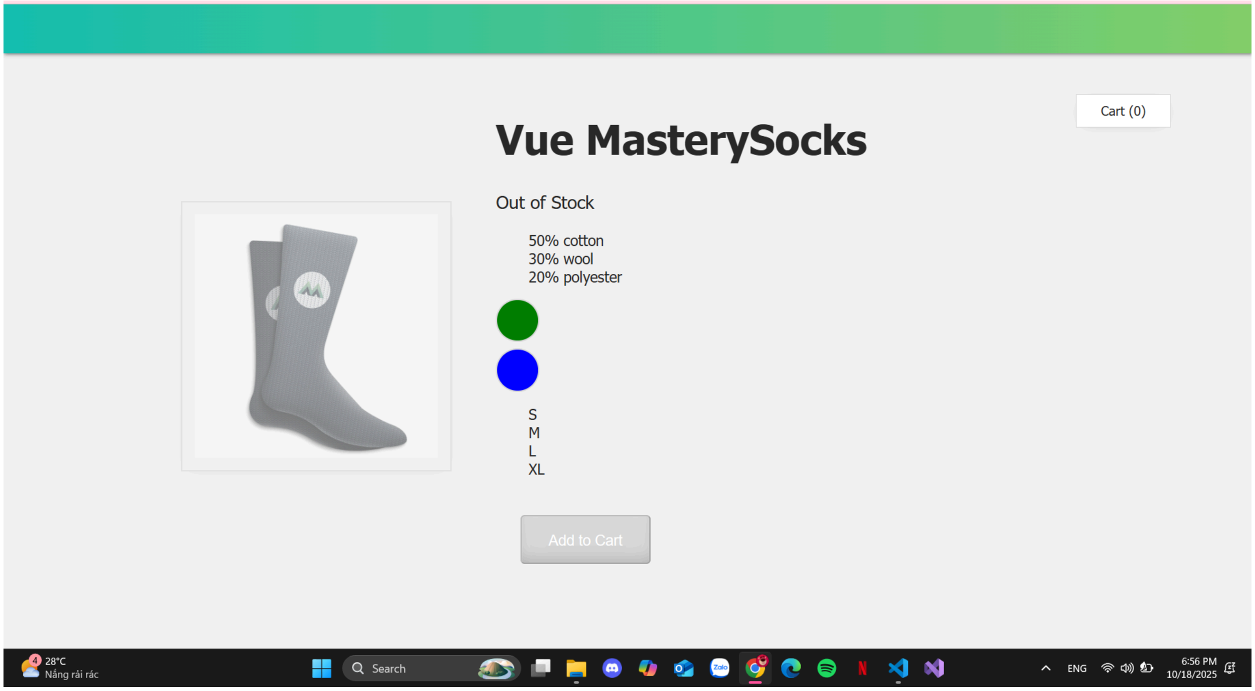
Lesson 8 :



Cart (0)

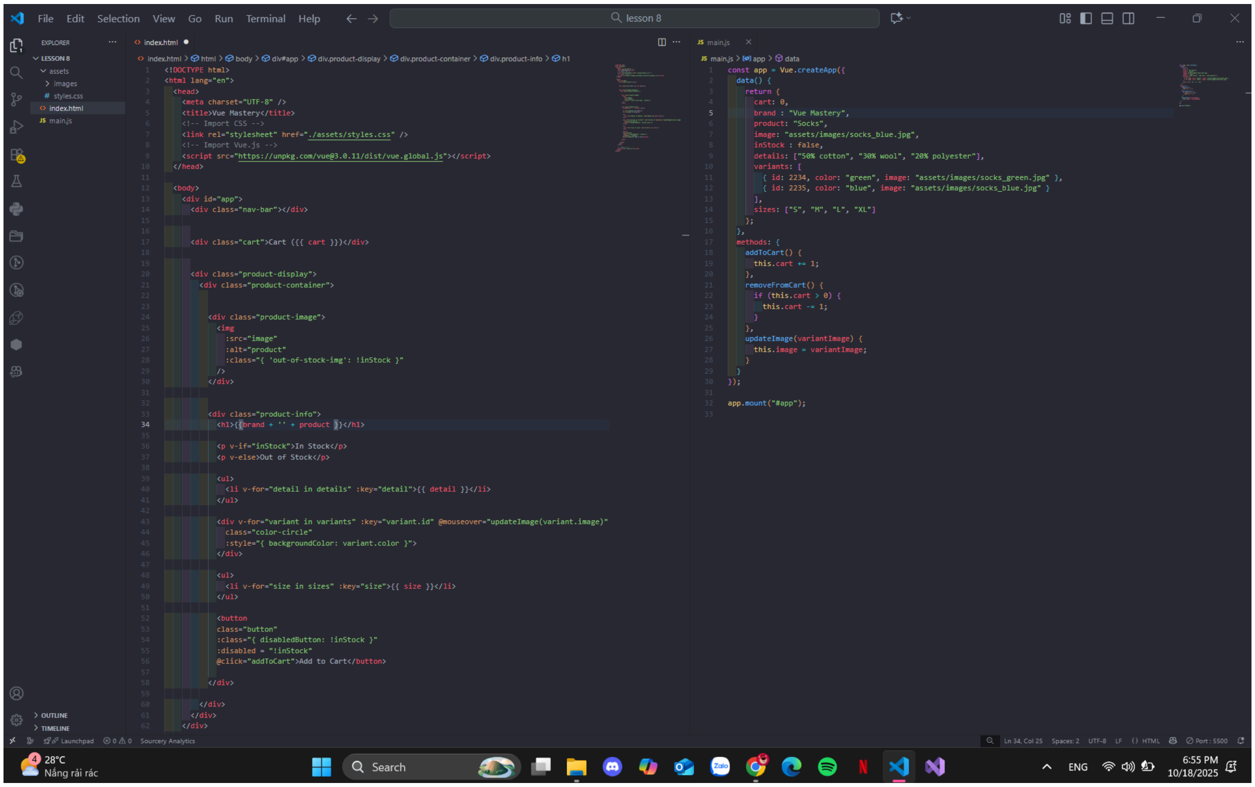
Vue MasterySocks

Out of Stock

- 50% cotton
- 30% wool
- 20% polyester

- S
- M
- L
- XL

Add to Cart

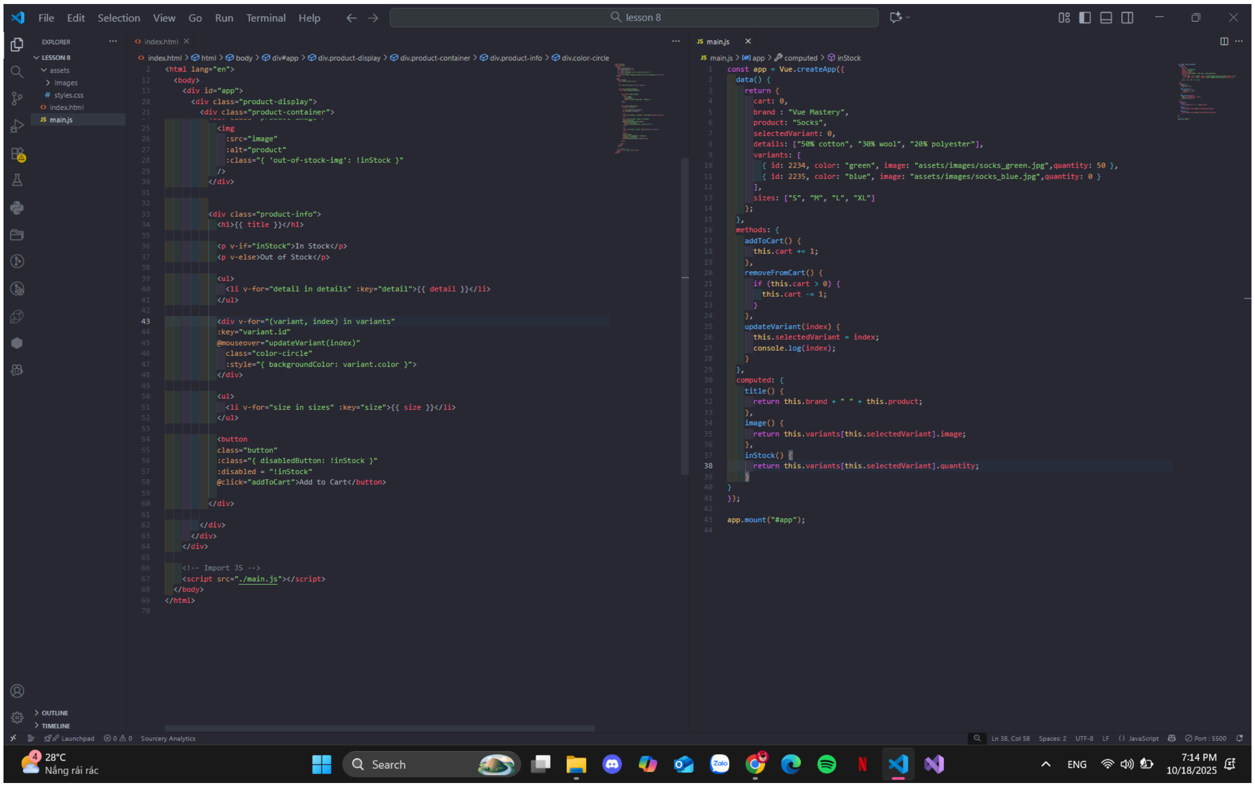


index.html

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue Mastery</title>
    <!-- Import CSS -->
    <link rel="stylesheet" href="./assets/styles.css" />
    <!-- Import Vue.js -->
    <script src="https://unpkg.com/vue@3.0.11/dist/vue.global.js"></script>
  </head>

