## A comprehensive 6-month scheme for mastering Next.js.

- Month 1: Foundations (Weeks 1–4)
  - o Goal: Understand how the web works + master HTML & CSS + intro to JS.
  - Week 1: Introduction & HTML Basics
    - How the web works (servers, browsers, HTTP)
    - HTML structure, tags, forms, tables
    - Semantic HTML
  - Week 2: CSS Essentials
    - Styling basics (colors, fonts, units)
    - Box model, positioning
    - Flexbox & Grid
    - Transitions and basic animations
  - Week 3: Responsive Design
    - Media queries
    - Mobile-first approach
    - Accessibility
    - Project: Responsive Landing Page
  - Week 4: JavaScript actions on HTML
    - DOM manipulation basics
    - Event on HTML element
    - Introduction to typescript and why use them in projects
    - Project: Clone a simple website
- Month 2: Deep Dive Into JS, TS & React (Weeks 5–8)
  - o Goal: Learn core JS/TS concepts, then start React.
  - Week 5: More on TypeScript
    - Why TypeScript in React
    - Types, interfaces, functions
    - Working with TS in small projects
  - Week 6: React Basics
    - JSX, components, props & state
    - Event handling, conditional rendering
    - Project: Counter App & Color Picker
  - Week 7: React Intermediate
    - Forms and inputs
    - useEffect & useState
    - Component reuse and props drilling
  - Week 8: More examples based on week 7
    - Introduction of Typescript in React
    - Making an ajax request
    - The use of react query for state management and data fetching.
    - Project: Blog UI with likes and comments

- Month 3: Next.js + Tailwind + Real World UI (Weeks 9–12)
  - o Goal: Go deeper into React ecosystem using Next.js & Tailwind CSS.
  - Week 9: Next.js Fundamentals
    - File-based routing
    - Pages, components, static vs dynamic pages
    - Link, Image, Head components
  - Week 10: Data Fetching in Next.js
    - getServerSideProps vs getStaticProps
    - API routes
    - Server actions
    - Parallel routing and intersecting pages
  - Week 11: Tailwind CSS Mastery
    - Utility-first concepts
    - Responsive design with Tailwind
    - Customizing themes and dark mode
  - Week 12: Integrating Tailwind + Next.js
    - Clean UI design
    - Component reuse with Tailwind
    - Project: Portfolio Site using Next.js + Tailwind
- Month 4: Explore more on Next.js Design (Weeks 13–16)
  - o Goal: Learn how React folders are structured and best practices
  - Week 13: React hook form and Zod for validation
  - Week 14: React custom hooks
  - Week 15: Working with metadata and OpenGraphs in Next.js
  - Week 16: Revision on things covered in week 13, 14, 15 and 16
- Month 5: Full Stack Development with Prisma & Real-Time (Weeks 17–20)
  - o Goal: Learn databases, server communication & real-time systems.
  - Week 17: Git & GitHub
    - Git basics: init, add, commit, push
    - Branching, merging
    - Working with GitHub (Issues, PRs)
  - Week 18: Prisma + Databases
    - Non-Relational DBs (MongoDB)
    - Prisma schema, migrations
    - CRUD operations
    - Project: Task Tracker with DB
  - Week 19: WebSockets
    - What is WebSocket & how it works?
    - Implementing basic real-time chat using Socket.io
    - Project: Real-Time Chatroom
  - Week 20: Authentication

- JWT or NextAuth
- Protected routes, role-based access
- Folder structure for best practices in Nextjs

- Month 6: Advanced Systems + Capstone (Weeks 21–24)
  - o Goal: Payments, webhooks, automation, then capstone.
  - Week 21: Payment Gateways
    - Flutterwave, Paystack, or Stripe integration
    - Handling success/failure callbacks
  - Week 22: Webhooks
    - How webhooks work
    - Receiving and validating webhook events
  - Week 23: Cron Jobs
    - What are cron jobs?
    - Automating tasks in Node/Next.js
  - Week 24: System designs and extra package
    - o Sending mail with NodeMailer
    - Hosting applications
    - o Buying a domain name and configuring it