Boulle Maxime Groupe SE

TP3 : Interface Development and Design

efrei

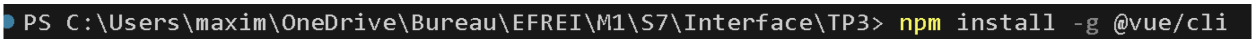
PARIS PANTHÉON-ASSAS UNIVERSITÉ

Promo 2026

Summary

Question 1: The main difference between local and global installations of packages with npm relates to their scope and accessibility ?

The biggest difference between local and global installations of packages with npm are the accessibility. With the global, you can access to everywhere from your computer to the package. Whereas with the local installation, you can only access to the package from the project. We generally use the local installation to have a clean setup of a framework but for a client a global is more suitable

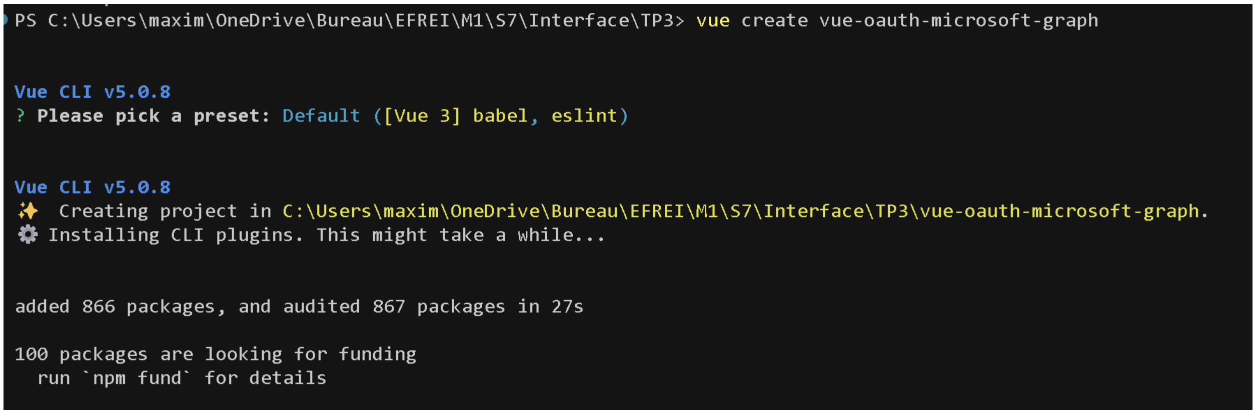


```
PS C:\Users\maxim\OneDrive\Bureau\EFREI\M1\S7\Interface\TP3> npm install -g @vue/cli
```

For the Vue CLI.

Exercise 1:

I created the Vue project named “vue-oath-microsoft-graph”



```
PS C:\Users\maxim\OneDrive\Bureau\EFREI\M1\S7\Interface\TP3> vue create vue-oauth-microsoft-graph


Vue CLI v5.0.8
? Please pick a preset: Default ([Vue 3] babel, eslint)


Vue CLI v5.0.8
✨  Creating project in C:\Users\maxim\OneDrive\Bureau\EFREI\M1\S7\Interface\TP3\vue-oauth-microsoft-graph.
⚙️ Installing CLI plugins. This might take a while...


added 866 packages, and audited 867 packages in 27s

100 packages are looking for funding
  run `npm fund` for details
```

Question 2: Webpack is internally used by the Vue CLI. Why is it required to deal with both multiple JavaScript files and special extensions like .vue?

Vue is a single page rendering and use the component system. So we have to use the webpack to render the different page created with js, html, images, etc …

Question 3: What is the role of babel and how browserslist may configure its output?

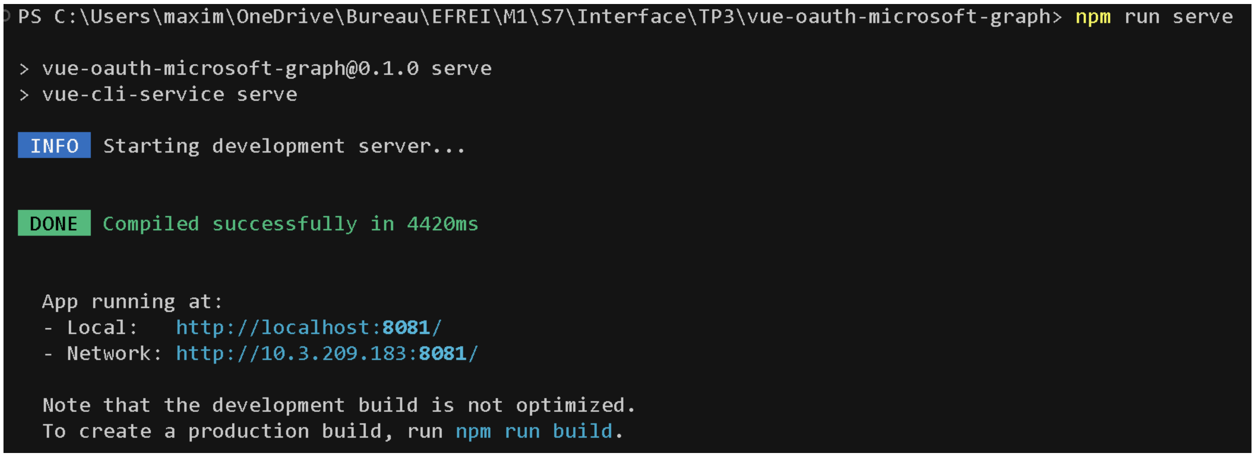
Babel is a tool to converts new JS code into another language understandable for older browsers. We can configure it like that :

```
"browserslist": [
        "defaults and fully supports es6-module",
        "maintained node versions"
]
```

Question 4: What is eslint and which set of rules are currently applied? The eslint configuration may be defined in a eslint.config.js or in package. json depending on the setup.