  <body>
    <div id="app">
      <div class="nav-bar"></div>


      <div class="cart">Cart ({{ cart }})</div>


      <div class="product-display">
        <div class="product-container">


          <div class="product-image">
            <img
              :src="image"
              :alt="product"
              :class="{ 'out-of-stock-img': !inStock }"
            />
          </div>


          <div class="product-info">
            <h1>{{brand + '' + product }}</h1>

            <p v-if="inStock">In Stock</p>
            <p v-else>Out of Stock</p>

            <ul>
              <li v-for="detail in details" :key="detail">{{ detail }}</li>
            </ul>

            <div v-for="variant in variants" :key="variant.id" @mouseover="updateImage(variant.image)"
              class="color-circle"
              :style="{ backgroundColor: variant.color }">
            </div>

            <ul>
              <li v-for="size in sizes" :key="size">{{ size }}</li>
            </ul>

            <button
            class="button"
            :class="{ disabledButton: !inStock }"
            :disabled = "!inStock"
            @click="addToCart">Add to Cart</button>

          </div>

        </div>
      </div>
    </div>
```

main.js

```javascript
const app = Vue.createApp({
  data() {
    return {
      cart: 0,
      brand : "Vue Mastery",
      product: "Socks",
      image: "assets/images/socks_blue.jpg",
      inStock : false,
      details: ["50% cotton", "30% wool", "20% polyester"],
      variants: [
        { id: 2234, color: "green", image: "assets/images/socks_green.jpg" },
        { id: 2235, color: "blue", image: "assets/images/socks_blue.jpg" }
      ],
      sizes: ["S", "M", "L", "XL"]
    };
  },
  methods: {
    addToCart() {
      this.cart += 1;
    },
    removeFromCart() {
      if (this.cart > 0) {
        this.cart -= 1;
      }
    },
    updateImage(variantImage) {
      this.image = variantImage;
    }
  }
});

app.mount("#app");
```

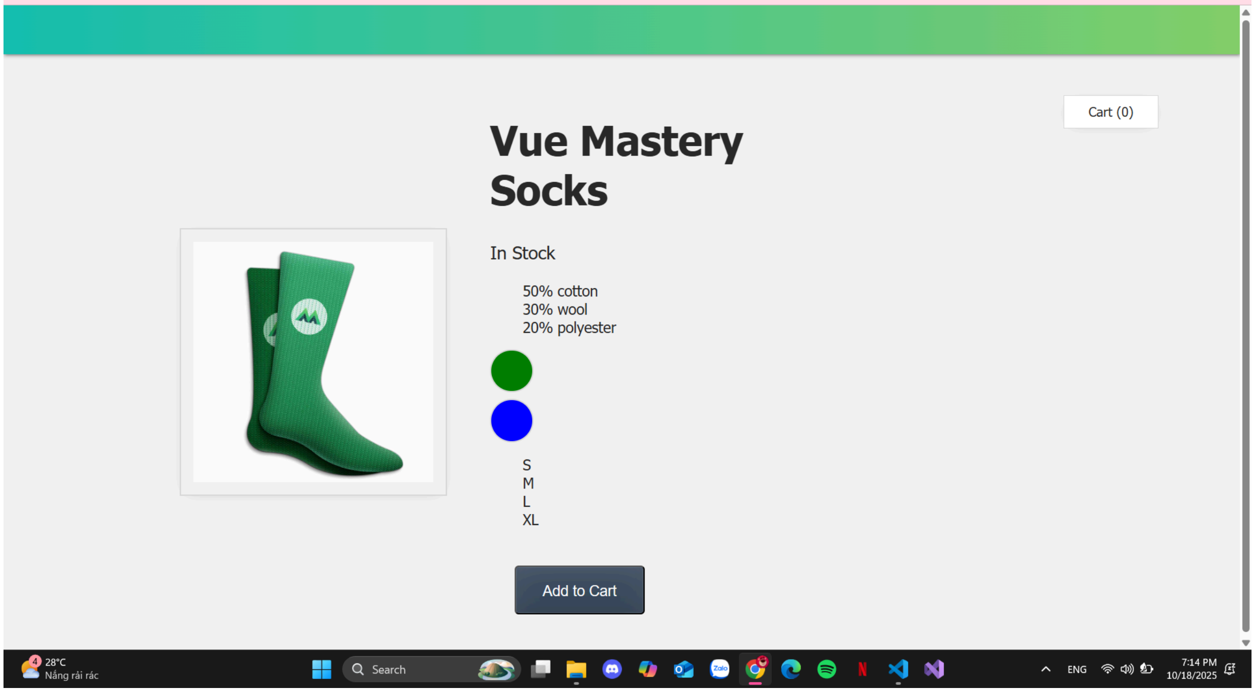


index.html > html > body > div#app > div.product-display > div.product-container > div.product-info > div.color-circle

```html
<html lang="en">
  <body>
    <div id="app">
      <div class="product-display">
        <div class="product-container">
            <img
              :src="image"
              :alt="product"
              :class="{ 'out-of-stock-img': !inStock }"
            />
          </div>


          <div class="product-info">
            <h1>{{ title }}</h1>

            <p v-if="inStock">In Stock</p>
            <p v-else>Out of Stock</p>

            <ul>
              <li v-for="detail in details" :key="detail">{{ detail }}</li>
            </ul>

            <div v-for="(variant, index) in variants"
            :key="variant.id"
            @mouseover="updateVariant(index)"
              class="color-circle"
              :style="{ backgroundColor: variant.color }">
            </div>

            <ul>
              <li v-for="size in sizes" :key="size">{{ size }}</li>
            </ul>

            <button
            class="button"
            :class="{ disabledButton: !inStock }"
            :disabled = "!inStock"
            @click="addToCart">Add to Cart</button>

          </div>

        </div>
      </div>
    </div>

    <!-- Import JS -->
    <script src="./main.js"></script>
  </body>
</html>
```

main.js > app > computed > inStock

```javascript
const app = Vue.createApp({
  data() {
    return {
      cart: 0,
      brand : "Vue Mastery",
      product: "Socks",
      selectedVariant: 0,
      details: ["50% cotton", "30% wool", "20% polyester"],
      variants: [
        { id: 2234, color: "green", image: "assets/images/socks_green.jpg",quantity: 50 },
        { id: 2235, color: "blue", image: "assets/images/socks_blue.jpg",quantity: 0 }
      ],
      sizes: ["S", "M", "L", "XL"]
    };
  },
  methods: {
    addToCart() {
      this.cart += 1;
    },
    removeFromCart() {
      if (this.cart > 0) {
        this.cart -= 1;
      }
    },
    updateVariant(index) {
      this.selectedVariant = index;
      console.log(index);
    }
  },
  computed: {
    title() {
      return this.brand + " " + this.product;
    },
    image() {
      return this.variants[this.selectedVariant].image;
    },
    inStock() {
      return this.variants[this.selectedVariant].quantity;
    }
  }
});

