AWE Bootcamp

Let's build a backend application together

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What we cover

What is a backend application ?
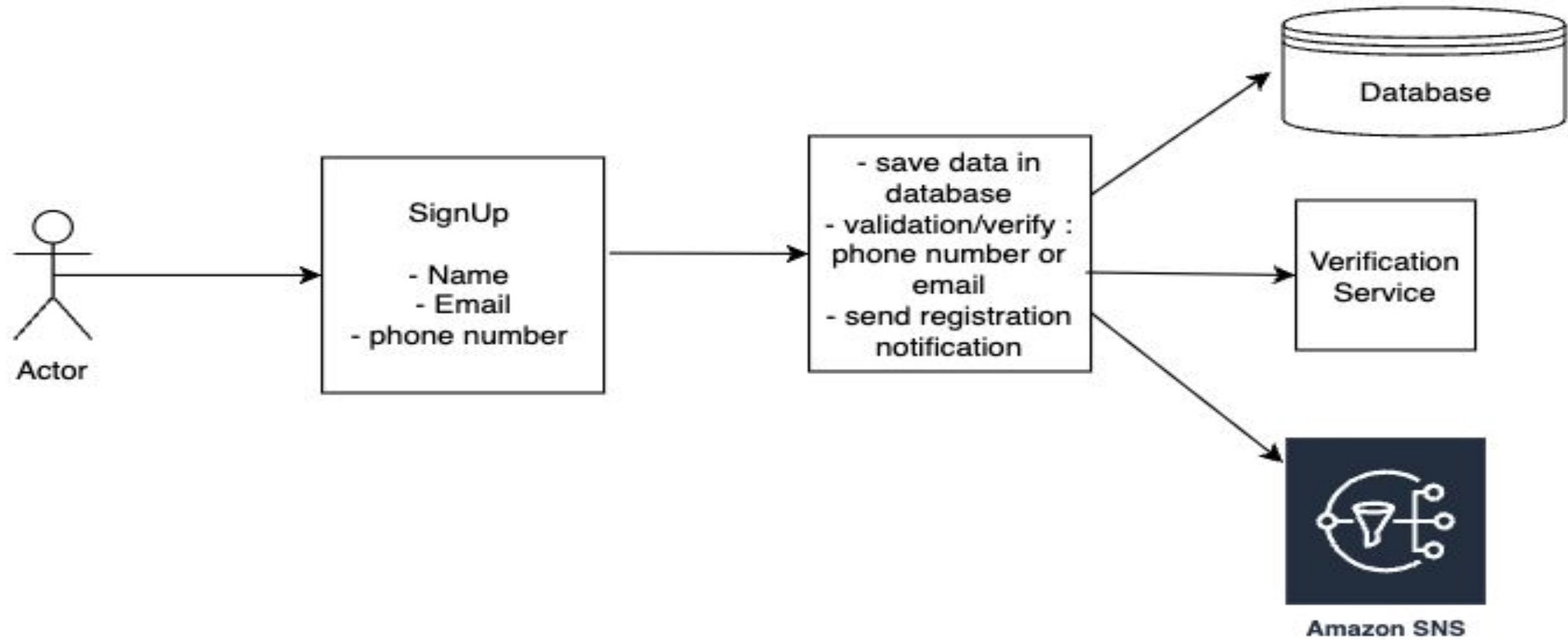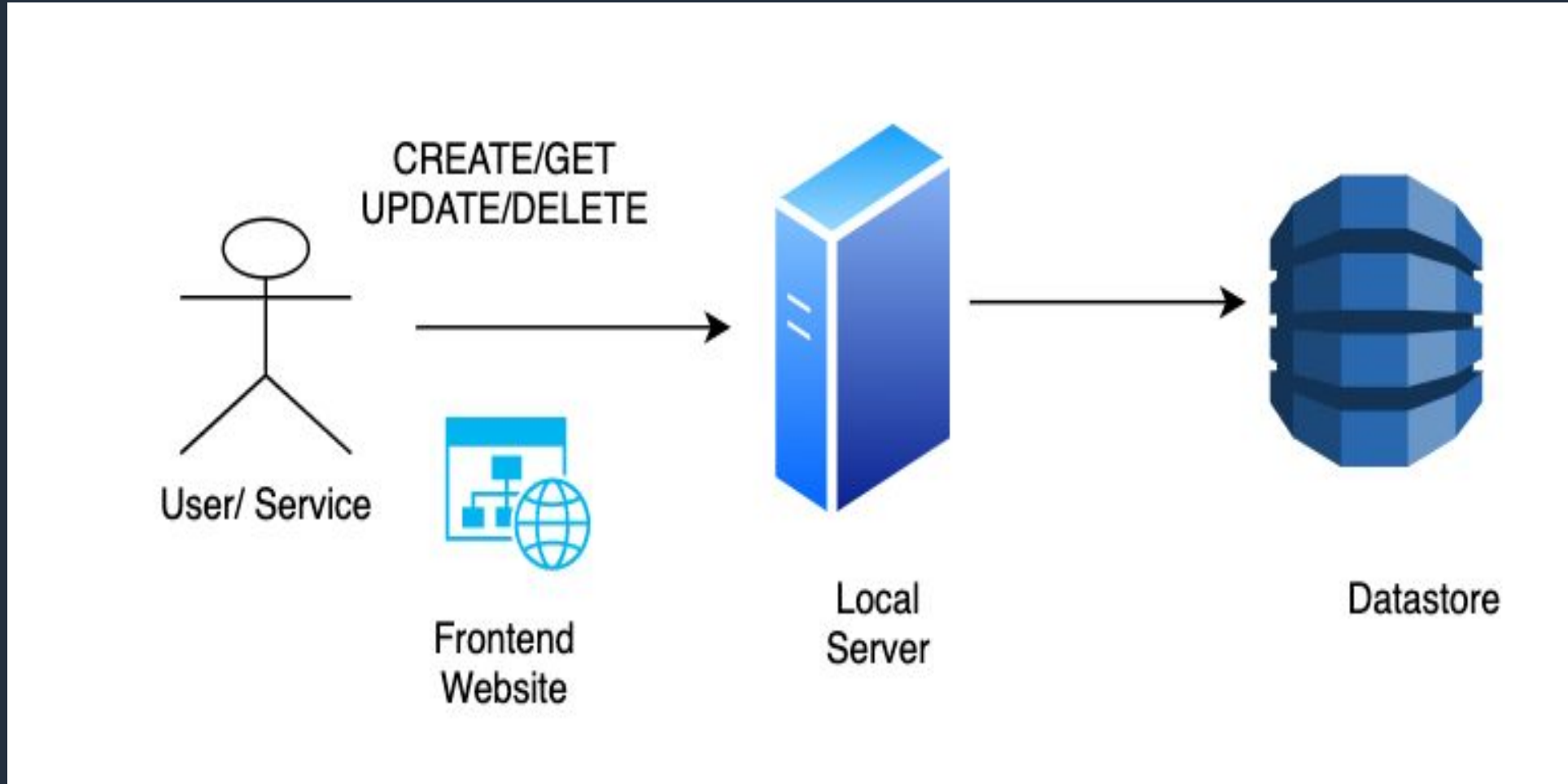
What is required to build backend?