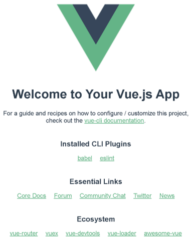
Eslint is a tool that helps you find and fix problems in your JavaScript code. It underline the problem so you can solve it easily.

Exercice 2:



```
PS C:\Users\maxim\OneDrive\Bureau\EFREI\M1\S7\Interface\TP3\vue-oauth-microsoft-graph> npm run serve

> vue-oauth-microsoft-graph@0.1.0 serve
> vue-cli-service serve

 INFO  Starting development server...


 DONE  Compiled successfully in 4420ms


  App running at:
  - Local:   http://localhost:8081/
  - Network: http://10.3.209.183:8081/

  Note that the development build is not optimized.
  To create a production build, run npm run build.
```

Exercice 3:



Welcome to Your Vue.js App

For a guide and recipes on how to configure / customize this project,
check out the vue-cli documentation.

Installed CLI Plugins

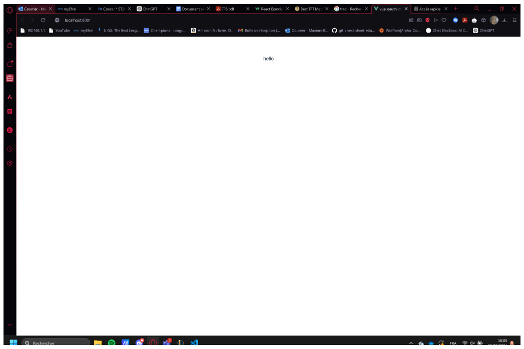
