**What is Nuxt.js ?**

🡪Nuxt js build up on vue js. It will configure by files and folder structure, it server side rendered app but it is not a server side application like express.

🡪Nuxt.js is a framework for creating Universal Vue.js Applications.

🡪Its main scope is **UI rendering** while abstracting away the client/server distribution.

🡪As a framework, Nuxt.js comes with a lot of features to help you in your development between the client side and the server side such as Asynchronous Data, Middleware, Layouts, etc.

**How it Works?**

Nuxt.js includes the following to create a rich web development:

🡪Vue2

🡪Vue Router

🡪Vuex(included only when using the store option)

🡪Vur-meta

**Features:**

* Write Vue Files (\*.vue)
* Automatic Code Splitting
* Server-Side Rendering
* Powerful Routing System with Asynchronous Data
* Static File Serving
* ES6/ES7 Transpilation
* Bundling and minifying of your JS & CSS
* Managing <head> element (<title>, <meta>, etc.)
* Hot module replacement in Development
* Pre-processor: Sass, Less, Stylus, etc.
* HTTP/2 push headers ready
* Extending with Modular architecture
* # install dependencies
* $ npm install # Or yarn install
* # serve with hot reload at localhost:3000
* $ npm run dev
* # build for production and launch server
* $ npm run build
* $ npm start
* # generate static project
* $ npm run generate

## Schema:

## This schema shows what is called by Nuxt.js? when the server is called or when the user navigate through the app via <nuxt-link>:

## nuxt-schema

# Commands and Deployment:

**Note:**https://scotch.io/tutorials/build-a-server-side-rendered-vue-app-with-nuxtjs

***Nuxt.js comes with a set of useful commands, both for development and production purpose.***

List of Commands**:**

* **nuxt-** Launch a development server on localhost:3000 with hot-reloading.
* **nuxt build-** Build your application with webpack and minify the JS & CSS (for production).
* **nuxt start-** Start the server in production mode (after running nuxt build).
* **nuxt generate-** Build the application and generate every route as a HTML file (used for static hosting).

## Development Environment:

## To launch Nuxt in development mode with hot reloading (client side):

## npm run dev

## Production Deployment:

## Nuxt.js lets your choose between three modes to deploy your application: Server Rendered, SPA or Static Generated.

### Server Rendered Deployment (Universal):

To deploy, instead of running nuxt, you probably want to build ahead of time. Therefore, building and starting are separate commands:

**nuxt build**

**nuxt start**

### Static Generated Deployment (Pre Rendered):

Nuxt.js gives you the ability to host your web application on any static hosting.

To generate our web application into static files:

**npm run generate**

# Installation:

*Nuxt.js is easy to get started with. A simple project only needs the nuxt dependency.*

## Using Nuxt.js starter template:

## $ vue init nuxt-community/starter-template <project-name>

*If [vue-cli](https://github.com/vuejs/vue-cli) is not installed, please install it with npm install -g vue-cli*

then install the dependencies:

**$ cd <project-name>**

**$ npm install**

and launch the project with:

**$ npm run dev**

The application is now running on [http://localhost:3000](http://localhost:3000/).

### Installing nuxt:

Once the package.json has been created, add nuxt to the project via npm:

**npm install --save nuxt**

**Directory structure:**

1. Assets

The assets directory contains your un-compiled assets such as Less, Sass or JavaScript.

1. Components

The components directory contains your Vue.js Components. Nuxt.js doesn't supercharge the data method on these components.

1. Layouts

The layouts directory contains your Application Layouts.*This directory cannot be renamed.*

1. Middleware

The middleware directory contains your Application Middleware. Middleware lets you define custom functions that can be run before rendering either a page or a group of pages (layouts).

1. Pages

The pages directory contains your Application Views and Routes. The framework reads all the .vue files inside this directory and creates the application router. *This directory cannot be renamed.*

1. Plugins

The plugins directory contains your Javascript plugins that you want to run before instantiating the root Vue.js Application.

1. Static

The static directory contains your static files. Each file inside this directory is mapped to /. *This directory cannot be renamed.*

**Example:** /static/robots.txt is mapped as /robots.txt

1. Store

The store directory contains your [Vuex Store](http://vuex.vuejs.org/en/) files. The Vuex Store option is implemented in the Nuxt.js framework. Creating an index.js file in this directory enables the option in the framework automatically. This directory cannot be renamed.

1. Nuxt.config.js

The nuxt.config.js file contains your Nuxt.js custom configuration. *This file cannot be renamed.*

1. Package.json

The package.json file contains your Application dependencies and scripts.

**Aliases**

|  |  |
| --- | --- |
| ~ or @ | [srcDir](https://nuxtjs.org/api/configuration-srcdir) |
| ~~ or @@ | [rootDir](https://nuxtjs.org/api/configuration-rootdir) |

By default, srcDir is the same as rootDir

NOTE: Inside your Vue templates, if you need to link to your assets or static directory, use ~/assets/a.png and ~/static/a.png

Example:

https://github.com/ammezie/demo-portfolio