app.mount("#app");
```



Cart (0)

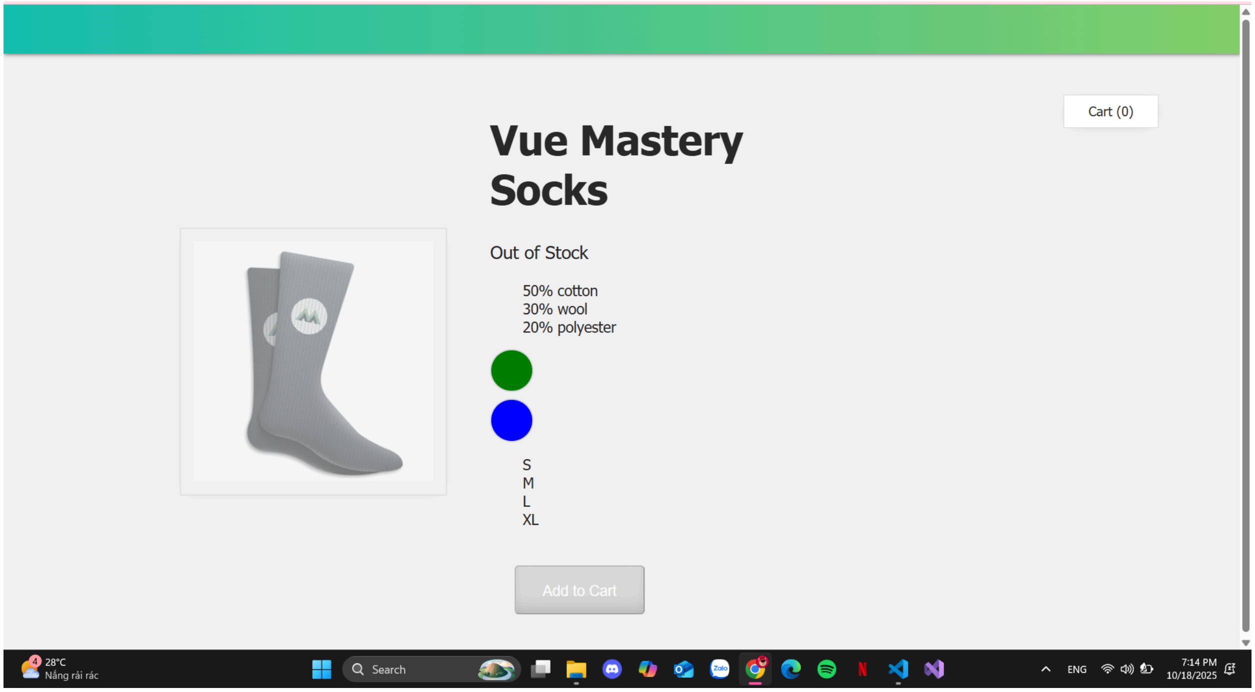
Vue Mastery Socks

In Stock

50% cotton
30% wool
20% polyester

S
M
L
XL

Add to Cart



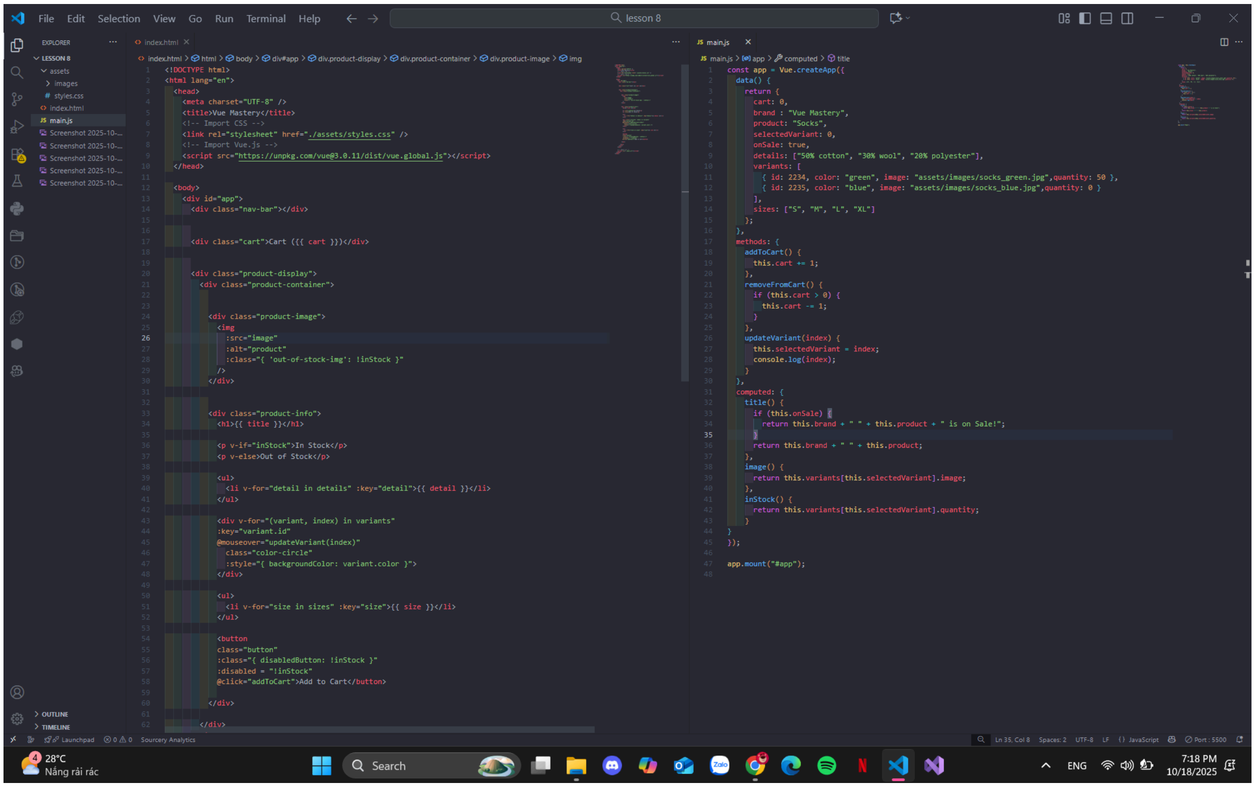
Vue Mastery Socks

Out of Stock

- 50% cotton
- 30% wool
- 20% polyester

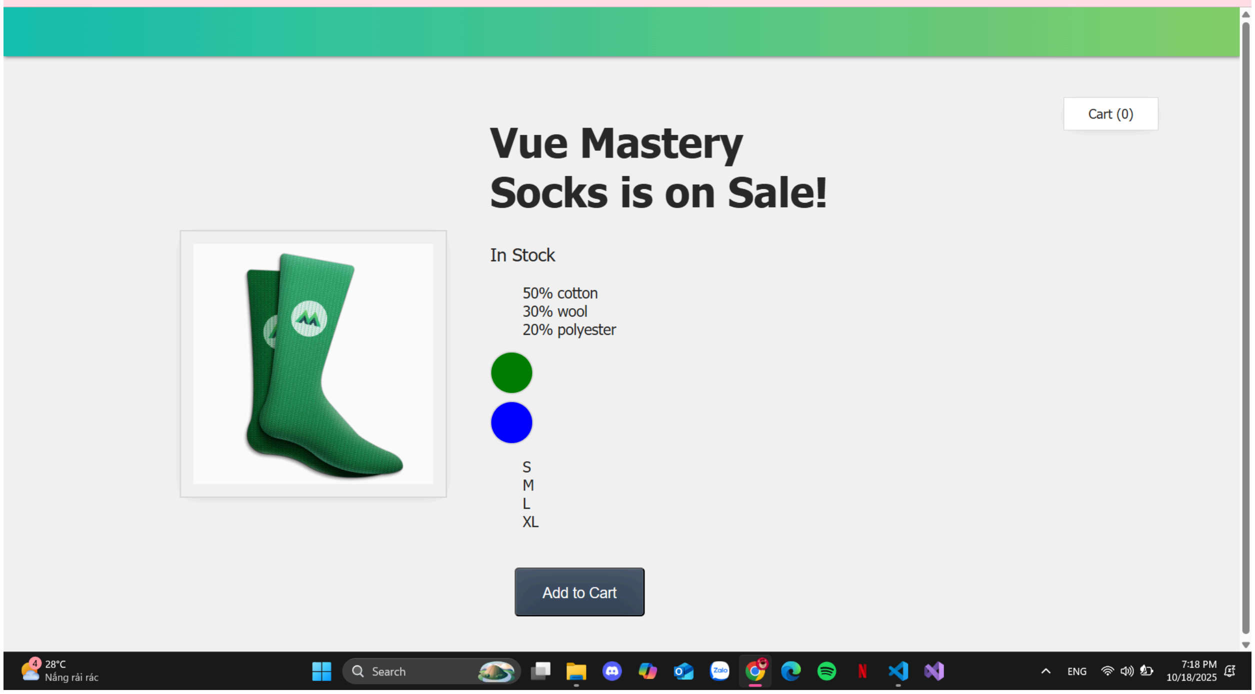
●
●

- S
- M
- L
- XL



```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue Mastery</title>
    <!-- Import CSS -->
    <link rel="stylesheet" href="./assets/styles.css" />
    <!-- Import Vue.js -->
    <script src="https://unpkg.com/vue@3.0.11/dist/vue.global.js"></script>
  </head>

  <body>
    <div id="app">
      <div class="nav-bar"></div>


      <div class="cart">Cart ({{ cart }})</div>


      <div class="product-display">
        <div class="product-container">


          <div class="product-image">
            <img
              :src="image"
              :alt="product"
              :class="{ 'out-of-stock-img': !inStock }"
            />
          </div>


          <div class="product-info">
            <h1>{{ title }}</h1>

            <p v-if="inStock">In Stock</p>
            <p v-else>Out of Stock</p>

            <ul>
              <li v-for="detail in details" :key="detail">{{ detail }}</li>
            </ul>

            <div v-for="(variant, index) in variants"
            :key="variant.id"
            @mouseover="updateVariant(index)"
              class="color-circle"
              :style="{ backgroundColor: variant.color }">
            </div>

            <ul>
              <li v-for="size in sizes" :key="size">{{ size }}</li>
            </ul>

            <button
            class="button"
            :class="{ disabledButton: !inStock }"
            :disabled = "!inStock"
            @click="addToCart">Add to Cart</button>

          </div>

        </div>
```

```javascript
const app = Vue.createApp({
  data() {
    return {
      cart: 0,
      brand : "Vue Mastery",
      product: "Socks",
      selectedVariant: 0,
      onSale: true,
      details: ["50% cotton", "30% wool", "20% polyester"],
      variants: [
        { id: 2234, color: "green", image: "assets/images/socks_green.jpg",quantity: 50 },
        { id: 2235, color: "blue", image: "assets/images/socks_blue.jpg",quantity: 0 }
      ],
      sizes: ["S", "M", "L", "XL"]
    };
  },
  methods: {
    addToCart() {
      this.cart += 1;
    },
    removeFromCart() {
      if (this.cart > 0) {
        this.cart -= 1;
      }
    },
    updateVariant(index) {
      this.selectedVariant = index;
      console.log(index);
    }
  },
  computed: {
    title() {
      if (this.onSale) {
        return this.brand + " " + this.product + " is on Sale!";
      }
      return this.brand + " " + this.product;
    },
    image() {
      return this.variants[this.selectedVariant].image;
    },
    inStock() {
      return this.variants[this.selectedVariant].quantity;
    }
  }
});

