













The Overview

For my final project for IDM232, I successfully navigated the challenges of a comprehensive web development course and, in the end, created a dynamic, self-hosted recipe page. The primary objective of this course was to employ server-side technologies like PHP, HTML, CSS, JavaScript, and MySQL to construct an interactive, data-driven product. The main challenge I faced was presented while I was building the final deliverable, where manual adjustments to both my self-hosted and local databases were required to solve image inconsistencies in the database to improve the site's overall user experience.

The project's goals included designing a responsive web page with 37 unique recipes dynamically pulled from a database. This process involved brand conceptualization, utilizing Figma and Visual Studio Code. Notable features of my final web page include a strong brand identity, unique micro-interactions, and details like hover effects and keyword search feedback.

would like to emphasize the importance of adapting code, applying feedback, and triple-checking work. The knowledge and skills I gained from this project are extremely valuable.

Context and Challenge

1. Background / Description / Timeline / Purpose:

At the beginning of the course, we were assigned to build a functional, responsive, self-hosted, and dynamic recipe page individually over the course of 11 weeks using HTML, CSS, JavaScript, PHP, and MySQL. As a class, we were introduced to modern server-side technologies for internet-based delivery of dynamic content that we would use to both connect and manipulate database content. We were first assigned to build the main menu page that would not be connected to the database, to ideate our final deliverable (assignment 1). The next assignment (assignment 2) was to finalize the main menu page, and assignment 3 was to build our recipe detail page. Following the builds of our main menu and detail pages, we would have to incorporate PHP and MySQL to dynamically pull data from our database to fill our webpage with all 37 recipes.

These two assignments, the Alpha build and the Beta build, would be combined to create our Final project or deliverable, a web page that should be functional and where a user can filter and search through recipes, and view each individual recipe. The main issue I ran into when completing this project did not occur until I began working on my final deliverable. In my database, both the local and selfhosted, the images of the recipe steps were out of order. To solve this, I manually edited the order and the format of 27 recipes and their correlating images. Although this was a challenge, I solved the problem by manually checking each recipe three times in both the databases and the web page. This truly taught me the importance of triple-checking my work.

2. The Problem:

The project exists to teach us how to define proper usage of server-side technologies, employ server-side technologies to pull data from a database, and challenge us to construct an interactive, data-driven product. Learning PHP and how to use server-side technologies served as an insightful challenge to expand our knowledge on what we knew about scripting and coding dynamic and responsive web pages.

3. Goals & Objectives:

Create, design, and code a functional and responsive web page that displays 37 unique recipes that would be dynamically pulled from a database using PHP, HTML, CSS, JavaScript, and MySQL. The user should be able to filter and search through recipes using our web page that is well-designed, accessible, and readable.

The overall goal for this project was to individually create a self-hosted, responsive web page that dynamically pulls data including recipes and their individal details from a database.

Process and Insight

For this first assignment, I first conceptualized my brand identity. I wanted to lean into the colors red and white, and utilize clean and modern fonts to reflect the sleekness of my color palette. I designed the web page in Figma, a web design and web development software, to outline what I wanted my main menu to look like. I coded the main menu page using Visual Studio Code, trying as hard as possible to stick to my initial design. The title, "Made with Love," is something I simply thought of after trying other names, but that title stuck with me the most.

The first assignment had to consist of 9 recipes from the database (including the title and subtitle of the recipe), a header, a search field, and filters based on the database. After the critique for assignment 1, assignment 2 was to update our page with the feedback we received in class. I decided to change my banner image to a photo of vegetables, which was previously an image of berries, and come up with a catchy subtitle or slogan that would reflect the website's brand identity. My subtitle was now "Recipes made simple, recipes made with love." Assignment 3 was to design the recipe detail page, the page a user will see after clicking on a recipe from the main menu. I utilize Figma

to design the layout for this page using the same designs and branding as assignment one, which I eventually coded. I stuck to rounded corners and shapes to give the page a softer look to contrast with the bright colors. This page consisted of the recipe image, a title, subtitle, description, estimated time, caloric information, ingredients, the ingredient image, steps, and images that correlated with the steps. After receiving feedback for this assignment, the "Alpha" would be due the following week. For the "Alpha," we had to use PHP and MySQL to dynamically pull the recipe images and the recipe titles and subtitles from a database, displaying 37 recipes. There was a huge learning curve when incorporating PHP into my website, but after trial and error and realizing that almost everything is simply an echo command, I was able to turn in the assignment. The "Beta" would consist of the same requirements, but now for the recipe detail page from assignment 3. We would pick a random recipe

number and dynamically pull that recipe's information from the database. This included a the recipe image, title, subtitle, description, estimated time, caloric information, ingredients, ingredient image, steps, and images correlated with the steps.

The Solution

<u>Link to my live final web page</u>

Above is the link to my final live web page. Overall, I am most proud of the design and brand I created. The web page has a strong brand identity, achieving this by utilizing bright and modern colors, rounded shapes, and unique fonts. I was able to create a web page that also has unique micro-interactions. When a user hovers over a recipe, a red dotted outline appears around the image, and the recipe title fades to red. The recipe also moves up a few pixels when it is being hovered over. The same effect takes place when a user hovers over a filter.

Additionally, when a user clicks on the filter, the title for the filter the user clicks on will appear centered over the recipes that correlate with that filter. If a user searches for a keyword or recipe that can not be found in the database, a message appears displaying "No results found for: "(whatever the user typed)"." and a small icon of a broken heart, which is the same heart in the logo and the banner. These small features that I incorporated serve as a foundation for the user's experience, and keep things interesting. Additionally, each image correlates with the step on the detail page below. In the database we were given, the images for the individual steps were out of order for over 20 recipes

am without it.

out of the 37. Although it was not a requirement to fix this issue, I took the liberty to resolve this to improve the overall user experience of the site and maintain consistency. To fix this issue, I manually edited the order of the images in both my local database and my selfhosted database. The Results This project is something that I am truly proud of and one that is a success. When I finished the final, I received positive feedback from family, friends, and my peers about the features and overall design. I learned that it is okay if your code does not identically reflect

something that you ideated or designed, and that there are ways to rethink these issues to come up with something better and more

unique. The knowledge and tools I gained from this class and project are ones that I will apply for the rest of my career. As I mentioned

before, this project also taught me the importance of triple-checking my work and applying feedback from critiques. All of the feedback I

received from both my professor and my peers in class made my final project what it is now, and I would not be as proud of this project as