

I started this project with the idea of creating an ecommerce website to sell custom NFC business cards. The concept was to allow users to choose a card design, customize it with a logo and link, preview their design, and then add it to a shopping cart before checking out. I began by writing the HTML structure for the two preset card options — one matte black and one sleek white — and included "Add To Cart" and "Remove" buttons for each. I gave each product a unique data-id so I could target them later using JavaScript.

Once the layout was in place, I moved on to adding interactivity using JavaScript. I used `localStorage` to store the cart so that the selected items and their quantities would stay saved even if the user refreshed the page. I created an object called `cart` in JavaScript, which updated every time the user clicked "Add To Cart". If the item already existed in the cart, its quantity increased; if not, it was added as a new item with its name, price, and quantity. I also used `.toFixed(2)` to make sure all prices looked clean, showing only two decimal places like you'd expect in an online store.

I added logic for the "Remove" button so users could take items out of their cart. I used `getElementsByClassName` to loop through all remove buttons and attach event listeners to each one. When clicked, the product was deleted from the cart object and the updated cart was saved back into `localStorage`.

One of the main features I wanted was a live preview of the uploaded image so users could see how their card would look before submitting. I managed this by using the `FileReader()` method in JavaScript, which I discovered while reading Mozilla Developer docs and watching YouTube tutorials. I added an event listener to the file input field, and when a file was selected, `FileReader` converted it to a temporary image URL using `readAsDataURL()`. I then injected that image into the preview area of the page using `innerHTML`. This made the user experience feel more interactive and professional.

For form submission, I used a service called `FormSubmit`, which I found through YouTube. It lets you send form data directly to an email address without needing a server. I connected the final shipping form to my email by setting the form action to `FormSubmit`'s endpoint and adding some hidden fields like `_subject`, `_template`, and `_captcha` to customize the email. To include a summary of the items in the cart, I created a JavaScript function that loops through the cart object, formats the details into a string, and inserts it into a hidden input field before the form is submitted. That way, when the email is sent, it includes the full cart summary along with the shipping information.

I also added a checkout button that, when clicked, sends the cart data to a local backend (`localhost:3000`) using the `fetch()` API and tries to create a Stripe checkout session. Even though Stripe wasn't fully set up for testing, I used this as a learning opportunity to understand how front-end code communicates with APIs and handles async operations.

Overall, I used the JavaScript techniques I learned throughout the project — including `localStorage`, `.toFixed()`, `FileReader()`, DOM manipulation, and form handling — to make the page interactive and functional. Most of what I implemented I found by experimenting, searching through Mozilla docs, and watching web development videos online and the module repo. Through trial and error, I was able to connect all the features together and complete the interactive parts of the assignment.