## **NEXT JS AND REACT**

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### Day 1

### Introduction

- \* Why Next.js?
- \* Fundamentals of Next
- \* Zero-Config approach
- \* Universal JavaScript (Isomorphic)
- \* Server-side rendering
- \* Code splitting
- \* Next vs. Create React App vs. Gatsby

### React Overview

- \* Classes vs Functional Components
- \* Props & State
- \* React Hooks (useState & useEffect)
- \* ES6
- \* JSX

## **Developing Locally**

- \* Installing Nextjs
- \* Running locally
- \* Linting
- \* Formatting

# Navigating Between Pages

- \* Link (client-side routing)
- \* withRouter
- \* getInitialProps
- \* Retrieving data from URLs

# Styling

- \* CSS (Importing & Using)
- \* Sass
- \* CSS-in-JS (Custom \_app.js)
- \* Styled-Components
- \* Responsive + Mobile-First Design

Day 2

## Fetching Data

- \* Custom Server
- \* Node.js & API Routes
- \* GraphQL
- \* Hasura

### Managing Assets and SEO

- \* Static Assets
- \* Public Files
- \* Image Compression / Optimization
- \* Custom \_document.js
- \* Open Graph (OG) tags

### Day 3

### Building A Blog With MDX

- \* MDX vs CMS
- \* Initial Setup
- \* Managing Posts
- \* Building Forms (StaticKit)
- \* Using a Component Library (Theme UI)

### Authentication

- \* What is a JWT?

  \* Auth0
- \* Firebase Auth
- \* Login & Signup Pages

Testing & Error Handling

- \* Unit test vs Integration test
- \* Jest Snapshot Testing
- \* React Testing Library
- \* Sentry Plugin
- \* Custom Error Page (\_error.js)

State Management & More

- \* Redux
- \* React Context
- \* Adding TypeScript
- \* Dynamic Imports

Exporting & Deployment

- \* Static Pre-Rendering
- \* Serverless Functions
- \* Zeit Now
- \* Netlify