app.mount("#app");
```



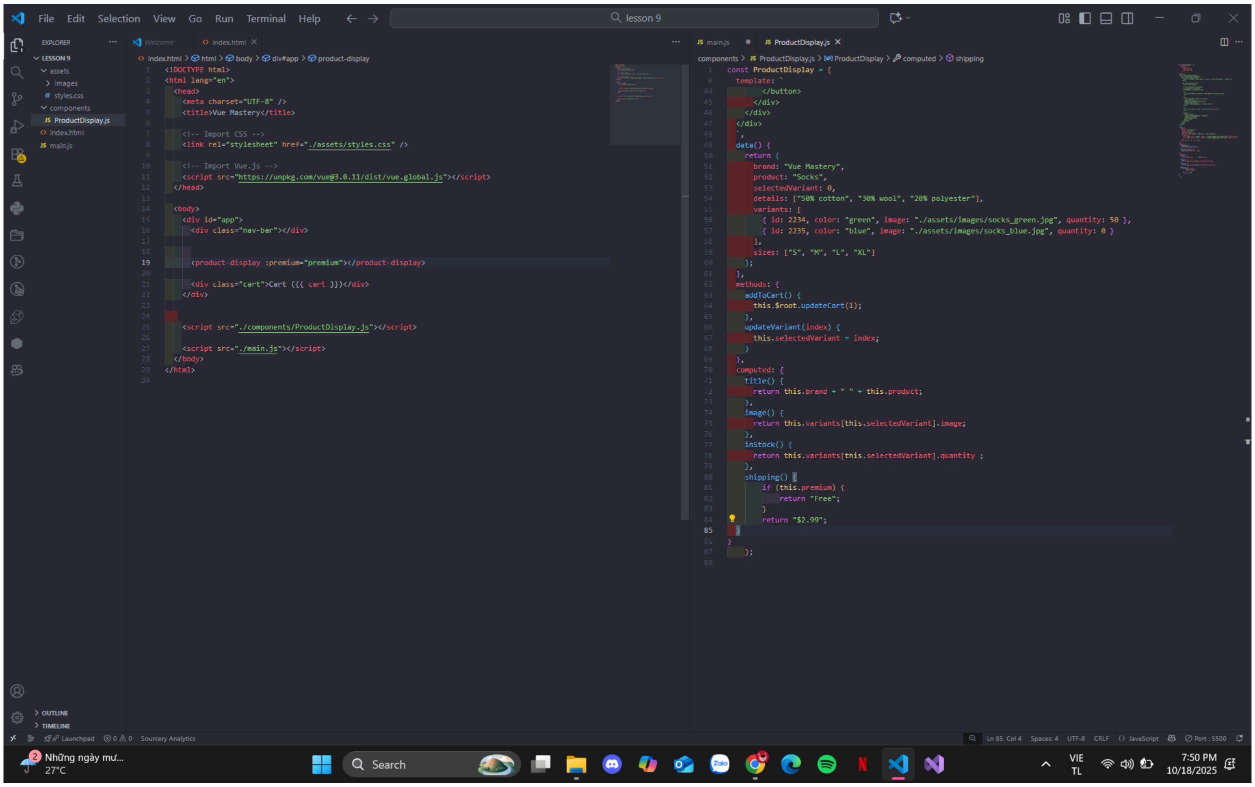
Vue Mastery
Socks is on Sale!

In Stock

- 50% cotton
- 30% wool
- 20% polyester

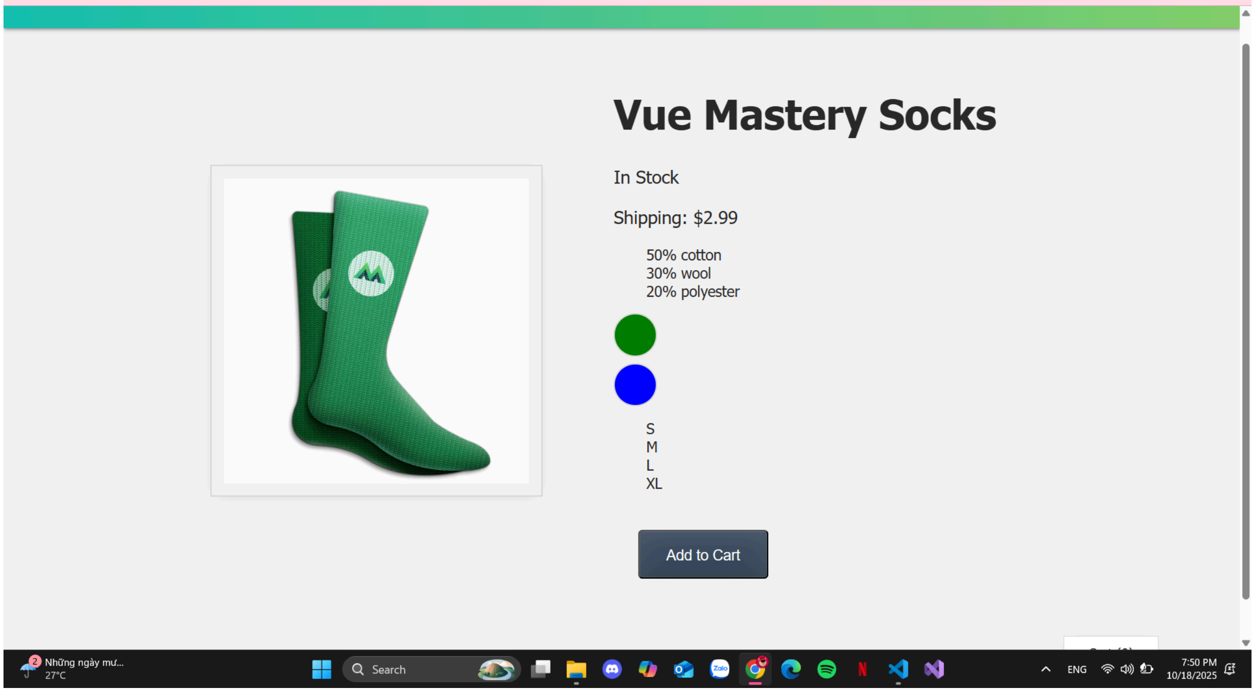
- S
- M
- L
- XL

Lesson 9 :



```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue Mastery</title>

    <!-- Import CSS -->
    <link rel="stylesheet" href="./assets/styles.css" />

    <!-- Import Vue.js -->
    <script src="https://unpkg.com/vue@3.0.11/dist/vue.global.js"></script>
  </head>

