# 2024 Backend Roadmap

By Web Dev Simplified

Each section, and all the items listed in each section, of this roadmap are listed in the order that you should learn them.

Each section also includes projects that you can complete in any order that require only the skills learned in that section and the sections prior.

## Backend Language - (Choose Any)

**JavaScript** (Recommended If Also Learning Frontend)

**Python** (Recommended If Also Learning AI)

**PHP** (Recommended If Also Learning Wordpress)

**C#**

**Rust** (Difficult To Learn)

**Ruby** (Easier To Learn But Not Used As Much)

## Backend Framework - (Choose Any)

**JavaScript**

**Node.js With Express** (Recommended)
**Deno** (Newer So Not As Popular)

**PHP**

**Laravel** (Recommended)
**Wordpress** (Also Recommended)
**CodeIgniter**

**Python**

**Django** (Recommended)
**Flask**

**C#**

**.NET** (Recommended)

**Rust**

**Rocket** (Recommended)

**Ruby**

**Rails** (Recommended)

# Node.js/Express - JavaScript Course Node.js Course

**Var vs Let vs Const -** Video Article

**Function Basics -** Video

**Callbacks -** Video Article

**Arrow Functions -** Video Article

**Hoisting -** Video Article

**Scoping -** Article

**Closures -** Video

**Strict Equality -** Video Article

**Objects/Arrays -** Array Video

**Reference Vs Value -** Video Article

**Control Flow (If, Loops, etc.)**

**Promises -** Video Article

**Async Await -** Video Article

**Callbacks -** Article Related Video

**Promises -** Video

**Async Await -** Video

**Common Modules -** Article

**Null Vs Undefined -** Video Article

**Recursion -** Video Article

**Array Methods -** Video Advanced Video

**Template Literals -** Video Advanced Video Article

**Destructoring/Spread Operator -** Video Article

**Node.js File System Libary**

**Express Middleware -** Video Article

**Express Routing -** Video

**Templating Language** (EJS, Handlebars, Pug, etc.)

## Projects (May Require A Database)

### Easy
Basic Node.js Server - Video
Basic REST API - Video
URL Shortener - Video
Hastebin Clone - Video
Paginated API - Video
Discord Bot - Video
Basic Chrome Extension - Video

### Medium
Amazon Web Scraper - Video
JSON Web Token Auth - Video
User Permission Role - Video
Passport Auth - Video
Custom Auth - Video
Stripe Payments - Video Article
PayPal Payments - Video
Google Docs Clone - Video
Password Protected File Sharing - Video

### Hard
Markdown Blog - Video
Reddit Clone - Video
Realtime Chat App - Video 1 Video 2

# Databases - [SQL vs NoSQL Video](#)

## SQL

**PostgreSQL** (Recommended)
**MySQL** (Also Recommended) - [Install Video](#) [Tutorial Video](#)
**SQLite**

## NoSQL

**MongoDB** (Recommended) - [Tutorial Video](#) [Cheat Sheet](#)
**Redis** (Recommended For Caching)
**Cassandra**
**DynamoDB** (Recommended If Working With AWS)

# TypeScript - [Course](#)

TSConfig

Type Inference

Array Type

Any/Unknown Type - [Video](#)

Type vs Interfaces - [Video](#)

Functions

Unions/Intersections

readonly/keyof/typeof

As Const/Enums

Tuples

Generics - [Video](#)

Built In Types (Pick, Omit, etc.)

Type Guards

Satisfies

Discriminated Union - [Video](#)

Function Overloads

Type Predicate - [Video](#)

Declaration Files

## Projects

### Easy

Image Slider - [Video](#)
Todo List - [Video](#)
Typing Effect Animation - [Video](#)
Hangman Clone - [Video](#)

### Medium

Custom Select Component - [Video](#)
Advanced Note Taking App - [Video](#)
Multistep Form - [Video](#)
Shopping Cart - [Video](#)

### Hard

Facebook Messenger Clone - [Video](#)
YouTube Home Page Clone - [Video](#)
Twitter Clone - [Video](#)