Microservice Architecture

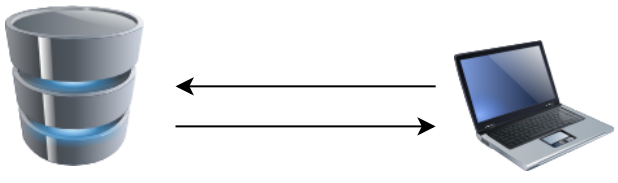
This lesson gives an overview of popular web server operating systems.

WE'LL COVER THE FOLLOWING

So far, we know that the back end consists of a server that receives user queries and a database from which the appropriate results are retrieved.

Microservices

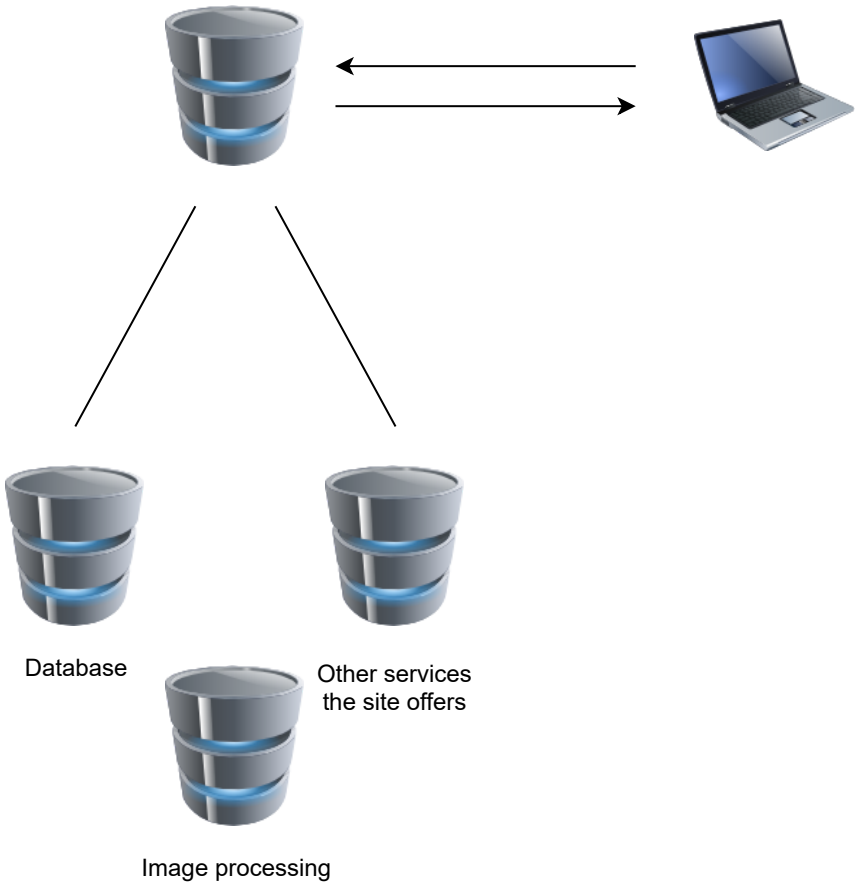
However, most modern websites don't rely on this style of web hosting, i.e., the code of all of the functionalities of the entire website does not exist on one server. Instead, websites are hosted on virtual machines (just think of them as computers within computers). Virtual machines can allow us to have several 'machines' on one server, each with different operating systems. So, the website is hosted on a server within a server, and that server delegates tasks to *other* servers.



Processes user queries
Retrieves Data from Database
Does other processing

Conventional

In the diagram above, a client connects to one server, and it handles everything and responds.



Microservice Architecture

In the Microservices architecture, however, many virtual machines exist on one physical server, and each has a separate job. For example, one of them may be the ‘interface’ that the user interacts with, and it might connect to another for the database.

According to the Microservices website,

"Microservices - also known as the microservice architecture - is an architectural style that structures an application as a collection of services that are

- Highly maintainable and testable
- Loosely coupled
- Independently deployable
- Organized around business capabilities.

The microservice architecture enables the continuous delivery/deployment of large, complex applications. It also enables an organization to evolve its technology stack."

Quick quiz on Microservices!

1 What is not an advantage of using the microservice architecture?

COMPLETED 0%

1 of 3

In the next lesson, we will talk about back end programming.