babel eslint

Essential Links

Core Docs Forum Community Chat Twitter News

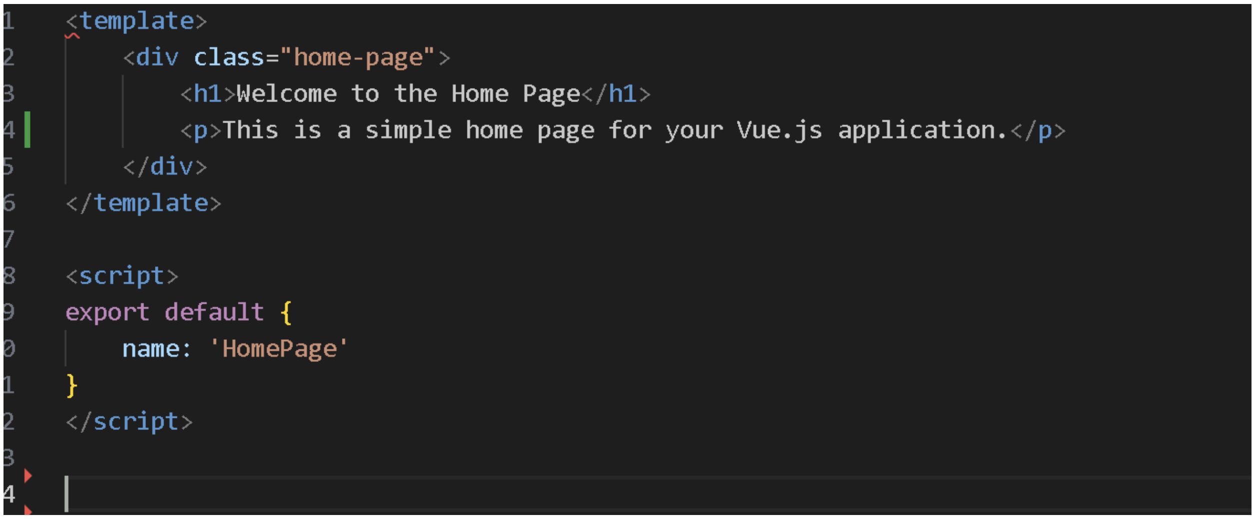
Ecosystem

vue-router vuex vue-devtools vue-loader awesome-vue

=> 

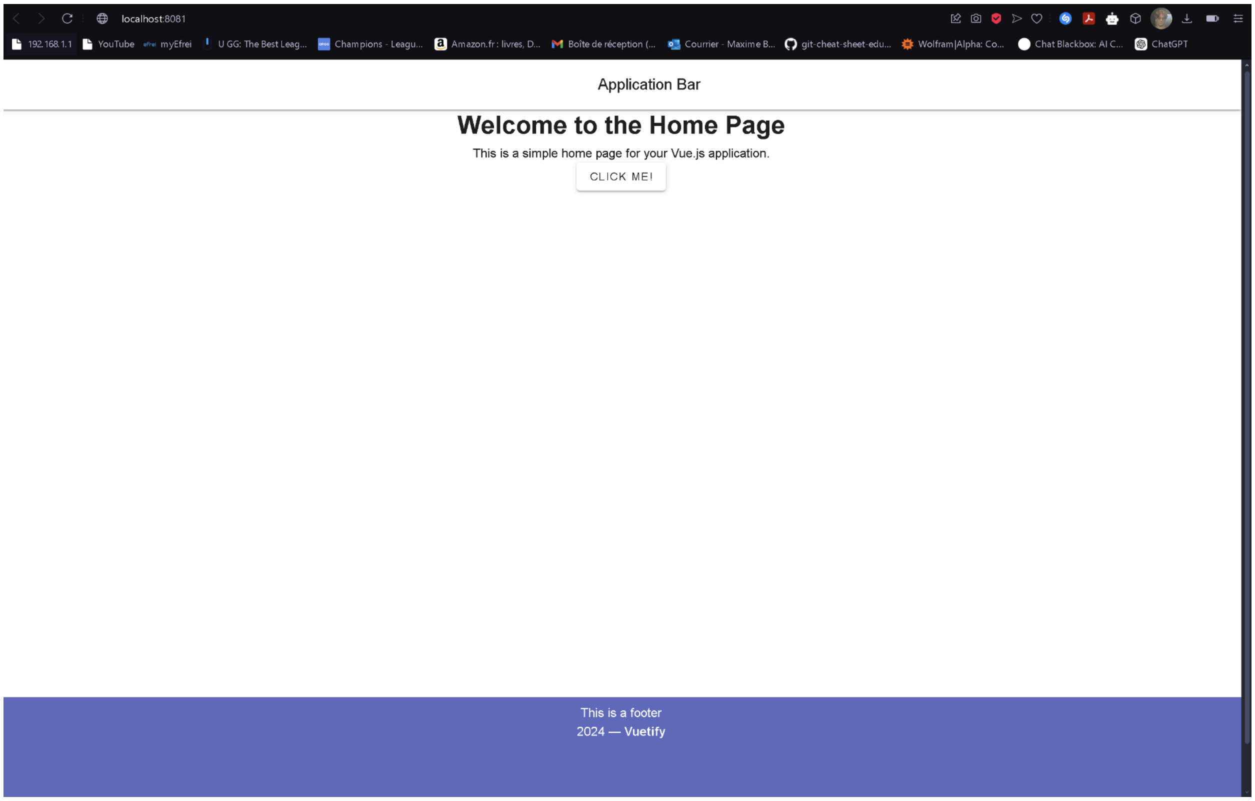
hello

Exercice 4:



```
<template>
    <div class="home-page">
        <h1>Welcome to the Home Page</h1>
        <p>This is a simple home page for your Vue.js application.</p>
    </div>
</template>

<script>
export default {
    name: 'HomePage'
}
</script>

```

Exercice 5:



Application Bar

Welcome to the Home Page

This is a simple home page for your Vue.js application.

CLICK ME!

This is a footer

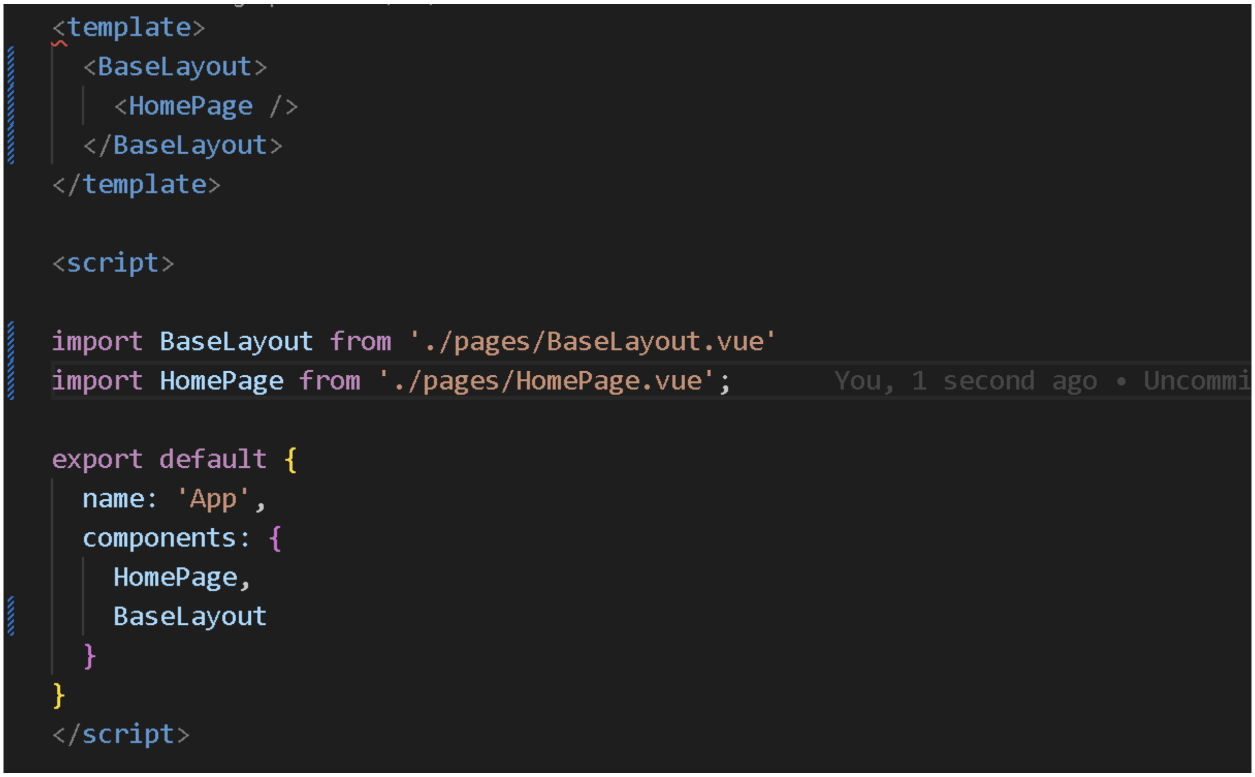
2024 — **Vuetify**

Question 5:

Scoped is for the component because the css is only available in the component, and non-scoped is for the whole single page.

