

B-WEB-200

Introduction to web development



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B-WEB-200

Introduction to web development

The whole purpose of this module is to introduce you to web development.

Most of you will have an internship in this field.



You will learn about recent and vastly used technologies.

Learn about the wonderful world of APIs and SQL databases.

Epytodo

TODO APP



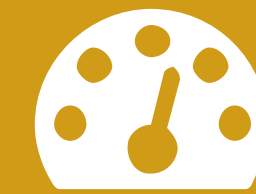
Development of the
backend of a Todo
app



Model/Create
a SQL
Database.



Development of a web
server in Node.js using
Express

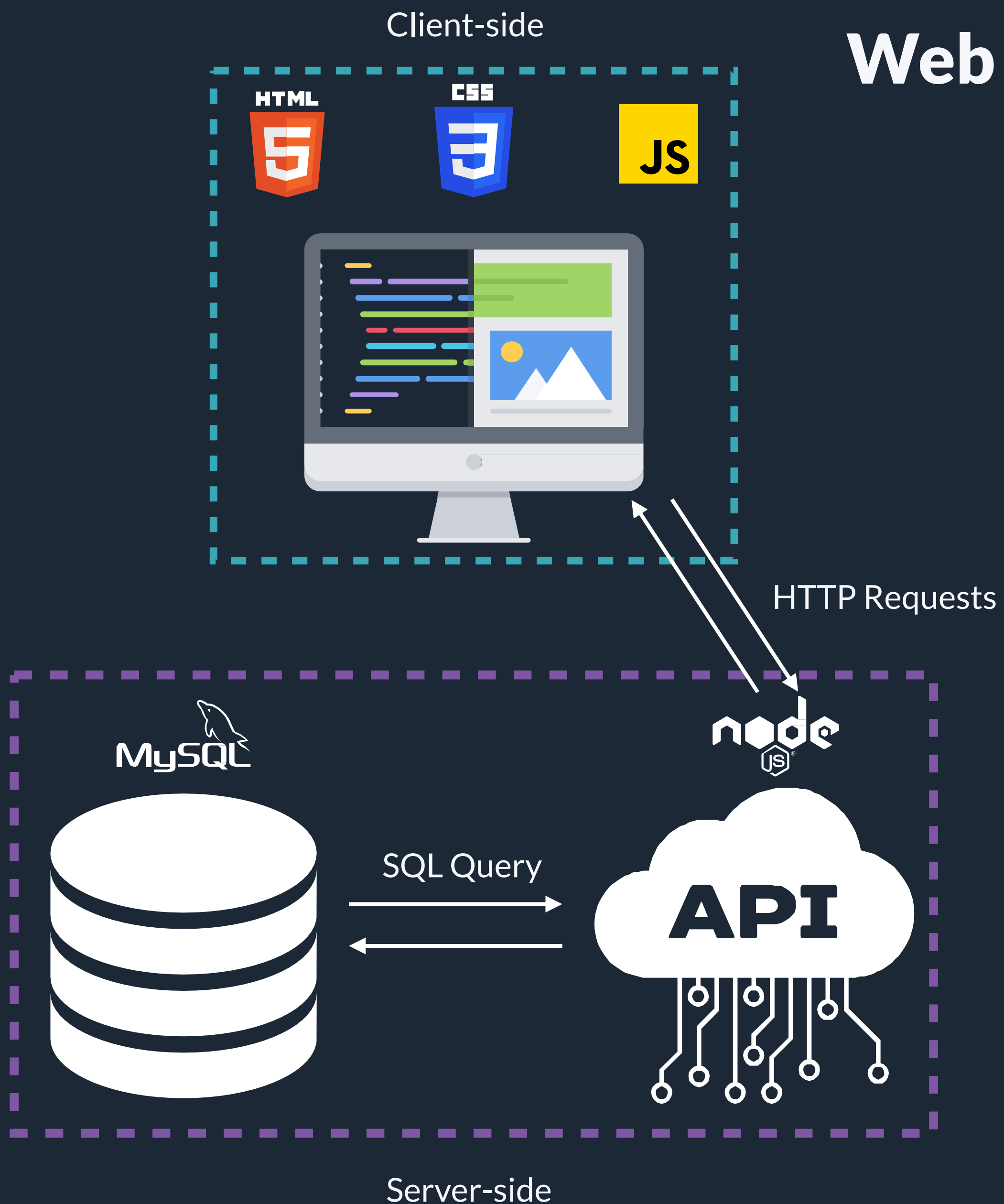


Bonus : build a web
app and utilize the
API



you will end up
with a good
organizational tool
to help you daily

Web app architecture



Client-side

Client-side means that the action takes place on the user's (the **client's**) computer. We will not be working on this side during this project.

Server-side

Server-side means that the action takes place on a web server. That's the part we will be working on during this project

White arrows

Those represent the **communication** between the different parts. The **client** requests data from the **server (API)** through **HTTP** Requests. The **server query** the data from the database and sends it back to the client as a response



- JavaScript has been the most popular programming language for the last 6 years.
- JS is not only a client-side language.
- Node.js® is a JavaScript runtime built on Chrome's V8 JavaScript engine.
- With node, we can use JS to build server-side apps.
- It uses npm as its package manager (just like pip or composer)



express

- A fast, unopinionated, minimalist web framework for Node.js
- Allows you to build Web applications and APIs
- It gets up and running with only a few lines of code.

```
const express = require('express')
const app = express()
const port = 3000

app.get('/', (req, res) =>
  res.send('Hello World!')
)
app.listen(port, () =>
  console.log(`Example app listening on port ${port}!`)
)
```




- SQL is a programming language used by nearly all relational databases to query, manipulate, and define data, and to provide access control.
- A database is an organized collection of structured information or data, typically stored electronically in a computer system
- Spreadsheets (such as Microsoft Excel) are also considered as databases in some cases.



- As a developer, you want to:
 - Insert data into a database
 - Access (or select) the data stored
 - Update data
 - Delete data
- In web development, we call those actions CRUD (create, read, update, delete)
- Example: CRUD user