  <body>
    <div id="app">
      <div class="nav-bar"></div>


      <product-display :premium="premium"></product-display>

      <div class="cart">Cart ({{ cart }})</div>
    </div>


    <script src="./components/ProductDisplay.js"></script>

    <script src="./main.js"></script>
  </body>
</html>
```

```javascript
const ProductDisplay = {
  template: `
        </button>
      </div>
    </div>
  </div>
  `,
  data() {
    return {
      brand: "Vue Mastery",
      product: "Socks",
      selectedVariant: 0,
      details: ["50% cotton", "30% wool", "20% polyester"],
      variants: [
        { id: 2234, color: "green", image: "./assets/images/socks_green.jpg", quantity: 50 },
        { id: 2235, color: "blue", image: "./assets/images/socks_blue.jpg", quantity: 0 }
      ],
      sizes: ["S", "M", "L", "XL"]
    };
  },
  methods: {
    addToCart() {
      this.$root.updateCart(1);
    },
    updateVariant(index) {
      this.selectedVariant = index;
    }
  },
  computed: {
    title() {
      return this.brand + " " + this.product;
    },
    image() {
      return this.variants[this.selectedVariant].image;
    },
    inStock() {
      return this.variants[this.selectedVariant].quantity ;
    },
    shipping() {
        if (this.premium) {
            return "Free";
        }
        return "$2.99";
  }
}
    };
```



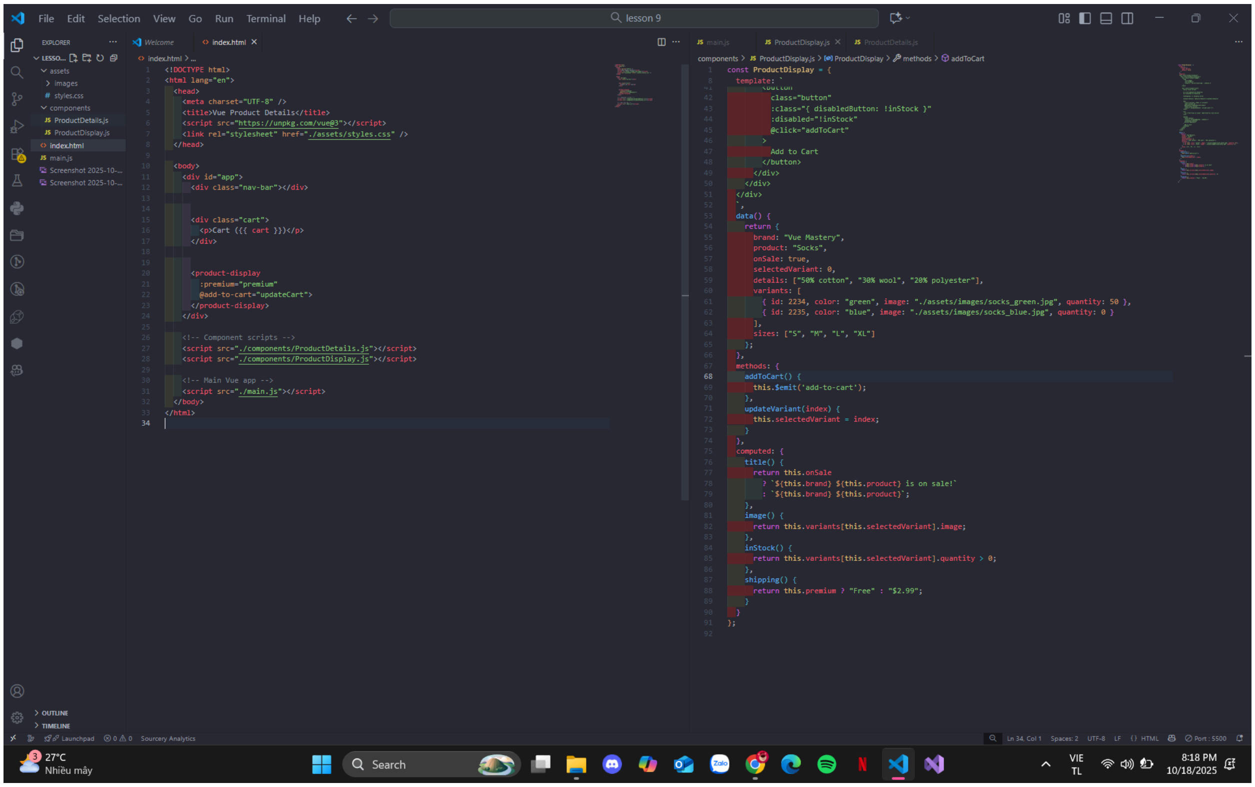
Vue Mastery Socks

In Stock

Shipping: $2.99

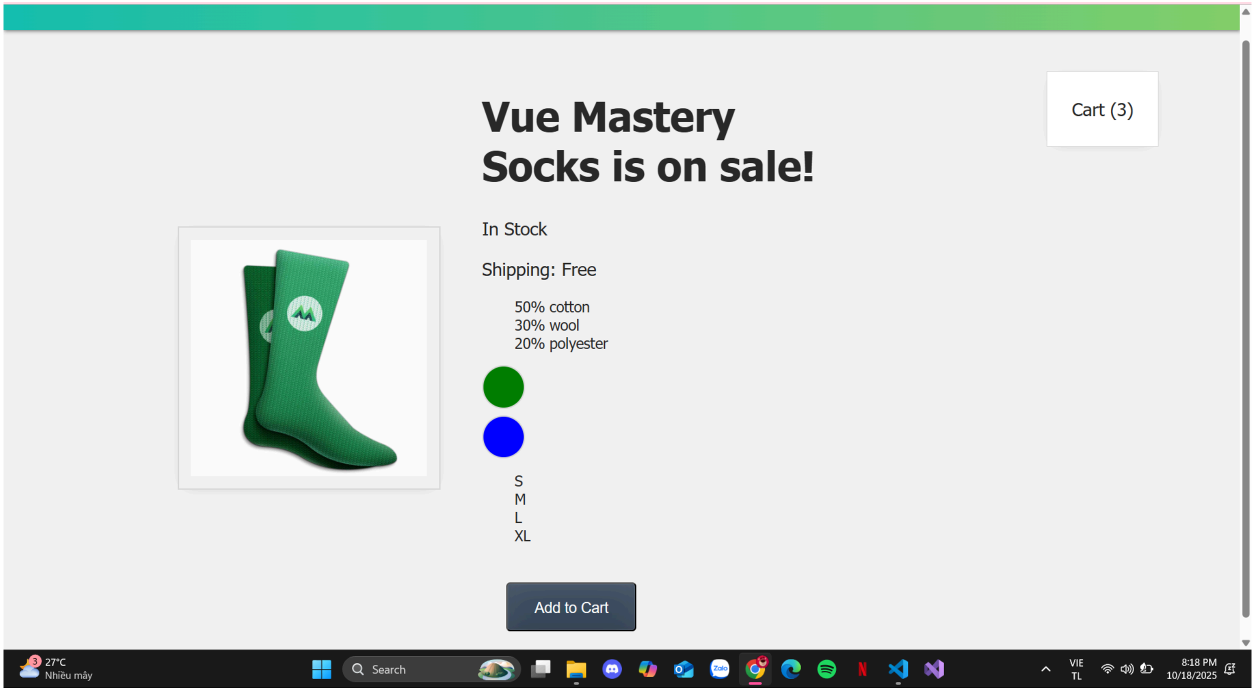
50% cotton
30% wool
20% polyester

S
M
L
XL



```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue Product Details</title>
    <script src="https://unpkg.com/vue@3"></script>
    <link rel="stylesheet" href="./assets/styles.css" />
  </head>

  <body>
    <div id="app">
      <div class="nav-bar"></div>


      <div class="cart">
        <p>Cart ({{ cart }})</p>
      </div>


      <product-display
        :premium="premium"
        @add-to-cart="updateCart">
      </product-display>
    </div>

    <!-- Component scripts -->
    <script src="./components/ProductDetails.js"></script>
    <script src="./components/ProductDisplay.js"></script>

    <!-- Main Vue app -->
    <script src="./main.js"></script>
  </body>
</html>

```

```javascript
const ProductDisplay = {
  template: `
        <button
          class="button"
          :class="{ disabledButton: !inStock }"
          :disabled="!inStock"
          @click="addToCart"
        >
          Add to Cart
        </button>
      </div>
    </div>
  </div>
  `,
  data() {
    return {
      brand: "Vue Mastery",
      product: "Socks",
      onSale: true,
      selectedVariant: 0,
      details: ["50% cotton", "30% wool", "20% polyester"],
      variants: [
        { id: 2234, color: "green", image: "./assets/images/socks_green.jpg", quantity: 50 },
        { id: 2235, color: "blue", image: "./assets/images/socks_blue.jpg", quantity: 0 }
      ],
      sizes: ["S", "M", "L", "XL"]
    };
  },
  methods: {
    addToCart() {
      this.$emit('add-to-cart');
    },
    updateVariant(index) {
      this.selectedVariant = index;
    }
  },
  computed: {
    title() {
      return this.onSale
        ? `${this.brand} ${this.product} is on sale!`
        : `${this.brand} ${this.product}`;
    },
    image() {
      return this.variants[this.selectedVariant].image;
    },
    inStock() {
      return this.variants[this.selectedVariant].quantity > 0;
    },
    shipping() {
      return this.premium ? "Free" : "$2.99";
    }
  }
};

```



Vue Mastery Socks is on sale!

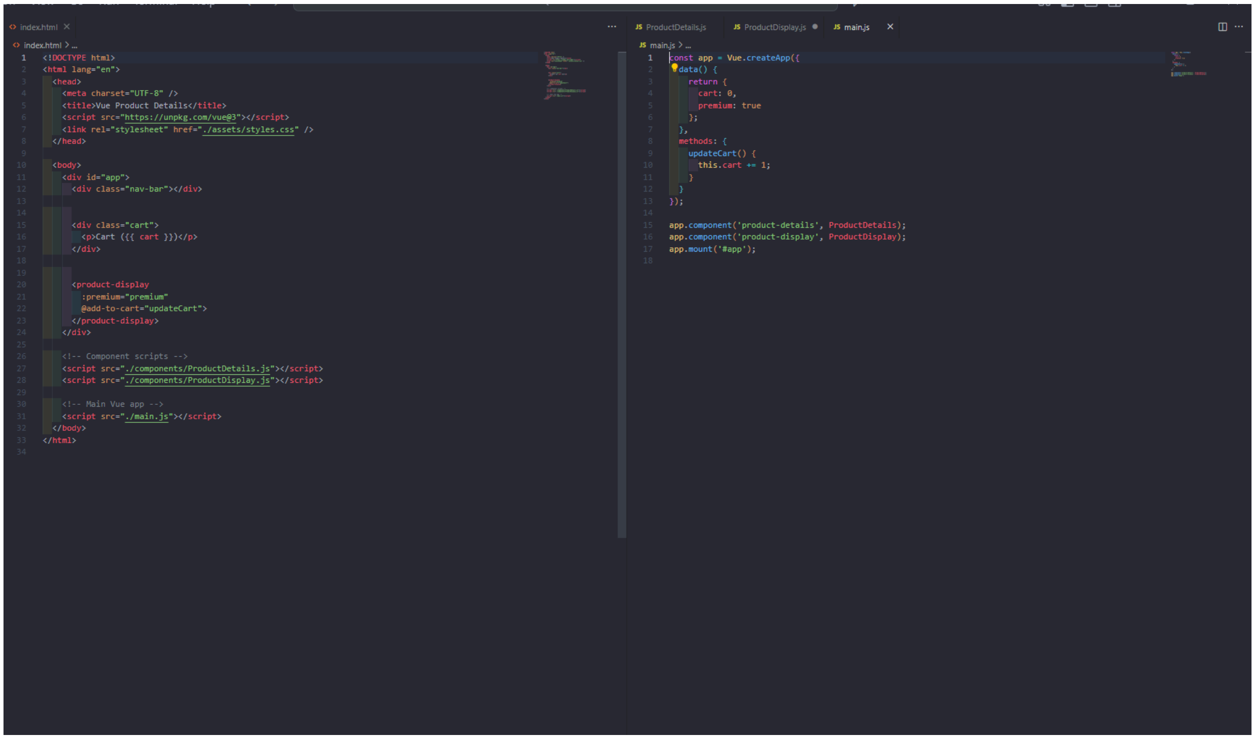
In Stock

Shipping: Free

- 50% cotton
- 30% wool
- 20% polyester

- S
- M
- L
- XL

Lesson 10 :

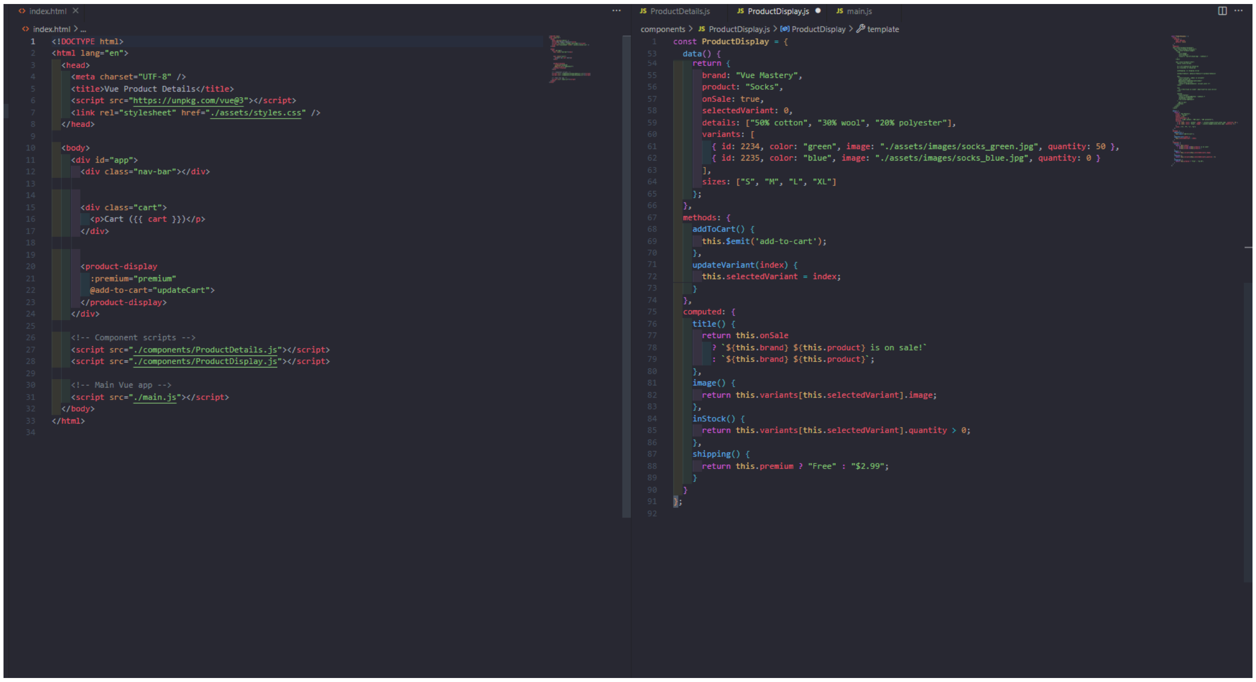


index.html

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue Product Details</title>
    <script src="https://unpkg.com/vue@3"></script>
    <link rel="stylesheet" href="./assets/styles.css" />
  </head>

  <body>
    <div id="app">
      <div class="nav-bar"></div>


      <div class="cart">
        <p>Cart ({{ cart }})</p>
      </div>


      <product-display
        :premium="premium"
        @add-to-cart="updateCart">
      </product-display>
    </div>

    <!-- Component scripts -->
    <script src="./components/ProductDetails.js"></script>
    <script src="./components/ProductDisplay.js"></script>

    <!-- Main Vue app -->
    <script src="./main.js"></script>
  </body>
</html>
```

