SQL + JavaScript Mastery Roadmap (6 Months)

★SQL Roadmap

Phase 1: Basics (Day 1-20)

- Topics: SELECT, WHERE, ORDER BY, Aggregates, Joins, Subqueries
- · Resources:
- Mode SQL Tutorial
- SQL Joins Visual Guide
- LeetCode Database

Phase 2: Advanced SQL (Day 21-40)

- Topics: Window Functions, CTEs, Views, Transactions, Triggers
- · Resources:
- Mode Window Functions
- PostgreSQL CTE Docs

Phase 3: Optimization (Day 41-60)

- Topics: Indexes, Execution Plans, Join Algorithms, Query Optimization
- · Resources:
- Use the Index, Luke!
- Stanford CS145
- Postgres Explain Visualizer

Phase 4: Internals (Day 61-90)

- Topics: Execution Lifecycle, Storage Engines, WAL, MVCC, Distributed SQL
- · Resources:
- CMU DB Course
- Postgres MVCC Docs
- Modern SQL Tutorial

JavaScript Roadmap

Phase 1: Fundamentals (Day 1-30)

- Topics: Variables, Functions, Scope, Prototypes, DOM, Events
- · Resources:
- Eloquent JavaScript
- MDN JS Guide

Phase 2: Advanced JS (Day 31-90)

- Topics: Closures, Execution Context, Event Loop, Async/Await, Proxies
- · Resources:
- JavaScript.info
- You Don't Know JS (Book)

Phase 3: JS Internals (Day 91-180)

- Topics: V8 Engine, Memory Management, AST, JIT, Browser & Node.js Internals
- Resources:
- V8 Blog
- Event Loop Explained (Jake Archibald)
- Node.js Event Loop Docs

Use this roadmap to track daily progress (you can tick off completed topics and add notes as you go).