Jeremy Morrison

CS 499 Computer Science Capstone

05/29/22

Milestone Two:

Enhancement One:

Software Design & Engineering

I have selected to modify this project because I believe it is a project that will properly display all of the course outcomes in one project. I am personally interested in web development as well, so this is a good project to build on my skills and display those skills to potential clients or employers. This project originally was built with the NoSQL database mongo DB, as well as python and Jupyter notebook. The project was a user interface similar to a web page that allowed users to select a specific category and the page would return data on animals in animal shelters in certain geographical locations based on breed and other data points. In the enhancement of this project, I will be recreating the project using different languages and rather than a NoSQL database I will be using a MySQL database. The languages I will be using are HTML, PHP, CSS, and possibly JavaScript. So far, I have come up with a flow chart for the program and I was going to create a wireframe design of the web application but I skipped that portion and began coding the login, signup, index, logout, functions, and connections pages due to the fact that I am a bit behind on the assignment deadline. I believe re-creating this project in other languages will display my ability to re-create and re-design software in different formats as well as add security and display my knowledge through narrative of the project. I believe now that I have begun building the project, I think it will go a bit smoother and fast paced, beginning seems to always be the most difficult part for me, but once I begin, I tend to see the path and tackle a project quickly. I think after the next week I will be simply adding finishing touches, making it look more visually appealing, and adding some finishing queries to the project.

As I said the most difficult part of this, for me, is finding where to begin. I had also never used PHP before, so I thought that would also be something to highlight in this project as I am also displaying my ability to quickly pick up a new skill and build a project with it. In order to do that I began learning where I begin learning most languages, codeacademy. I tend to quickly go through the basic syntax and then I will jump into a couple crash course videos on youtube before I begin coding. The next hurdle is almost always installing the required software needed to begin building and I have never used the php admin panel through xammp so I needed to quickly become familiar with that interface and its features. Again a couple crash course videos and I was able to begin building. All together I downloaded and installed XAMMP, ATOM, and a few basic language extensions on ATOM for ease of coding. After those were installed I created a test database and made sure everything was properly configured and functioning. I then created my first files which were index.php, communitation.php, login.php, logout.php, signup.php, and functions.php. I created a basic page with some text as the index page that will be displayed once a user logs in. I then created the communications page which is used to connect to the server and the databases. I created the login page that allows a user to login and be redirected the index page, or, if a user has no credentials there is a link to redirect to a signup page. If a user enters nothing or incorrect login information an error will display. I then created a sign up page that allows a user to enter a user name and password and be redirected to the login page once registered. Once registered the user data will be updated into the users database and the user will be able to login and access the index page. I had began creating on VSCode, a basic layout of the index page before I began doing all of the login coding and next, I will be designing that layout within the index.php page and connecting that to the animal shelter database as well as adding another layer of security because the current login security is pretty basic.

Some visuals on the work I have accomplished so far:

Graphical user interface, text, application, chat or text message

Description automatically generatedGraphical user interface

Description automatically generatedGraphical user interface, text, application

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