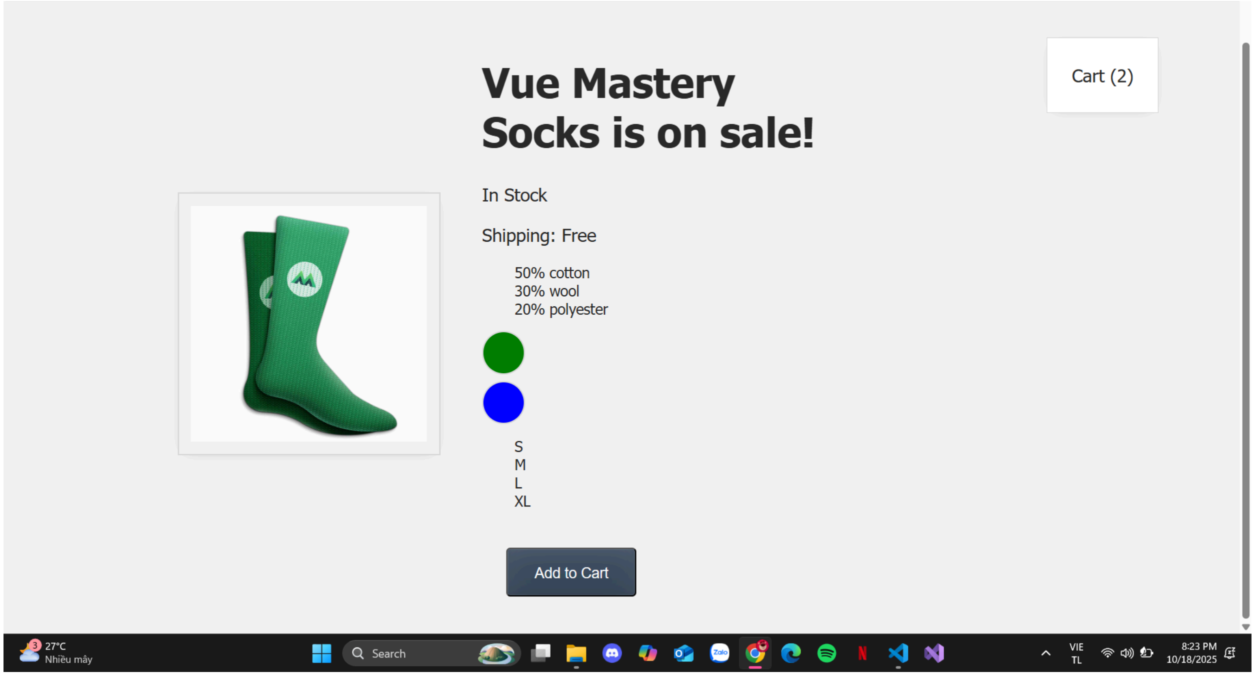
main.js

```javascript
const app = Vue.createApp({
  data() {
    return {
      cart: 0,
      premium: true
    };
  },
  methods: {
    updateCart() {
      this.cart += 1;
    }
  }
});

app.component('product-details', ProductDetails);
app.component('product-display', ProductDisplay);
app.mount('#app');
```



```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue Product Details</title>
    <script src="https://unpkg.com/vue@3"></script>
    <link rel="stylesheet" href="./assets/styles.css" />
  </head>

  <body>
    <div id="app">
      <div class="nav-bar"></div>


      <div class="cart">
        <p>Cart ({{ cart }})</p>
      </div>


      <product-display
        :premium="premium"
        @add-to-cart="updateCart">
      </product-display>
    </div>

    <!-- Component scripts -->
    <script src="./components/ProductDetails.js"></script>
    <script src="./components/ProductDisplay.js"></script>

    <!-- Main Vue app -->
    <script src="./main.js"></script>
  </body>
</html>
```

```javascript
const ProductDisplay = {
  data() {
    return {
      brand: "Vue Mastery",
      product: "Socks",
      onSale: true,
      selectedVariant: 0,
      details: ["50% cotton", "30% wool", "20% polyester"],
      variants: [
        { id: 2234, color: "green", image: "./assets/images/socks_green.jpg", quantity: 50 },
        { id: 2235, color: "blue", image: "./assets/images/socks_blue.jpg", quantity: 0 }
      ],
      sizes: ["S", "M", "L", "XL"]
    };
  },
  methods: {
    addToCart() {
      this.$emit('add-to-cart');
    },
    updateVariant(index) {
      this.selectedVariant = index;
    }
  },
  computed: {
    title() {
      return this.onSale
        ? `${this.brand} ${this.product} is on sale!`
        : `${this.brand} ${this.product}`;
    },
    image() {
      return this.variants[this.selectedVariant].image;
    },
    inStock() {
      return this.variants[this.selectedVariant].quantity > 0;
    },
    shipping() {
      return this.premium ? "Free" : "$2.99";
    }
  }
};
```



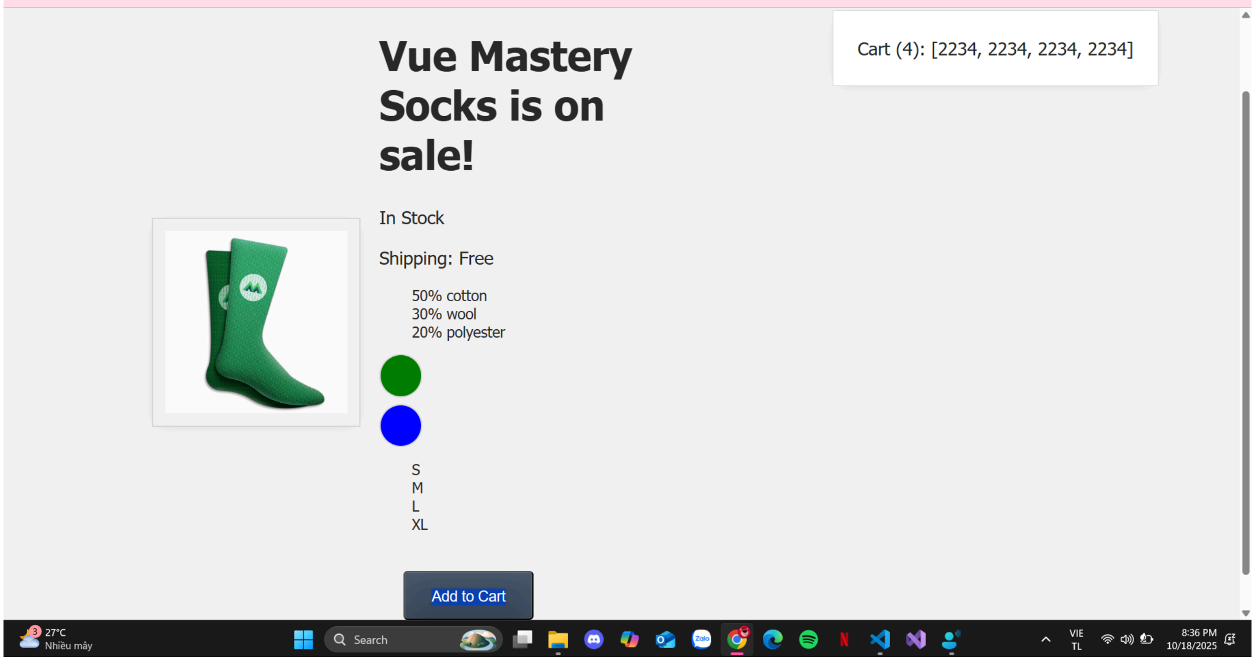
Vue Mastery
Socks is on sale!

