



Advanced NextJS

- N Days
- Lecture and Hands-on Labs

Course Overview

Course overview paragraph goes here. Note in the "Hands On Labs" section, we now use the {{#include SUMMARY.md:20:}} tag to import lines 20 (inclusive) and beyond from within SUMMARY.md

Review this course online at https://www.alta3.com/courses/00-template

Who Should Attend

This class is targeted for ...

What You'll Learn

You will learn essential microservices concepts including:

- Concept #1
- Concept #2
- Concept #3
- Concept #4
- Concept #5
- Concept #6

Outline

THIS IS THE OPTUM CUSTOM BUILT 3 DAY COURSE. FOR THE PUBLIC NEXT JS COURSE GO TO DIRECTORY nxtjs->

- Welcome to Alta3 Live
- 🖳 Lecture + Lab: Register for Poll
- Vim: A Modal Text Editor
- Efficient CLI Usage with Tmux
- Revision Control with GitHub
- .gitignore with NextJS Projects

Day 1: Foundations and Core Concepts

- 🖳 Lecture + Lab: Introduction to Next.js and Setup
- PLecture: Advanced React Features in Next.js
- 🖳 Lecture + Lab: Advanced React Features in Next.js Lab
- P Lecture: Next.js Routing and Navigation
- 🖳 Lecture + Lab: Next.js Routing and Navigation Lab
- 🖳 Lecture + Lab: Data Fetching Strategies

- Decture: Server-Side Rendering (SSR) and Static Site Generation (SSG)-and-static-site-generation (ssg).md)
- 🖳 Lecture + Lab: Advanced SSR and SSG Techniques
- P Lecture: State Management in Next.js
- 🖳 Lecture + Lab: State Management Deep Dive Context API vs Redux in Next.js
- 🖳 Lecture + Lab: Custom Image Optimization Component

Day 2: Advanced Features and Optimizations

- 🖳 Lecture + Lab: Advanced State Management
- 🖳 Lecture + Lab: API Handling and Data Integration in Next.js
- \blacksquare Lecture + Lab: Advanced API Integrations with Apollo
- \(\subseteq \text{Lecture} + \text{Lab: GraphQL Integration with Server-Side Rendering} \)
- 🖳 Lecture + Lab: Authentication and Authorization
- 🖳 Lecture + Lab: Server-Side Caching Strategies
- 🖳 Lecture + Lab: Real-Time Data with Next.js and WebSockets
- 🖳 Lecture + Lab: Error Handling and Logging

Day 3: Scaling and Advanced Architectures

- 🖳 Lecture + Lab: Hot Swapping Virtual DOMs
- 🖳 Lecture + Lab: Using App Router
- 🖳 Lecture + Lab: Testing in Next.js Lab
- PLecture: Lecture on Microfrontend Architecture and re-usable components
- 🖳 Lecture + Lab: Reusable Components and React.forwardRef
- 🖳 Lecture + Lab: Next.js Multi Zones
- 🖳 Lecture + Lab: Monorepo Setup with Turborepo
- 🖳 Lecture + Lab: Advanced SEO and Analytics
- 🖳 Lecture + Lab: Using 3rd Party Libraries and Reusable Components

Prerequisites

Next Courses

Course 1 Course 2