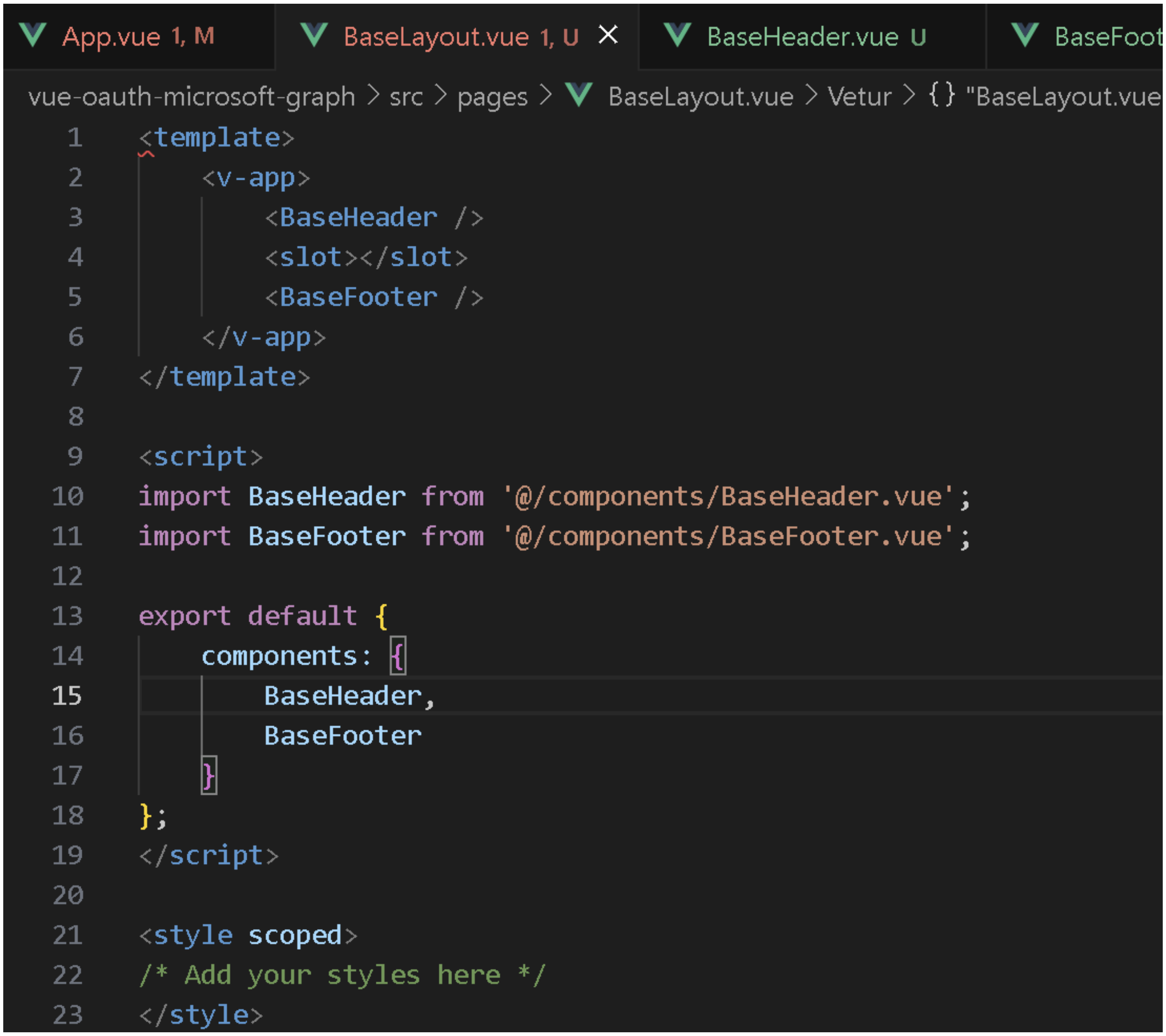
Exercice 6:

app.vue



```
<template>
  <BaseLayout>
    <HomePage />
  </BaseLayout>
</template>

<script>

import BaseLayout from './pages/BaseLayout.vue'
import HomePage from './pages/HomePage.vue';        You, 1 second ago • Uncommi

export default {
  name: 'App',
  components: {
    HomePage,
    BaseLayout
  }
}
</script>
```

