

IDM 232: Case Study

Christina Leisen



Overview

Using PHP/MySQL, HTML, and CSS to program a recipe website that can add, delete, edit, retrieve, and view information from a connected database of information. I used a combination of what I learned in class as well as working examples to build my own code and transfer my local files and database to my domain. This project was being built from September to December of 2022.

Context and Challenge

Background

This was a solo project that I was working on for my IDM 232 Scripting class. In this class, I was introduced to the fundamentals of PHP/MySQL and learned how to implement PHP into my recipe website. The biggest focus for this project were these four basic functions: add, delete, edit, and retrieve.

Problem

PHP allows you to develop dynamic and template-based websites, so it's important as an UI designer that I learn these tools. PHP allows you to improve the functionality of the website to make the experience more efficient as an admin of a site.

Goals

Implement the fundamentals of PHP into a multi-page functioning website.

Preview website locally through MAMP

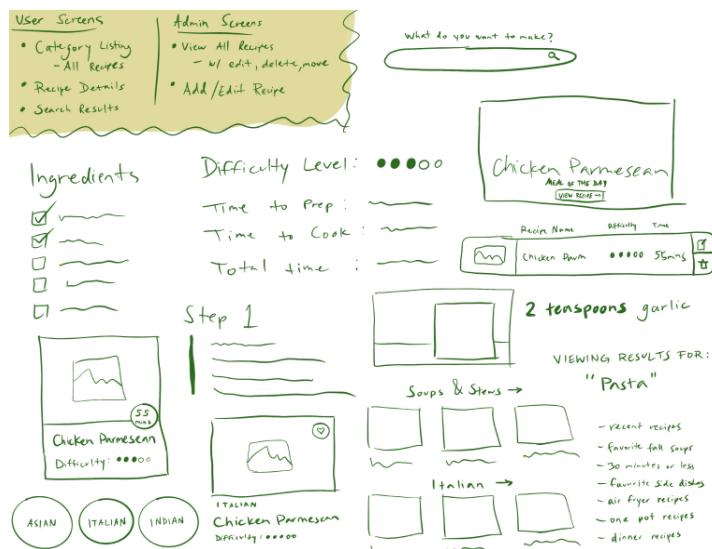
Transfer files and database to Bluehost domain

Successfully code recipe website with PHP, HTML, and CSS without any issues/errors

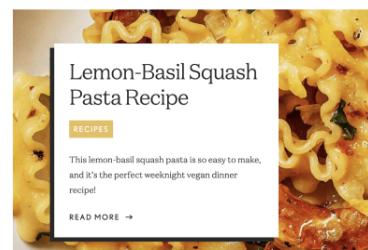
Process and Insight

Mood/Sketch Board

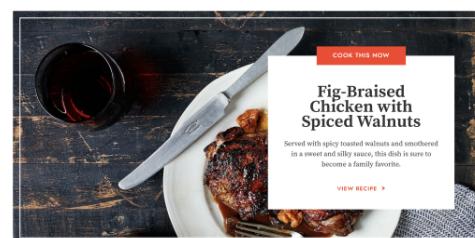
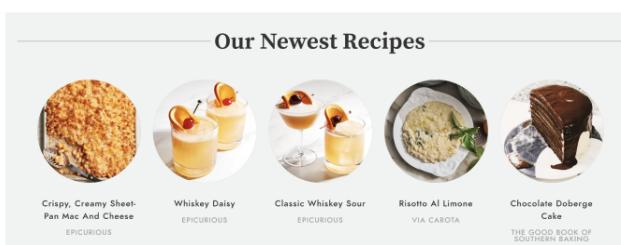
I first looked at other recipe websites for inspiration and from there sketched ideas that came to mind.



Tried & True RECIPES STC



this healthy table
a fork & a pencil



Style Tile

I then decided I wanted to go with a modern-rustic feel, so I put together a style tile for what I wanted the site to look like before I started on building templates.

lemon & basil

This is some text about our site.

What do you think?



Alpha Design

Next I began wireframing, and then referenced my style title to stylize the content and get an idea of what the final could look like. However, I was not married to these designs yet since I was unsure what would be feasible with php.

The screenshot displays a user interface for a cooking website. At the top, there's a search bar with the placeholder "Search" and a magnifying glass icon. Below the search bar, there are two sections: "Recent Searches" and "View All". The "Recent Searches" section lists "lemon & basil" and "ADMIN".

In the center, there's a search result for "Broccoli and Chicken Stir-Fry". The result includes the title "Broccoli and Chicken Stir-Fry", a thumbnail image of the dish, and a summary table with the following data:

Difficulty:	● ● ○ ○ ○
Time to Prep:	15 mins
Time to Cook:	20 mins
Total Time:	35 mins

On the right side of the search result, there's a large image of the stir-fried dish. Below the search result, there's a "Ingredients" section with a list of items, some with checkboxes:

- 25 cup soy sauce
- 1/4 cup brown sugar
- 1/2 teaspoon ground ginger
- 1 pinch red pepper flakes, or to taste
- 2 tablespoons water
- 2 teaspoons vegetable oil, or to taste
- 3 skinless, boneless chicken breast halves, cut into chunks
- 1 onion, sliced
- 3 cups broccoli florets
- 2 tablespoons cornstarch

At the bottom of the page, there's a "Directions" section with a heading "Step 1" and a text box containing the following instructions:

Stir soy sauce, brown sugar, ginger, and red pepper flakes together in a bowl to dissolve sugar into the liquid. Mix water and cornstarch together in a small bowl; stir with a whisk until cornstarch dissolves completely.

