




# **Next.js**

## **Folder Structure**

# Basic



```
1  my-next-app/
2  |— public/
3  |   |— images/           # Static images
4  |       |— logo.png
5  |— styles/
6  |   |— globals.css       # Global CSS styles
7  |— pages/
8  |   |— api/              # API routes
9  |       |— hello.js
10 |   |— _app.js           # Custom App component
11 |   |— _document.js      # Custom Document component
12 |   |— index.js          # Home page
13 |   |— about.js          # About page
14 |— package.json
15 |— next.config.js        # Next.js configuration file
```

# Intermediate

```
1  my-next-app/
2  |— public/
3  |   └─ images/
4  |— styles/
5  |   └─ globals.css
6  |   └─ Home.module.css      # CSS module for Home page
7  |— pages/
8  |   └─ api/
9  |   └─ _app.js
10  |   └─ _document.js
11  |   └─ index.js
12  |   └─ about.js
13  |   └─ blog/               # Blog section
14  |       └─ index.js         # Blog listing page
15  |       └─ [slug].js        # Dynamic blog post page
16  |— components/             # Reusable components
17  |   └─ Header.js
18  |   └─ Footer.js
19  |— context/                 # Context API for global state management
20  |   └─ AppContext.js
21  |— hooks/                   # Custom hooks
22  |   └─ useAuth.js
23  |— utils/                   # Utility functions
24  |   └─ fetcher.js
25  |— package.json
26  └─ next.config.js
```

# Advanced

```
1 my-next-app/
2   └─ public/
3       └─ images/
4   └─ styles/
5       ├── globals.css
6       ├── Home.module.css
7       └─ Theme.module.css    # CSS module for theming
8   └─ pages/
9       ├── api/
10        ├── _app.js
11        ├── _document.js
12        ├── index.js
13        ├── about.js
14        ├── blog/
15        └─ auth/              # Authentication pages
16            ├── login.js
17            └─ register.js
18   └─ components/
19       ├── Header.js
20       ├── Footer.js
21       ├── Layout.js         # Layout component for pages
22       └─ UI/                 # UI components (buttons, inputs, etc.)
23           ├── Button.js
24           └─ Input.js
25   └─ context/
26       ├── AppContext.js
27       └─ AuthContext.js     # Auth context
28   └─ hooks/
29       ├── useAuth.js
30       └─ useFetch.js        # Custom fetch hook
31   └─ layouts/                # Page layouts
32       └─ MainLayout.js
33   └─ middleware/             # Middleware for authentication, etc.
34       └─ auth.js
35   └─ services/               # Services for API calls
36       └─ apiService.js
37   └─ types/                  # TypeScript types (if using TypeScript)
38       └─ index.d.ts
39   └─ tests/                  # Unit and integration tests
40       ├── components/
41       └─ pages/
42   └─ package.json
43   └─ next.config.js
```

# Explanation of Key Folders

- **public/:** Contains static assets like images, fonts, etc.
- **styles/:** Contains global styles and CSS modules for component-specific styles.
- **pages/:** Contains all pages of the application, including API routes.
- **components/:** Contains reusable UI components and any other specific components used throughout the application.
- **context/:** Used for Context API to manage global state.
- **hooks/:** Contains custom hooks that can be reused across the application.
- **layouts/:** Contains layout components that wrap pages for consistent styling and structure.
- **middleware/:** Contains middleware functions to run before rendering pages, useful for authentication and redirects.
- **services/:** Contains services for making API calls and other data-fetching logic.
- **tests/:** Contains unit tests and integration tests for components and pages.