The Teaspot

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# Executive Summary

Our assignment was to work as a group to create a personal blog page that incorporates the languages, techniques, and coding practices taught in this class including but not limited to php, javascript, html, css, and react. With this in mind, we created a personal blog page about teapots, tea, and not much else.

# Introduction

With this project, we aim to satisfy the following requirements:

* Use at least one JavaScript library
  + We planned to use JQuery to implement tooltips on our blog page
* Incorporate a CSS style sheet
  + We planned to use a CSS JQuery style sheet
* Incorporate a database with data, provide a database creation script with instructions for running locally
  + We planned to use php, PHPMyAdmin, and MySQLi extension to bridge the connection between database, backend, and frontend code. Assigned each blog post an individual page id to differentiate which comments should populate with each post.
* Utilize cookies for state management and visits, present a different page/message for returning users vs. new users
  + We planned to use php to check whether the admin user is logged in. If the admin user is logged in there will be a “delete comment” option visible on blog post comments, additionally the login page display will change to show an option for logging out.
* Implement logging (write logs to database for error management and site usage)
  + Logging is designed in such a way that when backend interactions occur, the logger copies the query and stores it in a separate database table
* Utilize Git for version control
  + Link to GitHub repo: [GitHub](https://github.com/rogerb5/winter2023-cscd378-blog-final)

# Project Objectives

We will be creating a personal blog page about teapots incorporating the following features:

* About Me page
* Blog post page
* Login page for admin user
* Filtering options to show blog posts by type and date posted
* Option for visitors to read comments on individual blog posts
* Option for visitors to post comments on individual blog posts
* Option for admin user to be able to delete blog posts
* Option to toggle dark/light mode
* Option to sign up for an email list

# Project Timeline (Milestones and Deliverables)

## **Milestone #1:** Research



**Notes:** Conducted independent research followed by team discussion, needs assessment, site outline, and designed framework for implementation

**Met/Unmet**: Met

**Explanation:** N/A

**Lessons:** It’s important to conduct thorough research to help inform the planning/design process.

## **Milestone #2:** Set up GitHub Repository



**Notes**: Verified all team members had access to the repository

**Met/Unmet**: Met

**Explanation:** N/A

**Lessons:** Make sure everyone on the team is prepared and able to use the resource effectively to ensure the individual work stays on track with group work.

## **Milestone #3:** Initial UX Design



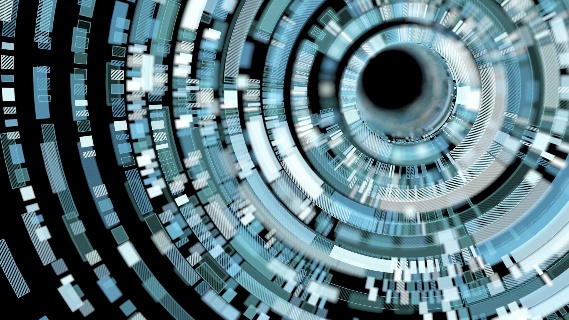
**Notes:** Utilized Figma to create initial UX design for landing page

**Met/Unmet:** Met

**Explanation:** N/A

**Lessons:** Pre-planning allows for a seamless UI implementation, waiting for the initial UX design to be completed prevents repetition.

## **Milestone #4:** UI Front End Functionality



**Notes:** Implemented design for website

**Met/Unmet:** Met

**Explanation:** N/A

**Lessons:** It was essential to continually reevaluate the product during the implementation process to ensure that the UI wasn’t writing cheques that the code couldn’t cash, and to ensure that both frontend and backend code were being written in a complementary way. Frequent meetings and strong communication between departments was essential in ensuring the success of this implementation.

## **Milestone #5:** API Back End Functionality



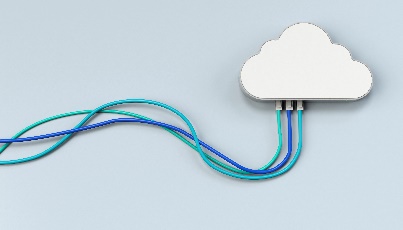
**Notes:** Implemented code to support site functionality

**Met/Unmet:** Met

**Explanation:** N/A

**Lessons:** Learning how to connect the backend code to the frontend code in an elegant and performant way was an interesting challenge. As mentioned in milestone #4, effective communication was essential to the success of this project, especially since we had two team members working on this aspect of the work. We were able to divide up tasks, collaborate and support each other when needed, and communicate in a way that allowed us to accomplish almost all of our functionality goals.