BaseLayout.vue

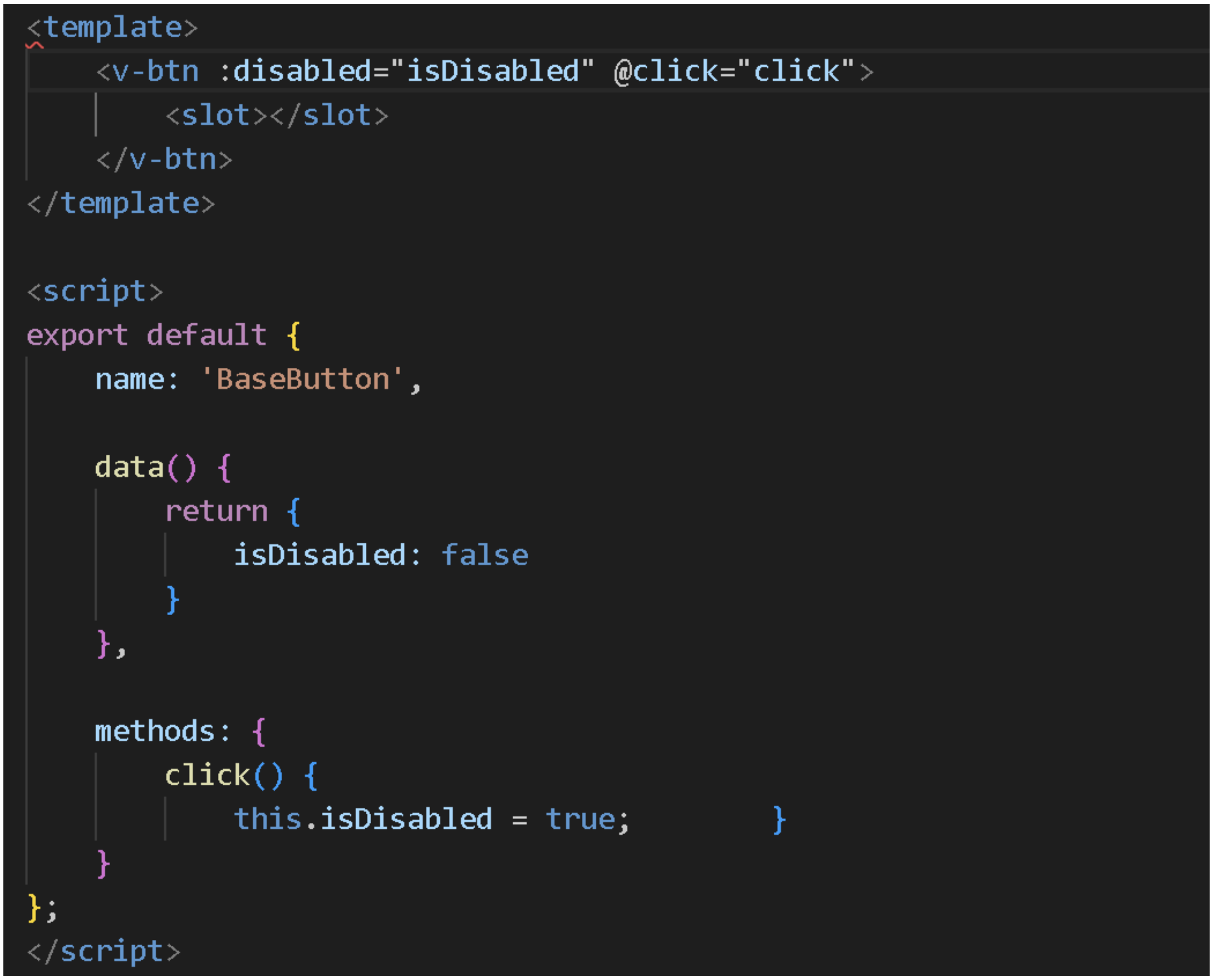

App.vue 1, M
BaseLayout.vue 1, U
BaseHeader.vue U
BaseFoot
vue-oauth-microsoft-graph > src > pages > BaseLayout.vue > Vetur > {} "BaseLayout.vue

```
<template>
    <v-app>
        <BaseHeader />
        <slot></slot>
        <BaseFooter />
    </v-app>
</template>

<script>
import BaseHeader from '@/components/BaseHeader.vue';
import BaseFooter from '@/components/BaseFooter.vue';

export default {
    components: {
        BaseHeader,
        BaseFooter
    }
};
</script>

<style scoped>
/* Add your styles here */
</style>
```

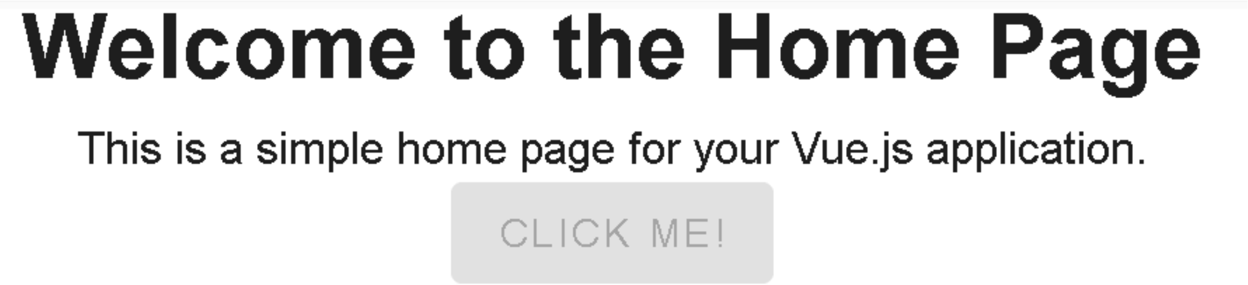
Question 6:

By inheritance, the non-props is given to the template. So if you pass some css in non-props, the css will be attributed to the template.

Exercice 7:



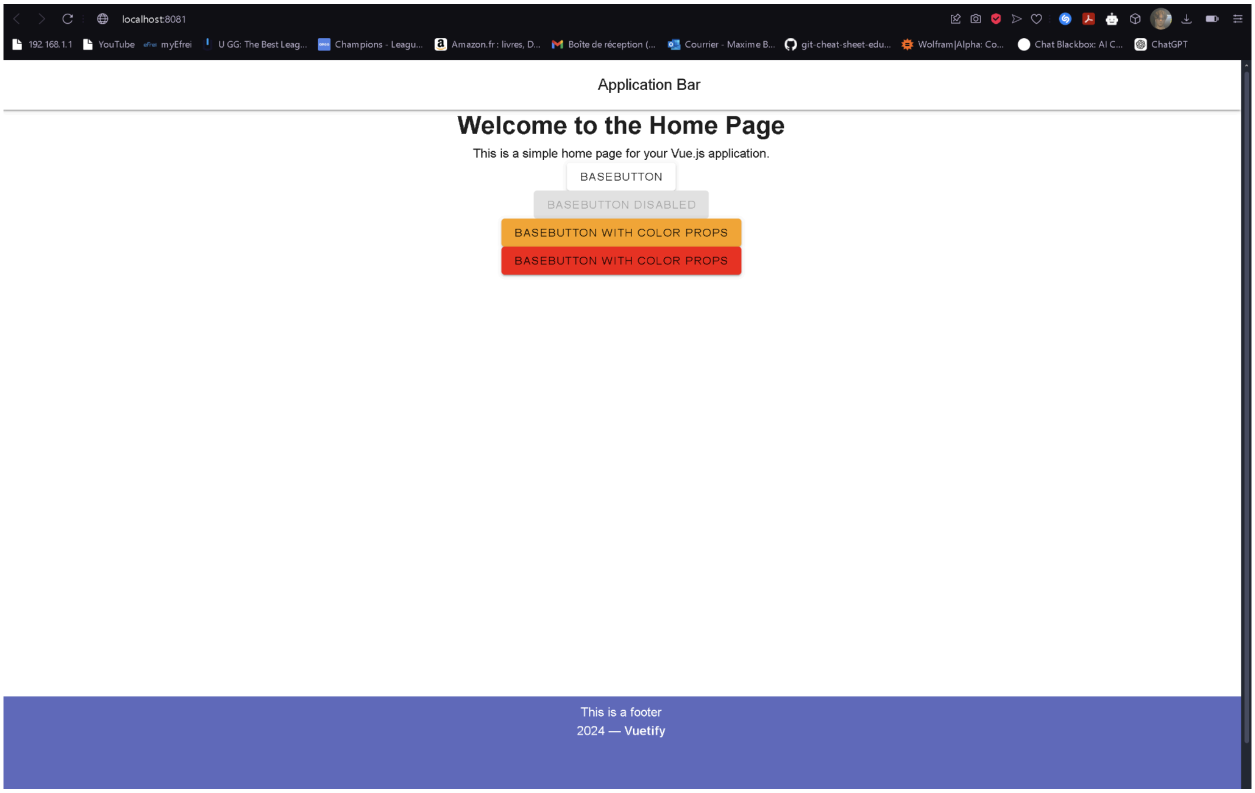
```
<template>
    <v-btn :disabled="isDisabled" @click="click">
        <slot></slot>
    </v-btn>
</template>

<script>
export default {
    name: 'BaseButton',

    data() {
        return {
            isDisabled: false
        }
    },

    methods: {
        click() {
            this.isDisabled = true;       }
    }
};
</script>
```



