

## About this Book

Today, web Applications are expected to be interactive, responsive, available 24/7 and accessible from anywhere from world. Web application must be dynamic, flexible, secure and scalable to meet the demand. The frontend frameworks like React, Angular, Vue etc have enabled Web development to evolve very quickly. React, the most popular web development library in the world, particularly was created at Facebook to create independent isolated and reusable components for frontend interactive user interfaces. But there were few problems: initial load performance of page, Search Engine Optimization (SEO). By default, react runs on client side (on browser) and takes time to render complete page on screen. Since React framework is open-source JavaScript library therefore can cause SEO issues.

Next.js is full-stack lightweight React framework which not only helps to build fully optimized, scalable, high performance modern web applications but also provides additional tools and bundlers to have best developer experience and many built-in innovative features out of the box, such as: -

- **Pre-rendering** - (Static Generation & Server-Side Rendering), no need of extra configuration as Next.js provides pre-rendering by default.
- **Better for SEO** - pages are statically generated at build time or on request time before sending to browsers.
- **App Router** - file system-based routing by default
- **Native typescript support** - automatic typescript configuration, compilation.
- **Built-in Image optimization and lazy loading** - automatically optimizes size of image and format. Also loads the image when required.
- **Code Splitting** - Reduces the first payload size by splitting code and server components.
- **Data Fetching** - Renders content, depending upon use case. Includes pre-rendering with server side, static site generation with data / without data or incremental static generation at runtime.
- **API Route** - easy creation of API end point
- **Build Tools** - everything is included within its initial configuration.
- **CCS Support** – allows to use customize styling methods.

Starting with basic of Next.js and its core concepts, this book will demonstrate innovative features of the framework that are helpful to meet modern web pages goal easily and quickly.

By end of this book, you will be able to develop, fully optimized build SEC- friendly and superfast modern web pages using Next.js.