In Stock

Shipping: Free

50% cotton
30% wool
20% polyester

S
M
L
XL



Cart (4): [2234, 2234, 2234, 2234]

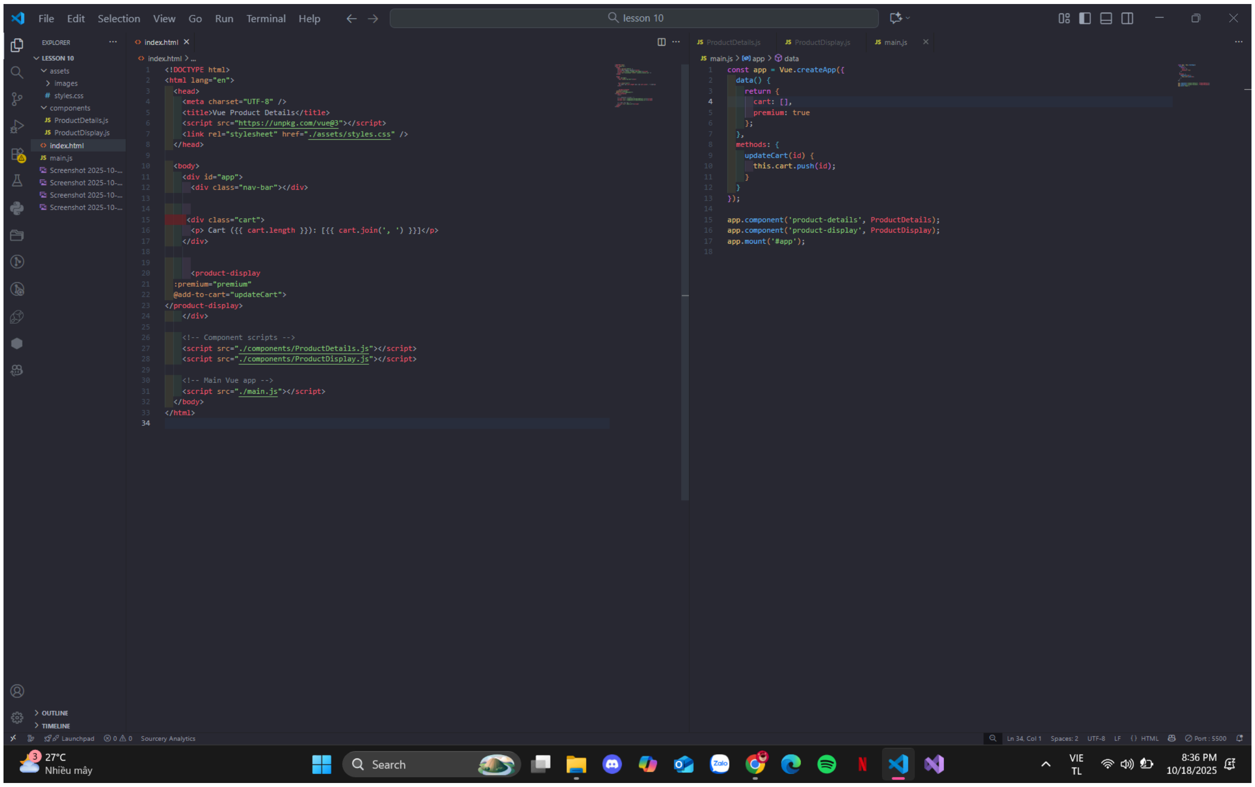
Vue Mastery Socks is on sale!

In Stock

Shipping: Free

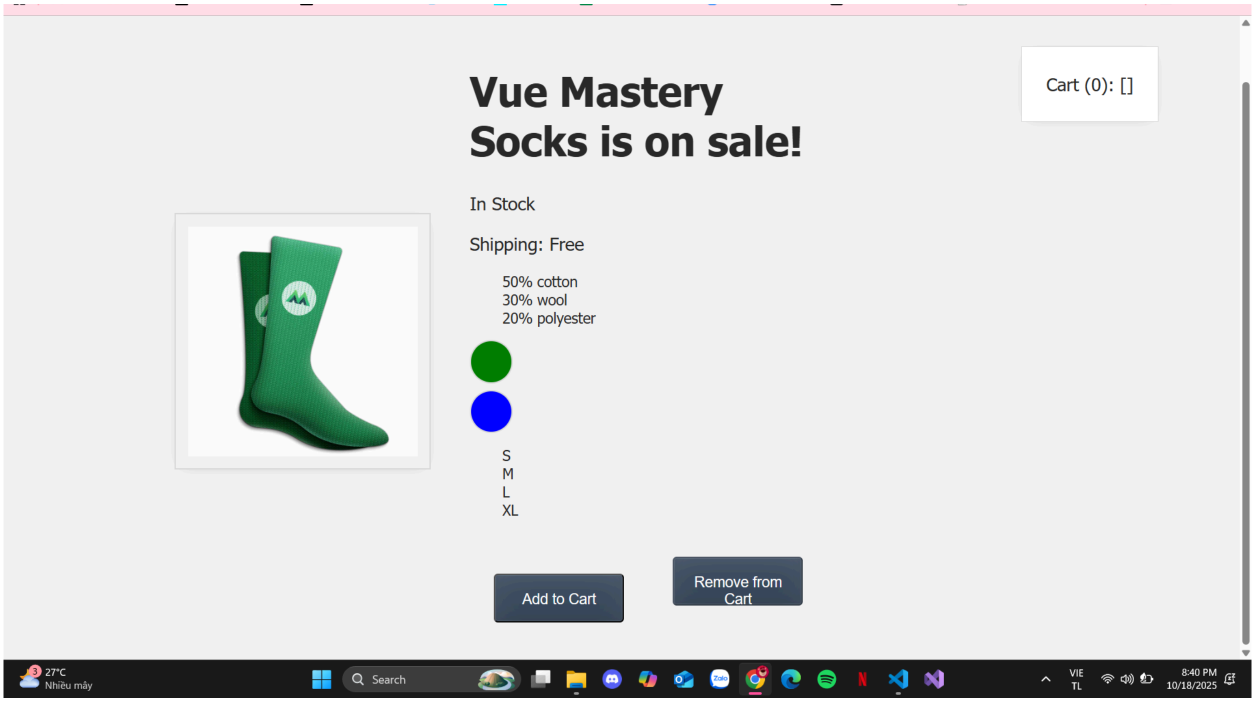
- 50% cotton
- 30% wool
- 20% polyester

- S
- M
- L
- XL



```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue Product Details</title>
    <script src="https://unpkg.com/vue@3"></script>
    <link rel="stylesheet" href="./assets/styles.css" />
  </head>

  <body>
    <div id="app">
      <div class="nav-bar"></div>


     <div class="cart">
      <p> Cart ({{ cart.length }}): [{{ cart.join(', ') }}]</p>
    </div>


      <product-display
  :premium="premium"
  @add-to-cart="updateCart">
</product-display>
    </div>

    <!-- Component scripts -->
    <script src="./components/ProductDetails.js"></script>
    <script src="./components/ProductDisplay.js"></script>

    <!-- Main Vue app -->
    <script src="./main.js"></script>
  </body>
</html>

```

```javascript
const app = Vue.createApp({
  data() {
    return {
      cart: [],
      premium: true
    };
  },
  methods: {
    updateCart(id) {
      this.cart.push(id);
    }
  }
});

app.component('product-details', ProductDetails);
app.component('product-display', ProductDisplay);
app.mount('#app');

```



Cart (0): []

