Month 1: Foundations & Tech Stack Overview

- Week 1: Dev Environment & Toolchain
- Week 2: Language Basics & Concurrency Models
- Week 3: Introduction to Web Programming
- Week 4: Language Comparison & Mini Project

Month 2: Backend Development Deep Dive (Rust or Go)

- Week 5: Web Frameworks & Routing
- Week 6: Databases & ORM Integration
- Week 7: User Authentication & Authorization
- Week 8: Testing & Error Handling

Month 3: Frontend Fundamentals (React + Next.js Basics)

- Week 9: React Basics – Components & State
- Week 10: Next.js Basics & Routing
- Week 11: API Calls & Data Rendering
- Week 12: UI Styling & Interaction

Month 4: Frontend Framework Advanced & Full-stack Expansion (Next.js/React & Advanced Frontend)

- Week 13: Next.js Advanced Features (SSR/SSG/API Routes)
- Week 14: Global State Management (Redux/Zustand/React Query)
- Week 15: Complex Features – Subscription/Payment/Permissions
- Week 16: Frontend Testing & Performance Optimization

Month 5: Backend Architecture Optimization & Engineering Practices

- Week 17: Microservices & API Gateway
- Week 18: Caching & Performance Optimization (Redis/Query Optimization)

- Week 19: Continuous Integration & Deployment (CI/CD)
- Week 20: Security Testing & Hardening

Month 6: Project Deployment & Comprehensive Advancement

- Week 21: Deployment (Cloud Server + Docker)
- Week 22: Logging & Monitoring (Prometheus/Grafana)
- Week 23: Acceptance Testing & Load Optimization
- Week 24: Market Promotion & Continuous Operation