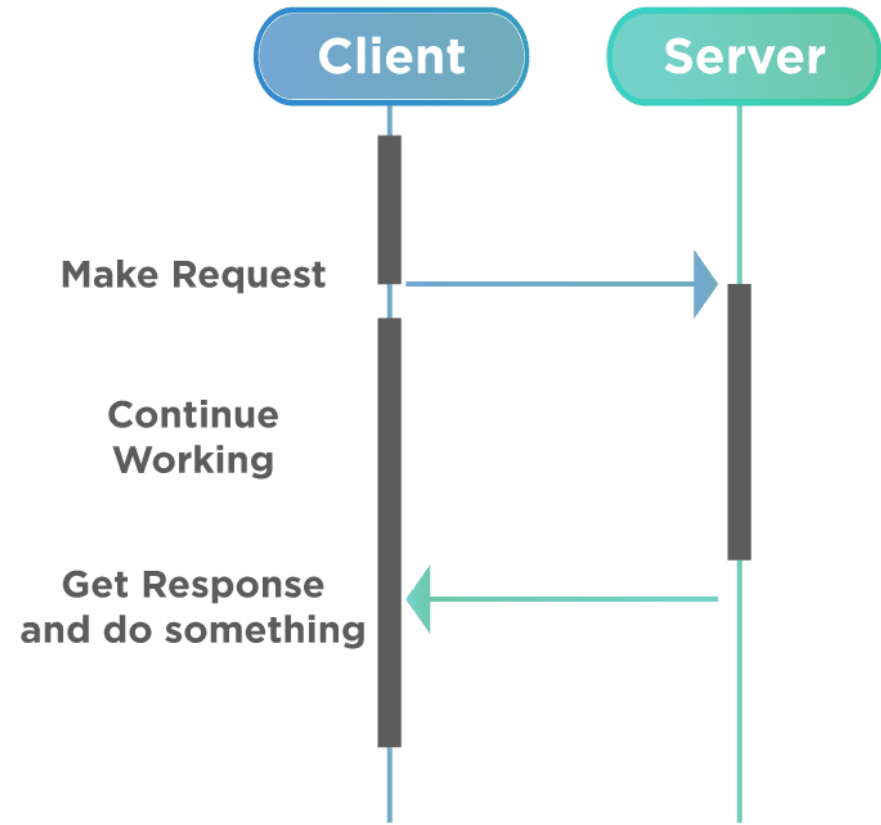
Synchronous & Asynchronous Code

- **Synchronous code** is "a bunch of statements in sequence" - so each statement in your code is executed one after the other. This means each statement has to wait for the previous one to finish executing.
- **Asynchronous code** takes statements outside of the main program flow, allowing the code after the asynchronous call to be executed immediately without waiting.

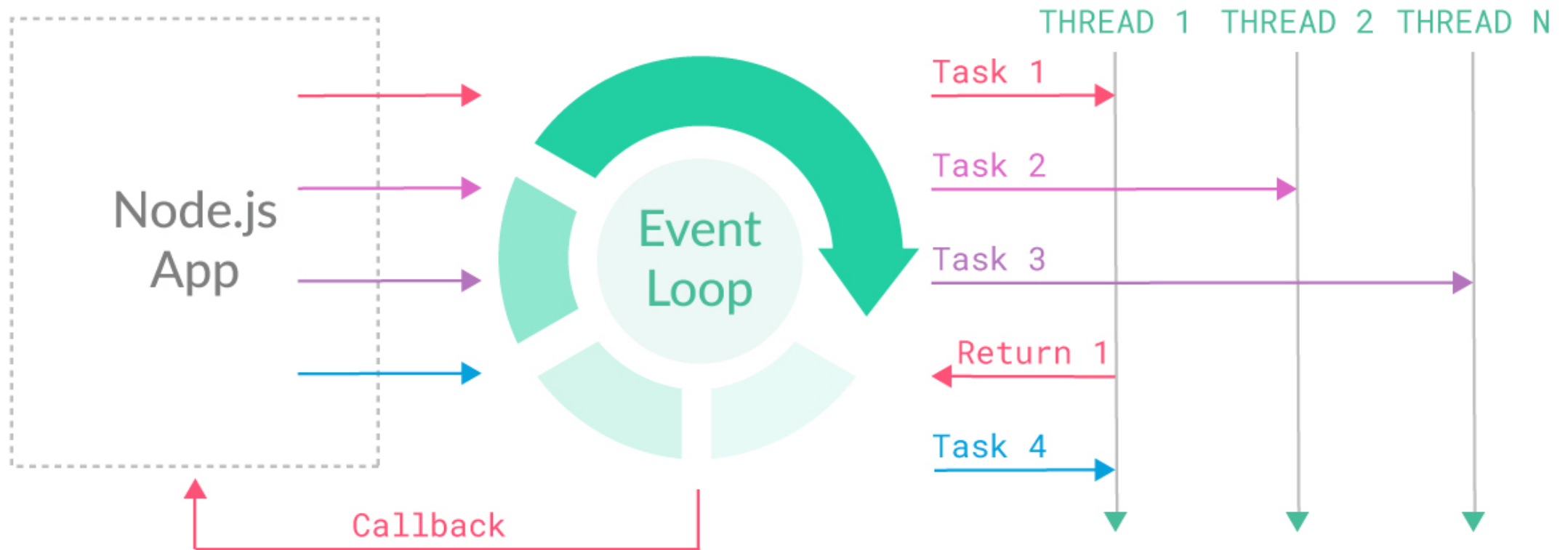
Synchronous



Asynchronous



Node.js Event Loop



Node.js moodulid

Sisseehitatud:

- Failisüsteem, HTTP, OS jne

<https://flaviocopes.com/node-core-modules/>

Lisatavad: `npm install ...`

Kõik kokku: katsetame :)

Tänan!

Viited

- What exactly is Node.js? <https://www.freecodecamp.org/news/what-exactly-is-node-js-ae36e97449f5/>
- JavaScript vs Node JS <https://www.educba.com/javascript-vs-node-js/>
- Node.js VS JavaScript: Differences & Similarities. <https://hackernoon.com/nodejs-vs-javascript-differences-and-similarities-6w1ws22pc>
- Node.js Event Loop: <https://nexocode.com/blog/posts/behind-nodejs-event-loop/>
- Javascript for Beginners: Async. <https://rowanmanning.com/posts/javascript-for-beginners-async>
- NodeJS Core Modules: <https://flaviocopes.com/node-core-modules/>