Welcome to the Home Page

This is a simple home page for your Vue.js application.

Exercice 8:



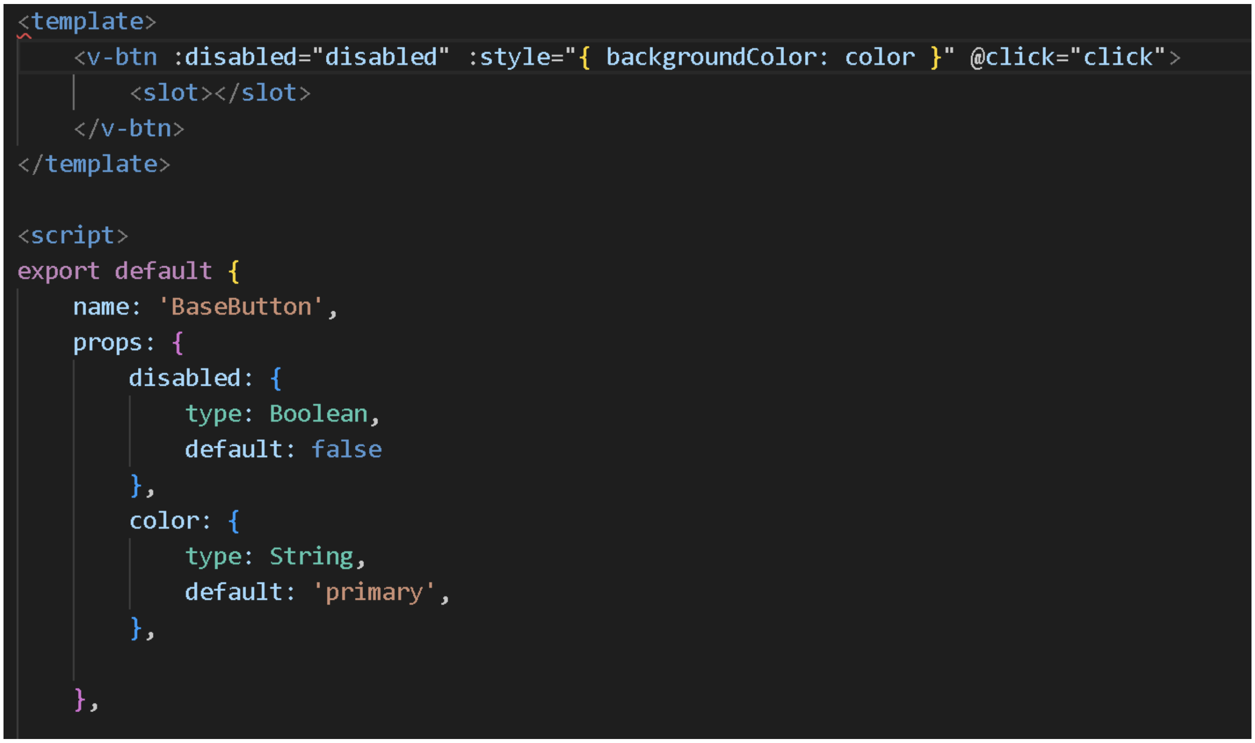
Application Bar

Welcome to the Home Page

This is a simple home page for your Vue.js application.