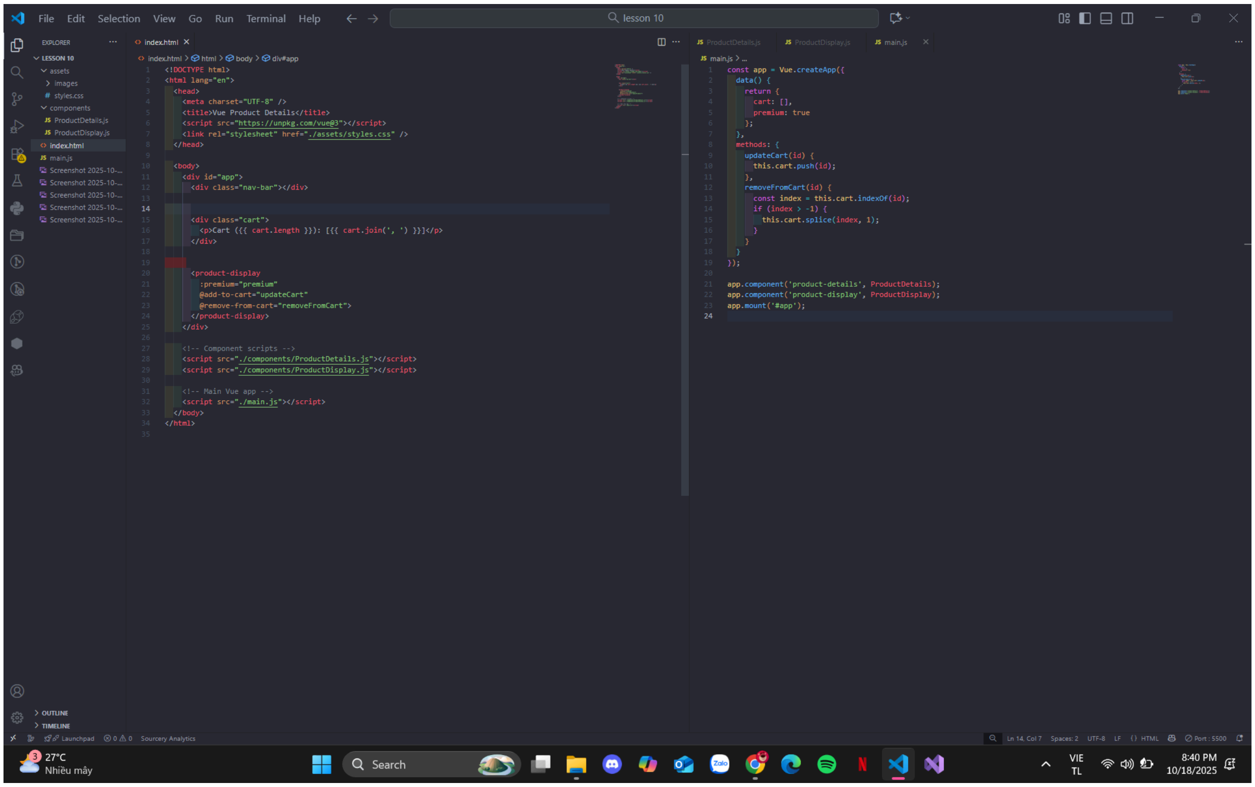
Vue Mastery Socks is on sale!

In Stock

Shipping: Free

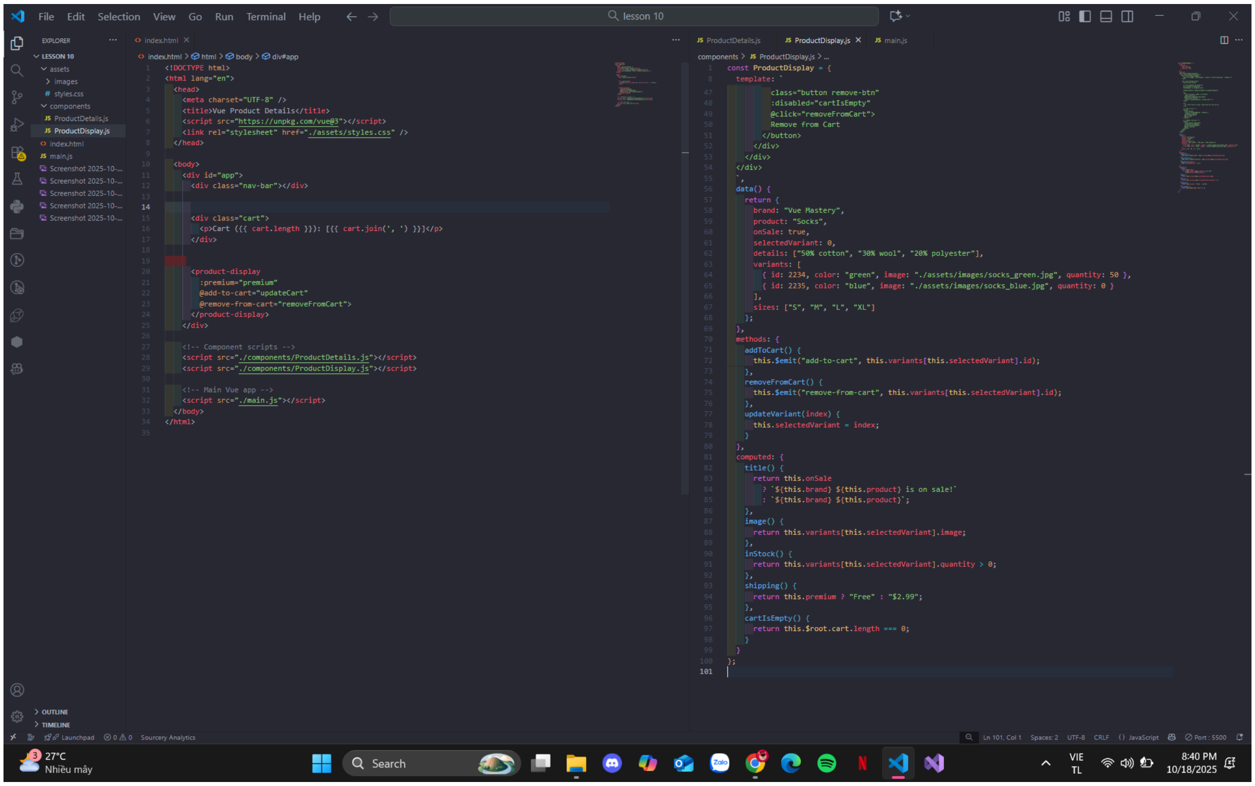
50% cotton
30% wool
20% polyester

S
M
L
XL



```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue Product Details</title>
    <script src="https://unpkg.com/vue@3"></script>
    <link rel="stylesheet" href="./assets/styles.css" />
  </head>

  <body>
    <div id="app">
      <div class="nav-bar"></div>


      <div class="cart">
        <p>Cart ({{ cart.length }}): [{{ cart.join(', ') }}]</p>
      </div>


      <product-display
        :premium="premium"
        @add-to-cart="updateCart"
        @remove-from-cart="removeFromCart">
      </product-display>
    </div>

    <!-- Component scripts -->
    <script src="./components/ProductDetails.js"></script>
    <script src="./components/ProductDisplay.js"></script>

    <!-- Main Vue app -->
    <script src="./main.js"></script>
  </body>
</html>
```

```javascript
const app = Vue.createApp({
  data() {
    return {
      cart: [],
      premium: true
    };
  },
  methods: {
    updateCart(id) {
      this.cart.push(id);
    },
    removeFromCart(id) {
      const index = this.cart.indexOf(id);
      if (index > -1) {
        this.cart.splice(index, 1);
      }
    }
  }
});

app.component('product-details', ProductDetails);
app.component('product-display', ProductDisplay);
app.mount('#app');
```



```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <title>Vue Product Details</title>
    <script src="https://unpkg.com/vue@3"></script>
    <link rel="stylesheet" href="./assets/styles.css" />
  </head>

  <body>
    <div id="app">
      <div class="nav-bar"></div>


      <div class="cart">
        <p>Cart ({{ cart.length }}): [{{ cart.join(', ') }}]</p>
      </div>


      <product-display
        :premium="premium"
        @add-to-cart="updateCart"
        @remove-from-cart="removeFromCart">
      </product-display>
    </div>

    <!-- Component scripts -->
    <script src="./components/ProductDetails.js"></script>
    <script src="./components/ProductDisplay.js"></script>

    <!-- Main Vue app -->
    <script src="./main.js"></script>
  </body>
</html>
```

```javascript
const ProductDisplay = {
  template: `
          class="button remove-btn"
          :disabled="cartIsEmpty"
          @click="removeFromCart">
          Remove from Cart
        </button>
      </div>
    </div>
  </div>
  `,
  data() {
    return {
      brand: "Vue Mastery",
      product: "Socks",
      onSale: true,
      selectedVariant: 0,
      details: ["50% cotton", "30% wool", "20% polyester"],
      variants: [
        { id: 2234, color: "green", image: "./assets/images/socks_green.jpg", quantity: 50 },
        { id: 2235, color: "blue", image: "./assets/images/socks_blue.jpg", quantity: 0 }
      ],
      sizes: ["S", "M", "L", "XL"]
    };
  },
  methods: {
    addToCart() {
      this.$emit("add-to-cart", this.variants[this.selectedVariant].id);
    },
    removeFromCart() {
      this.$emit("remove-from-cart", this.variants[this.selectedVariant].id);
    },
    updateVariant(index) {
      this.selectedVariant = index;
    }
  },
  computed: {
    title() {
      return this.onSale
        ? `${this.brand} ${this.product} is on sale!`
        : `${this.brand} ${this.product}`;
    },
    image() {
      return this.variants[this.selectedVariant].image;
    },
    inStock() {
      return this.variants[this.selectedVariant].quantity > 0;
    },
    shipping() {
      return this.premium ? "Free" : "$2.99";
    },
    cartIsEmpty() {
      return this.$root.cart.length === 0;
    }
  }
};
```

In lessons 8, 9 and 10, I felt like I had a better understanding of how Vue components work and how parts of the application can communicate with each other. In lesson 8, I learned how to pass data between components using props and emit, which was confusing at first but with practice, I gradually got the hang of parent-child interactions. In lesson 9, I learned more about computed properties and methods, which made the code cleaner and easier to maintain. At that time, I really felt that Vue was quite "smart" because it could update the interface automatically when data changed.

In lesson 10, I learned how to separate component files like ProductDisplay.js and ProductDetails.js, which makes the project cleaner and more professional. Although I still encountered small errors when connecting files, after a few fixes, I understood the problem lies in the declaration and import. Overall, these three lessons helped me feel more confident in building basic Vue applications and I feel more interested in programming interactive interfaces.