

# NextJS

# Installation & Setup

Step1: Install Next.js using npm or yarn:

```
npx create-next-app@latest my-next-app
```

OR

```
yarn create next-app my-next-app
```

Step 2: Step 3: Navigate into the project directory and run the development server

```
cd my-next-app npm run dev
```

# Pages and Routing

File-Based Routing: Each file in the /pages directory becomes a route.

pages/index.js → /

pages/about.js → /about

Dynamic Routes: Use brackets for dynamic routes.

pages/posts/[id].js → /posts/1

# File Structure Overview

## Key Folders:

`/pages`: For page-based routing.

`/public`: For static assets (images, fonts, etc.).

`/styles`: For CSS files.

Next.js automatically handles routing based on files in `/pages`.

# File Structure Overview

## **node\_modules/**

This directory is where all your project's dependencies (installed via npm or yarn) are stored. You typically won't interact with this folder directly.

## **.next/**

This folder is automatically generated after building the application (e.g., npm run build or npm run dev). It contains compiled code and cached files for faster performance.

# File Structure Overview

## Package.json

A metadata file that defines your project. It lists dependencies, scripts, and other configurations.

### Important Fields:

**dependencies:** Lists the npm packages required by your project.

**scripts:** Contains predefined scripts for common tasks like running the dev server or building the app.

# .gitignore

Lists files and directories that Git should ignore when committing changes. Typically includes `node_modules/`, `.next/`, and other system-specific files.

# Custom Folders

**components/**: A common convention is to store reusable UI components in this folder.

**lib/ or utils/**: Stores utility functions, API helpers, or custom hooks.

**hooks/**: Stores custom React hooks if your project uses them.