Workshop

What is backend application

- It's not visible to users.
- Interface to database or other services.
- Used to perform heavy compute.
- It could be used by front-end application or other backend application.
- It is used to build dynamic frontend application.

Example

What will we build today

What is required to build backend?

Programming Language

HTTP Server

Backend Framework

Package Manager

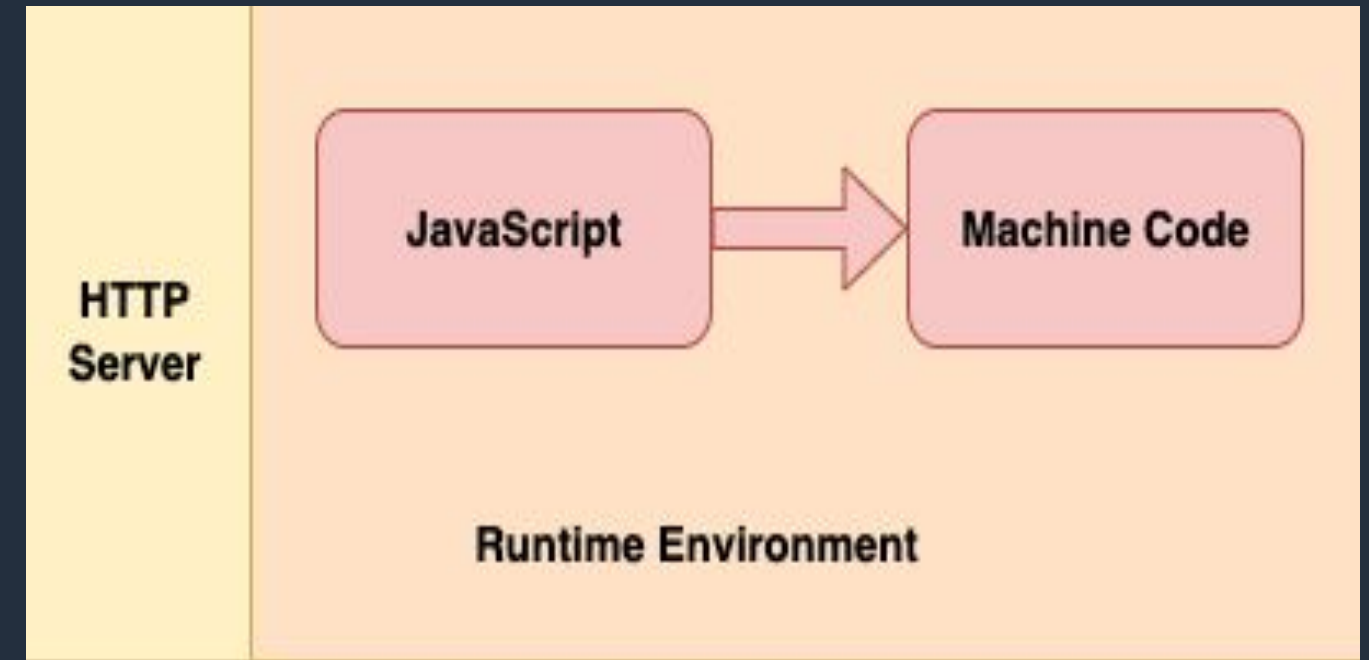**Database**

Technologies
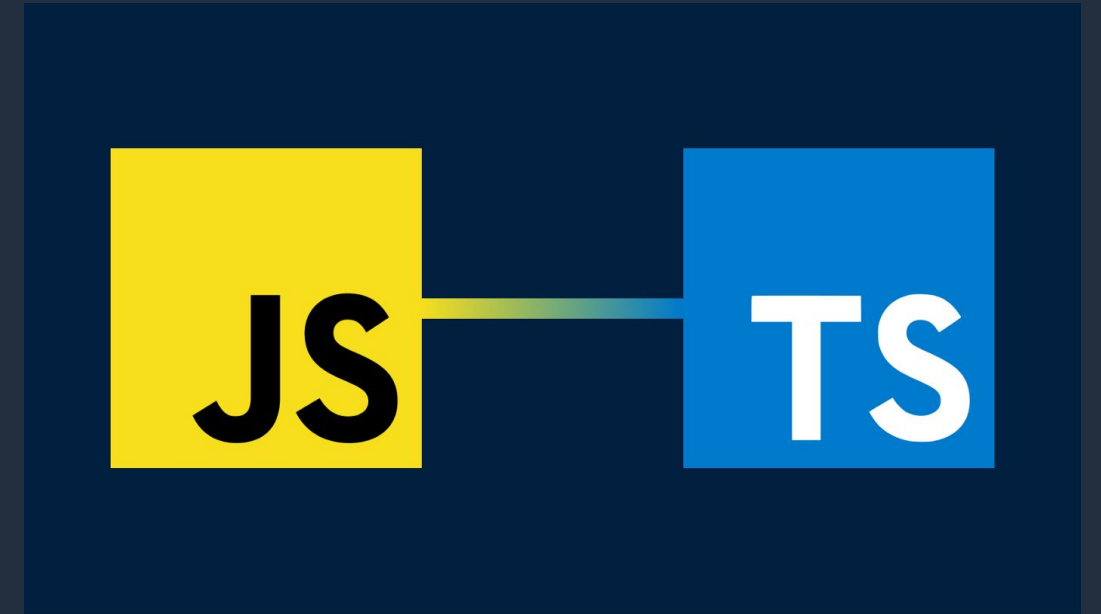
Node

TypeScript

NestJs

NPM

DynamoDB

NodeJs

- JavaScript
- Runtime environment for JavaScript
- Single threaded as JavaScript was single threaded (one single thread handles event loop)
- Non-Blocking I/O

TypeScript

- Programming language ☺

- Flavor/variant of JavaScript

- Strongly typed : better readability and
- Not Opinionated, makes it easy to write object oriented code

NestJs

- Framework for building efficient, scalable server-side applications.

- It uses progressive JavaScript, is built with and fully supports TypeScript (yet still enables developers to code in pure JavaScript)

- It combines elements of OOP (Object Oriented Programming), FP (Functional Programming), and FRP (Functional Reactive Programming).

NPM

- It is an online repository for the publishing of open-source Node.js projects.

- It is a command-line utility for interacting with said repository that aids in package installation, version management, and dependency management

DynamoDB

- NoSQL database service
- Supports key–value data structures
- It's a managed service offered by AWS
- Auto-scale on traffic

References

- https://docs.nestjs.com/modules
- https://nodejs.org/api/

Q&A