Coding Out the Pages

After designing each of my pages, I then began coding each page in HTML and tried my best to replicate what I had planned for. I enjoyed this part because I was able to build off of my knowledge of HTML and CSS from previous classes.

Implementing PHP

In this stage, I had to apply what I learned so far throughout the class. I previewed my website using MAMP, a local server to follow along. This was the most intimidating part, but I found that if I looked back and reviewed what we learned each week of the class, I was able to follow along and make sure I was doing the assignment correctly. The most exciting part was when I finally connected the recipe cards to link to a recipe details page that was populated with the referenced database information. It was exciting to me because before learning php, I would have to hand code any page I wanted to have, but here it's so easy to have a page automatically with the same styling, but different information.

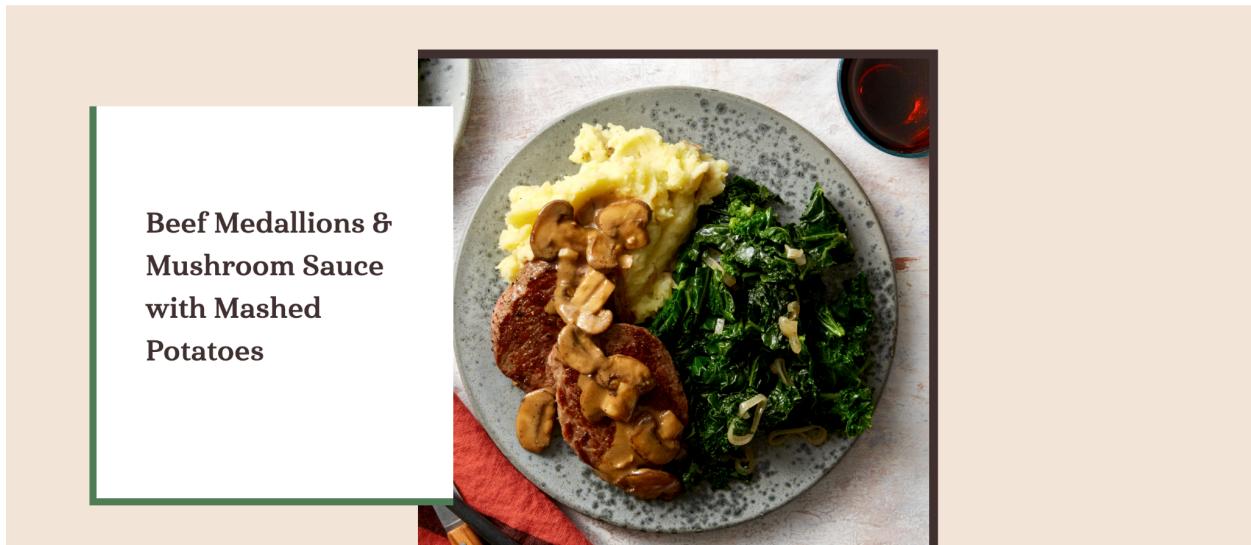
```

1  <?php
2
3  include_once __DIR__ . '/../app.php';
4
5
6  $query = "SELECT * FROM recipes WHERE id = {$_GET['id']}";
7  $result = mysqli_query($db_connection, $query);
8  if ($result->num_rows > 0) {
9      // Get row from results and assign to $recipe variable;
10     $recipe = mysqli_fetch_assoc($result);
11 } else {
12     $error_message = 'Recipe does not exist';
13     // redirect_to('/admin/recipes?error=' . $error_message);
14 }
15
16 $page_title = 'Recipe Details';
17 include_once __DIR__ . '/../_components/header.php';
18 ?>
19 <?php
20     $site_url = site_url();
21     echo "
22         <div class = 'main'>
23             <div class = 'top'>
24                 <div class= 'info_card'>
25                     <div class= 'recipe_title'>
26                         {$recipe['recipe_title']}
27                     </div>
28
29                     </div>
30                     <div>
31                         <img class= 'recipe_image' src= '{$site_url}/{$recipe['file_path']}'>
32                     </div>
33                     </div>
34                     <div class= 'info'>
35                         <ul>
36                             <li>{$recipe['introduction']}</li>
37                         </ul>

```

lemon & basil

ADMIN



Connecting to Bluehost

Since this would be my first time dealing with a database on my server, I was nervous that even though my site worked locally, it might not work on my live domain. I imported my local database onto my Bluehost and uploaded the files into Cyberduck. I quickly realized that the images for each recipe card were not showing up. After lots of trial and error, I finally realized that the only

issue was that I was linking to the wrong folder. Sure enough, after a few tweaks, my site was up and running and the database was adding, deleting, editing, and retrieving recipes.

Final Project

View my final project here.

<https://christinaleisen.com/idm232/final/>

The Results

By the end of the term, I was able to build pages using HTML, CSS, and PHP/MySQL and connect information on the site to databases that allow me to add, delete, edit, and retrieve content. I learned how to stay organized after making lots of files of code by grouping my files into folders and being very careful to remember to use correct file paths when switching from folder to folder. Transferring my local files to my domain was a complicated part of the project that I worked through and overcame, as well as making sure to be very diligent with file paths. I learned that there is a lot of time and planning that goes into using databases, but also how it can make creating large scale websites with php worth it.