## **Milestone #6:** Database Design and Implementation



**Notes:** Our plan was to use the database to store admin credentials for logging in, store guest email addresses for an email list, guest comments on individual blog posts would also be stored in the database, and blog post content was going to be stored in the database to allow for dynamic content creation.

**Met/Unmet:** Standing up database for storing admin credentials, storing emails and guest comments, storing logging info, and storing guest comments were successful.   
Storing blog post content in the database for rendering pages was not met due to time constraints.

**Explanation:** Our initial hope was that the admin user would be able to create new blog posts from within the UI, however this would have required a more advanced skillset and a longer timeline. We made the decision to pivot and create our individual blog pages in the code knowing that this solution would not be scalable for an actual blog site.

**Lessons:** Using the database to store blog post content was a much larger and more involved undertaking than we initially expected. If we were creating this for production, we would have taken the time to follow through with this design.

## **Milestone #7:** Accessibility Research



**Notes:** Researched WCAG guidelines for web accessibility

**Met/Unmet**: Met

**Explanation:** Presented findings to class, plan is to incorporate WCAG guidelines into work moving forward (added tooltips and made sure all media had appropriate alt tags)

**Lessons:** We did not actively consider accessibility with our initial design so this research phase was eye opening. We learned about simple changes we could implement to make our site more accessible to visitors. There is such a wide range of accessibility needs that we would not be able to address them all within the scope of this project, however moving forward we will take accessibility into consideration in the design and implementation of this project as well as future projects.

## **Milestone #8:** Implement Dark Mode Design



**Notes:** The plan was to include an option that would allow the user to toggle between a light and dark color scheme

**Met/Unmet:** Unmet

**Explanation:** We made the decision to focus on functional design aspects with the understanding that aesthetic changes such as implementing a dark mode feature may not be achievable within our production timeline.

**Lessons:** We were unfortunately unable to complete our plans for a dark mode design within the timeframe. This was unfortunately a lesson in over promising, under delivering. It might have been better to complete a more simple, pared down implementation of our design and then add on additional features at the end of the project.

## **Milestone #9:** Testing/Refactoring



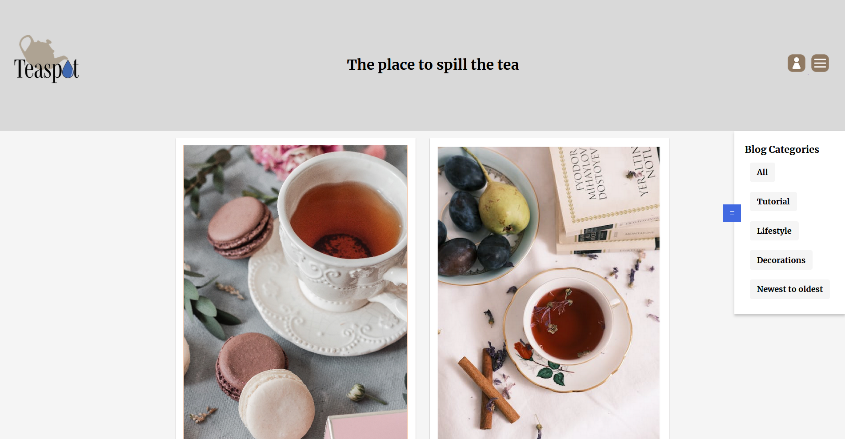
**Notes:** Once the individual components of the site were complete, we linked them all together and tested the function of the site to look for areas of improvement

**Met/Unmet**: Met

**Explanation:** We felt it was more useful to spend the last week of the design process conducting testing to ensure our deliverables were working as anticipated.

**Lessons:** We felt testing and refactoring was an important part of the process because it is better to deliver a product that works but is slightly less flashy than a big fancy product that doesn’t function properly.

# Project Deliverables



A picture containing graphical user interface

Description automatically generated

Landing page:

* Header with custom logo that persists on all pages
  + Teapot logo links to Landing Page
  + Custom icon links to Login page
* Drawer that slides out with filtering/sorting options to show blog posts by category

Previews for blog posts

Custom Footer:

* Navigation links to Home page, About page, and Login Page
* Input field for email list
  + Links to database

Graphical user interface, application, Teams

Description automatically generated

Login Page:

* Login credentials are stored in a database schema
* Incorrect login/password will return an error message

# Project Results

Delete comments button for individual comments rather than all comments  
Nav buttons on blog posts through php?

Artifact in header by nav buttons

# Lessons Learned

# Challenges and Obstacles

# Conclusion

Time to wrap it up. What is your conclusion? How would you synthesize all the information into something even the busiest CEO wants to read? What are the key takeaways? How does your product/service/methodology uniquely address the issues raised by your study?



# Appendices

# User Guide