

Back-End Developer Roadmap





Back-End Developer Roadmap

Starting with web development can be overwhelming. This back-end developer roadmap will guide you to start with it in the proper way. We will cover the most important building blocks of the web. This guide will help you to become a modern back-end developer.

Learn Basic Front-End Dev

You must know basics of front-end development, and how things work in the browser.



HTML



CSS



JavaScript

Once you know basic front-end, you can then jump right into learning a programming language, there are so many options of programming language that you can learn to become a backend developer.

Note: You don't need to know multiple programming languages to become a backend developer.

Choose a Programming language



JavaScript



Python



PHP



Ruby



Rust



Java



Go Lang

Then choose a Framework according to your programming language

 JavaScript

JavaScript Runtime

 Node.js

 Deno



Node.js Popular Framework

ex

Express.js



Nest.js



Fastify



Sails



Hapi



Restify

koa

Koa



Python

Popular Framework



Django



Flask



PHP

Popular Framework



Laravel



Symfony



Ruby

Popular Framework



Rails



Sinatra



Java

Popular Framework



Spring



Google Web Toolkit



Rust

Popular Framework

Rocket



Rocket.rs



GO

GO

Popular Framework



Gin



ASP .NET

asp.net is also a popular framework of C#

Backend concepts you should learn



HTTP / HTTPS



REST



GraphQL



Web Sockets



CORS



MVC Architecture



CI / CD



Serverless

Learn about databases

2 Types of Databases

SQL

NoSQL



MySQL

MongoDB



PostgreSQL

CouchDB



SQL Lite

DynamoDB



Learn Caching



Redis



Memcached

ORM / ODM



Mongoose (MongoDB)



Prisma (SQL)



Sequelize (SQL)

Essential things to learn



Authentication



OAuth



Hashing (bcrypt)



Rate Limiting



Reverse proxy



Load balancer



Documentation (Swagger)

Learn any HTML Templating Engine



EJS



PUG



Handlebars



doT



Jade



Eta

Other Important Topics



Linux



Terminal (CLI)



Git



Basic Networking



Web Security



Payment Gateways



Testing

Learn to deploy and learn any cloud service

★  Google Cloud

★  Digital Ocean

★  AWS

 Azure

 Heroku

 Linode

 Vercel

Optional things to learn



Docker



Performance



Scalability



Kubernetes

Tools to learn as a backend developer



NPM



Yarn



Postman



Insomnia



GitHub

Project Ideas



Social Media Web App



Chat App



Video Chat App



REST API



Amazon Scraper API



Web Scraper



URL Shortner



CRUD Blog App

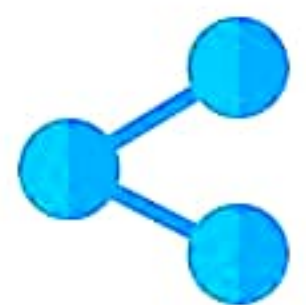
Project Ideas



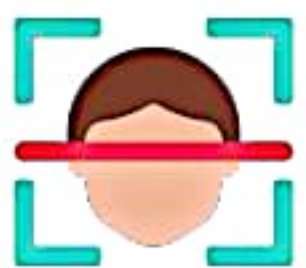
Discord Clone [with webRTC](#)



Travel Log App



File Sharing App



Users System



Multiplayer Game



Gist Clone



Weather Logger



Ecommerce API