



## **Advanced React - Take React to the Next level - 40 hours**

**Advanced fullstack React development with Next.js**

### **Description**

After learning React.js and using create-react-app for a while, you'd want to switch gears and take your React.js skills to the Next.js level!

Developing your apps with Next.js gives you so many benefits out of the box with zero configuration on your part.

So many real world scenarios and performance requirements are being met using Next.js you'd be left wondering how come you didn't hop on the wagon sooner. Features like Image optimization, internationalization, automatic code splitting, analytics, file-system routing, a variety of styling options, optional typescript support, amazing developer experience, auto-scaled serverless functions as your backend are just too easy!

But wait - there's more! Strange terms like JAM stack, SSR, SSG, ISR, PWA, AMP will suddenly start making sense to you and you'll understand why, how and when to use them! So stop procrastinating! Leave your SPA at home and join us on this journey that will enhance your abilities and make you much more productive and relevant than ever before. Get in the know and find out what is all the fuss about.

### **Prerequisites**

Knowledge of the following topics is assumed  
React ,React Hooks, Javascript ES6/7

### **Syllabus**

The training will include hands-on challenges of all of the topics we will cover, creating small apps with navigation, data-fetching, crud, authentication, internationalization and other useful techniques.

## Introduction

- JAM stack overview
- What's Next?
- Next use cases and differentiation
- SSR / SSG / SPA / Universal / Hybrid apps
- Hello Next app - project structure
- Running community code examples locally
- Build options

## Routing

- Adding 'pages' to your app
- Dynamic routing
- Next router
- Static Routes
- Shallow routing

## Styling

- Styling alternatives in next.js
- css libraries
- css preprocessors
- Sass
- css modules
- css-in-js

## Adding a backend to your Next.js app

- API Routes
- Introduction to Serverless lambda functions
- Dynamic API routes
- Middleware & helpers
- CORS

## Connecting to data sources

- Database tooling, options and choices
- Prototyping
- Deployment
- Performance / budget / dev time / considerations
- Data modeling & migrations
- Data fetching techniques

## Going beyond SPA

- SSR - pros & cons
- SSG - why & how
- ISR flow
- AMP & PWA's

## Authentication

- Cookies & session
- JWT
- OAuth2
- Protected routes
- Revoke access

## Internationalization

- Multilingual web apps
- i18n considerations
- i18n libraries
- Internationalized Routing in Next.js

## Deployment

- Environment variables
- Build & export
- Deployment on different platforms