

The image features a dark navy blue background. In the upper left corner, there is a graphic composed of several overlapping geometric shapes. A bright blue parallelogram is partially visible, with a light green parallelogram overlapping it. Below these, there are more complex shapes in shades of blue and green, creating a layered, architectural effect. The word "Backend" is written in a clean, white, sans-serif font in the upper right area.

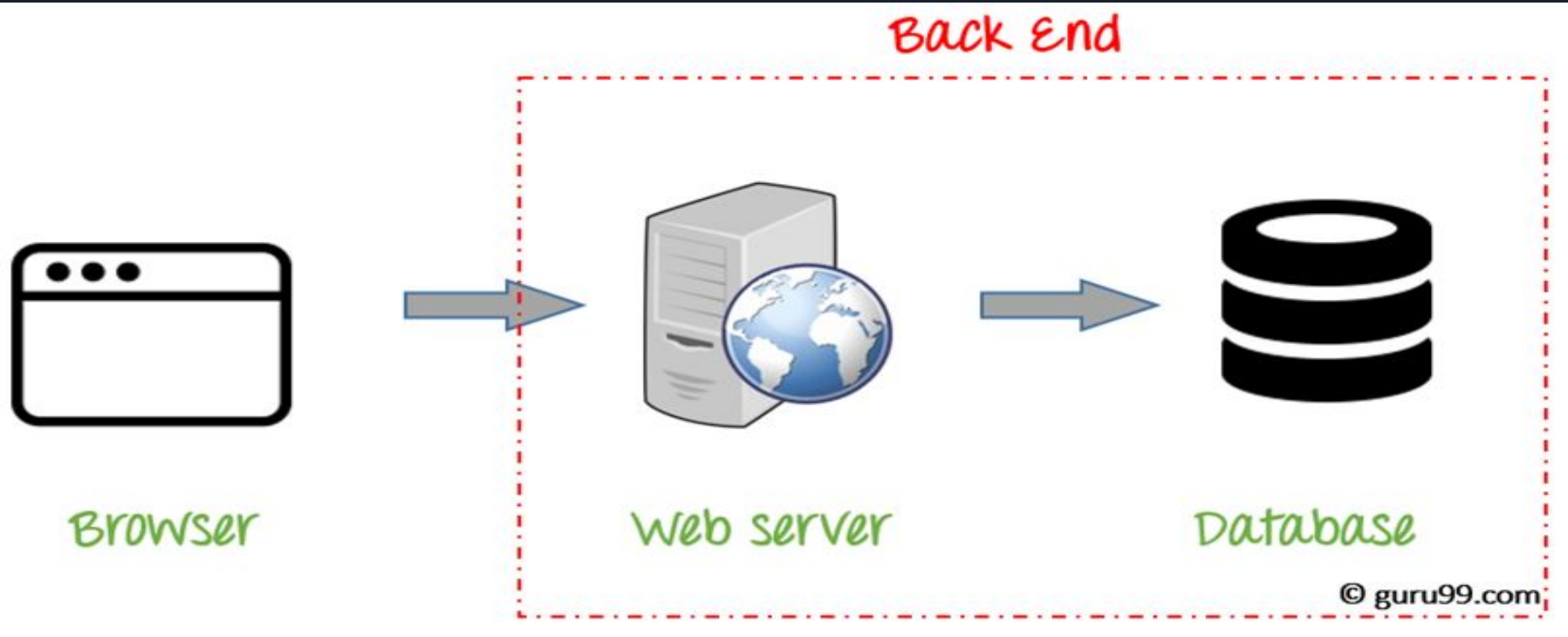
Backend



What is Backend?

- Working on server-side software, which focuses on everything you can't see on a website.
- Ensure the website performs correctly.
- Focusing on databases, back-end logic, application programming interface (APIs), architecture, and servers.
- helps browsers communicate with databases, store, understand, and delete data.

Backend



What we will learn in Backend

Backend

Node Js

CLI Program

HTTP Server

Express-Server

RESTful API

Databases

Lowdb

MongoDB

Security

Database Advanced

MySQL

Deploy/Render

Express-Session

Register/Login/Admin

Final Project

JWT Web Token


Socket.io



Node Js

Node.js is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser.

Why Node Js?



Easy,
Only javascript
to getting start

Speed,
Non-blocking
thread
execution

Packages,
vast set of
open-source
Node.js
packages

Strong backend
written in C and
C++ 💪

Maintainable
easy choice for
developers,
javascript, html,
css, NO more



Common Websites in nodejs

- **LinkedIn.**
- **Netflix.**
- **PayPal.**
- **NASA.**
- **eBay.**
- **Trello.**
- **Uber.**
- **Walmart.**
- **Mozilla.**



CLI In Nodejs

Command-line interface

A command-line interpreter or command-line processor uses a command-line interface (CLI) to receive commands from a user in the form of lines of text.

CLI program can be written in any programming language, like C/C++, java, python, ... etc.

And also can be written in javaScript using nodejs (execute javascript code outside the web browser).