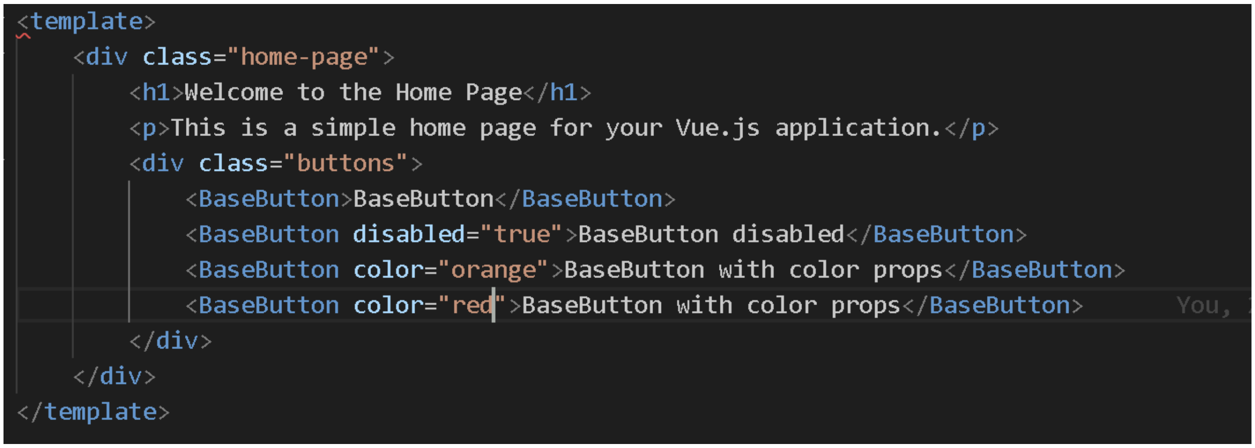
This is a footer
2024 — **Vuetify**

button page:



```
<template>
    <v-btn :disabled="disabled" :style="{ backgroundColor: color }" @click="click">
        <slot></slot>
    </v-btn>
</template>

<script>
export default {
    name: 'BaseButton',
    props: {
        disabled: {
            type: Boolean,
            default: false
        },
        color: {
            type: String,
            default: 'primary',
        },

    },
```

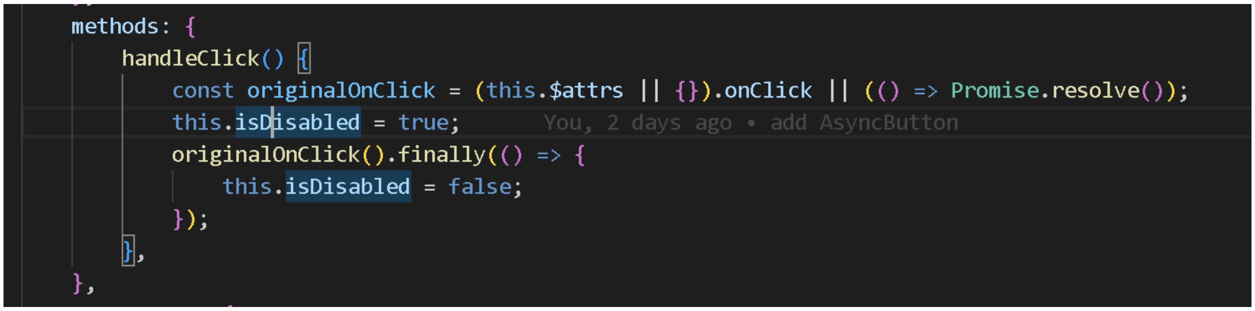
Home page :



```
<template>
    <div class="home-page">
        <h1>Welcome to the Home Page</h1>
        <p>This is a simple home page for your Vue.js application.</p>
        <div class="buttons">
            <BaseButton>BaseButton</BaseButton>
            <BaseButton disabled="true">BaseButton disabled</BaseButton>
            <BaseButton color="orange">BaseButton with color props</BaseButton>
            <BaseButton color="red">BaseButton with color props</BaseButton>        You,
        </div>
    </div>
</template>
```

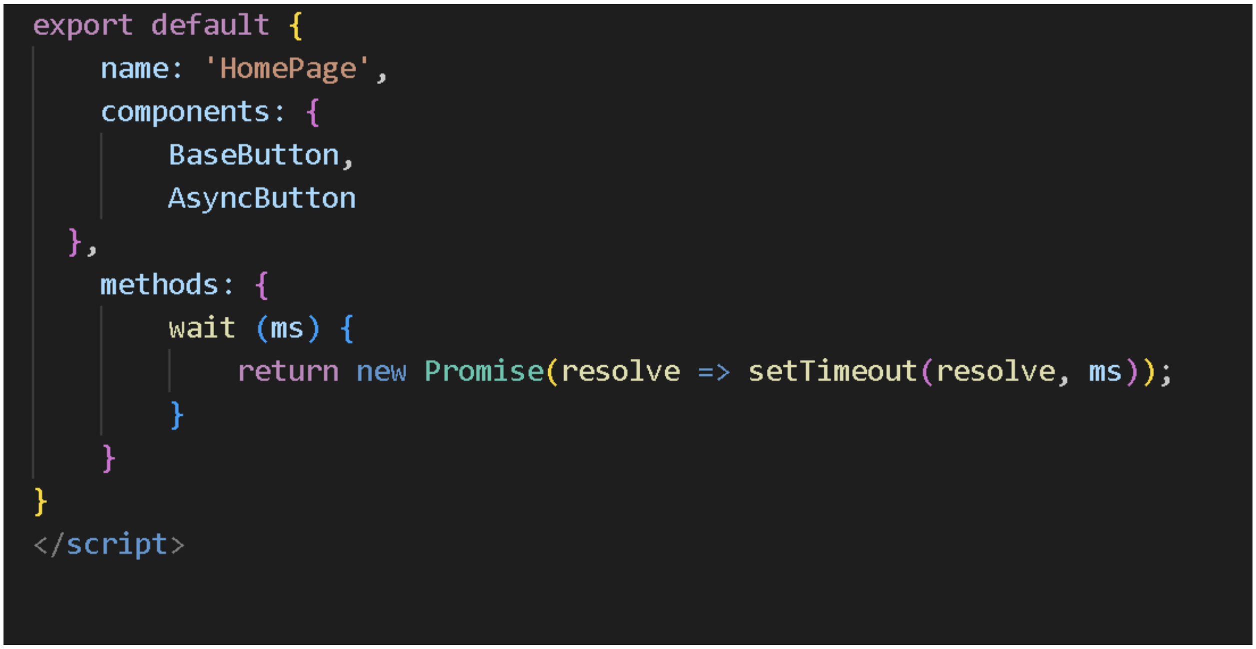
Exercice 9:

the async button method :



```
    methods: {
        handleClick() {
            const originalOnClick = (this.$attrs || {}).onClick || (() => Promise.resolve());
            this.isDisabled = true;        You, 2 days ago • add AsyncButton
            originalOnClick().finally(() => {
                this.isDisabled = false;
            });
        },
    },
```

