Node.js+Vue Guidelinelf of demo

> Original Designed by ZHANG CHAOZU in 2020
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> Change the damo by ZHANG CHAOZU in 2021
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> Update the tutorial by ZHU YUEMING and ZHANG CHAOZU in 2021

Build a Vue project

Why Vue:

1. Vue is a framework toward to data response but not dom, so operation toward to data is the only thing need to be considered.
2. Toward to the components and component tree, component can be reusable, more easy to maintain.

What is Node.js:

Node.js is a engine based on Chrome V8, it play a role like jvm in java.

What is npm/cnpm/yarn:

- **npm** is a node packages manager in node.js, like maven in java project.
- **cnpm**: due to the slow speed to download from outside server, Taobao create *cnpm*, which synchronize the resources from official serve and much faster than npm.
- **yarn** is also a kind of packages management tool.

What is vue-cli:

vue-cli is a command line system to build a vue production system.

Efficient and powerful plugins:

1. vue-devtools: a plugin from Chrome, much usable and powerful.
2. page-ruler-redux: clarify the position and size precisly.

What is webpack:

Webpack is a static module bundler for modern JavaScript applications. When webpack processes your application, it internally builds a dependency graph which maps every module your project needs and generates one or more bundles.

1. Environment setup

1. **Node.js**: node.js download address: https://nodejs.org/en/download/, just click next.

   After finishing installation, try

   ```
   node -v
   npm -v
   ```

2. **cnpm**: change the resources to be Taobao source, important.

```
npm install -g cnpm --registry=https://registry.npm.taobao.org
```

3. **yarn**: install yarn

```
cnpm install -g yarn
```

4. change the resources to be

```
yarn config set registry https://registry.npm.taobao.org
```

5. **vuex**: install vuex

```
cnpm install vuex
```

6. start project in webstorm.

2. Directory structure

global configuration file:
package.json: contains the config information, including the start script, dependencies etc.

src directory, it is the directory you only need to care about when write the code.

1. **assets**: the public directory for static resources, including the css, js, picture......
2. **components**: the directory for reusable components, such as the picture upload, phone verify and so on.
3. **service**: service connected with back-end, including the functions for getting information through *axios*
4. **router**: router for components, necessary and important.
5. **store**: It is a repository that define implement functions to combine vue component with axios method.
6. **views**: different pages for users.
7. **App.vue**: the entrence components for index.html(the only one true html file in vue).
8. **main.js**: the entrence js funtion to import library

[vue-cli official tutoria in Chinese](#)

Write Vue

All pages in vue are consist of components and index page, so router onle need be considered to index, and components are used in index.

Componets:

1. Define components

```
<template>

    //your components here

</template>
```

2. Import the components

```
<template>
    <your-components>...</your-components>
</template>
<script>
    export default {
        ...
        components: {your-components},
        ...
    }
</script>
```

Vue: official tutoria for Vue.js, it is also same with vue-cli.

Vue3: https://www.runoob.com/vue3/vue3-tutorial.html