

# ■■■ React Complete Roadmap

## \*\*\*\*\* PHASE-1 (Prerequisite) \*\*\*\*\*

- Basics: Variables, operators, etc
- Functions
- Array, Object, String
- DOM Manipulation
- Promises & APIs
- Destructuring
- Modules

## \*\*\*\*\* PHASE-2 (React Basics) \*\*\*\*\*

- CLI Tools: Vite, Create React App
- Folder Structure
- Components: JSX, Props, States (useState), Data Flow
- Hooks
- Styling: CSS, Tailwind CSS

## \*\*\*\*\* PHASE-3 (Rendering) \*\*\*\*\*

- Event Handling
- Life cycle: useEffect
- Conditional Rendering
- List Rendering: Normal Array, Array of Objects, Array of Array
- Refs: useRef
- Higher Order Components

## \*\*\*\*\* PHASE-4 (APIs) \*\*\*\*\*

- Fetch
- Axios
- React Query

## \*\*\*\*\* PHASE-5 (Routing) \*\*\*\*\*

- React Router
- TanStack Router

## \*\*\*\*\* PHASE-6 (Hooks) \*\*\*\*\*

- useState
- useEffect
- useRef
- useLocation
- useCallback
- useMemo

#### \*\*\*\*\* PHASE-7 (Advance Powers) \*\*\*\*\*

- State Management: Context API + Reducer, Zustand, Redux, Redux Toolkit
- Styling: CSS, Tailwind CSS, Daisy UI, Styled Components, ShadCN, Material UI, Ant Design, Redux UI
- Animations: Gsap, React Spring, Framer Motion
- Validation: React Hook Form, Zod, Formik, Yup
- Testing: Jest, Vitest, React Testing Library

#### \*\*\*\*\* PHASE-8 (Projects) \*\*\*\*\*

- Beginner: To-Do List, Weather App, Calculator, Mini E-commerce Store, Quiz App, Expense Tracker, News App
- Intermediate: Basic E-commerce Store, Blog App, Chat App, Movie App, Portfolio Website
- Advanced: Advance E-commerce Store, LMS, YouTube Clone, Task Management App, Social Media Clone

#### \*\*\*\*\* OPTIMIZATIONS \*\*\*\*\*

- Performance: useMemo, Code splitting, Virtualization
- Bundle Size Optimization
- Cost Optimization: Reduce API calls, Lazy loading
- SEO

#### \*\*\*\*\* After React \*\*\*\*\*

- Next.js
- React Native (Android)
- Backend (Recommended)

#### \*\*\*\*\* Optional \*\*\*\*\*

- VCS - Git & GitHub