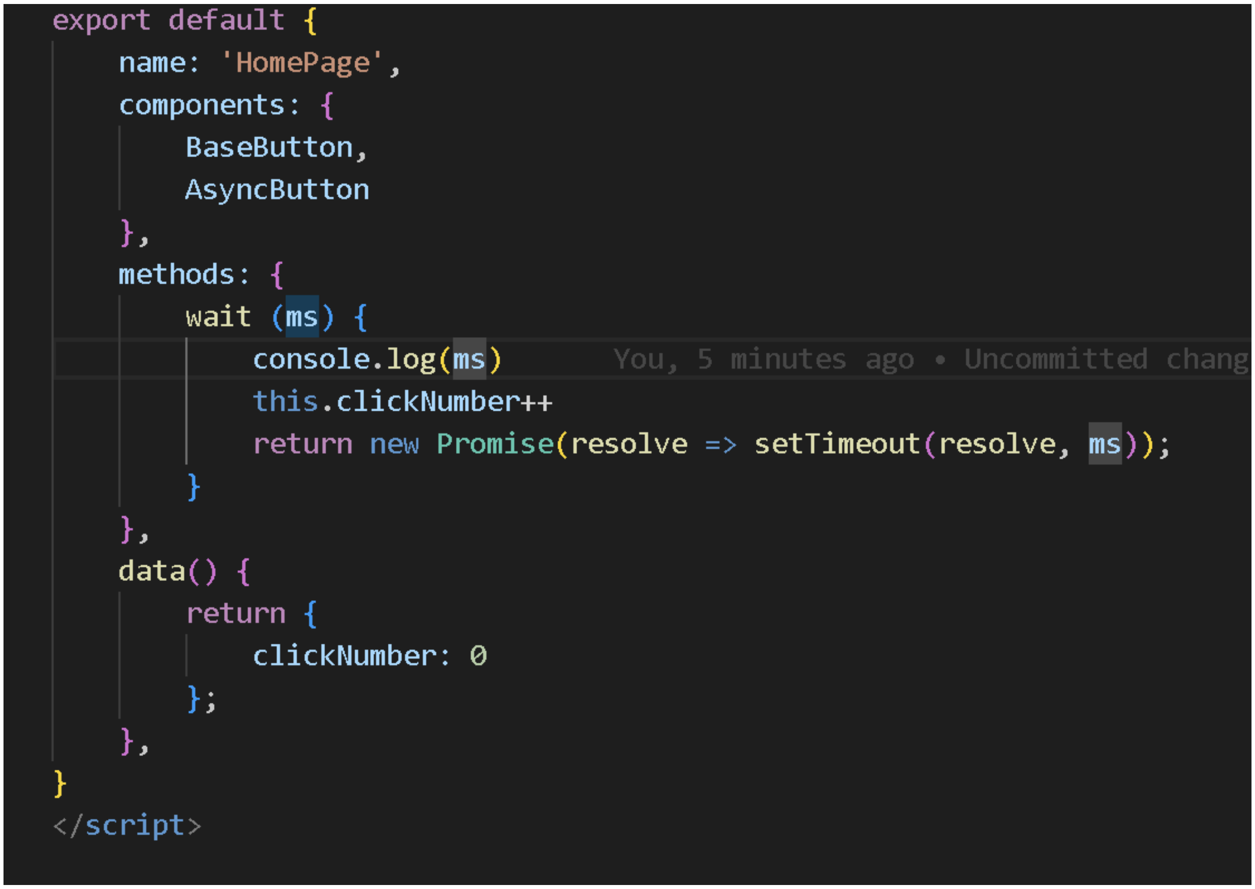
The home page method :



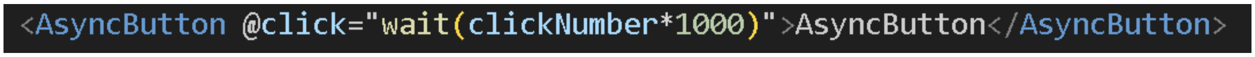
```
export default {
    name: 'HomePage',
    components: {
        BaseButton,
        AsyncButton
  },
    methods: {
        wait (ms) {
            return new Promise(resolve => setTimeout(resolve, ms));
        }
    }
}
</script>
```

Exercice 10:

the new HomePage method and data :



```
export default {
    name: 'HomePage',
    components: {
        BaseButton,
        AsyncButton
    },
    methods: {
        wait (ms) {
            console.log(ms)        You, 5 minutes ago • Uncommitted chang
            this.clickNumber++
            return new Promise(resolve => setTimeout(resolve, ms));
        }
    },
    data() {
        return {
            clickNumber: 0
        };
    },
}
</script>
```



```
<AsyncButton @click="wait(clickNumber*1000)">AsyncButton</AsyncButton>
```

Question 7: Analyse how works the AsyncButton. How the child component is aware of the returned Promise by the parent onClick handler? When is executed the callback passed to .finally()? Why use .finally() instead of .then()?

The child is aware by the props :disabled=”isPending”.
.finally() is used because it returns the promise with regardles. Whereas .then() is waiting for a success promise.

Question 8: Which bug is introduced if inheritAttrs: false is missing or set to true in AsyncButton? Why?

The function handleClick() is called 2 times.