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CSC 102

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GitHub URL: <https://github.com/madisonwikoff/CSC102Project.git>

**PetMatcher**

For our final project, we want to make adding a new pet to one’s life and/or family much easier. PetMatcher—our project—will be a program that will match you to a pet that best fits your needs by analyzing your current lifestyle. The first phase involves the user answering quiz questions on a user interface, which will lead the machine to its conclusion of which kind of pet would fit the user and their lifestyle best which is determined by incrementing counters for each type of pet if an answer is selected that matches that pet type. This part was built using classes. However, this method of using classes seems to not agree with the rest of the GUI (which was built using functions. We believe this may be what’s causing the quiz to not display within the complete PetMatcher GUI, so we will be readjusting the quiz to be in multiple windows within functions rather than classes.

Once the match has been made, the second part of the program will help the user view a list of essential starting items such as food, equipment, and toys. This results from the originally planned Search function becoming a bit too much to handle. However, this is a reasonable replacement, even if it’s more simple than what we originally planned to do—plus, it actually works, unlike said Search function!

Lastly the program will help the user design a routine for the new family addition, such as when to feed the pet, when to play with the pet, when to bath it, and when to clean it/its enclosure. In this part of the program, we tried to incorporate GPIO, utilizing different colored LEDs that signify each different type of task. For example, a blue LED signifies that it’s time to play with the pet. The user must now enter times in an “hour:minute:second AM/PM” format, as the program is supposed to track the system’s clock upon clicking a “Start Day” button and, when the hour, minute, and period match a time that the user input in their routine, the corresponding LED will blink as a visual alarm to signify that it’s time for a specific task. After the user completes the task, they can hit the button for the LED and it will stop blinking, signifying the user has completed said task. Unfortunately, this still isn’t functional, but we hope to have it working by the final presentation of our product.

Najja created some very cute background designs for us which were previously not appearing on the Pi. We did finally manage to get these pictures working on the Pi. At this time, we are not planning to add backgrounds to other functions in the program outside of the quiz as getting the quiz functional in the same file as the rest of the program and getting the LED visual alarm both working for the final presentation.

Our classmates expressed a lot of enthusiasm for our project and their suggestions pretty much line up with all that has been laid out above: getting the quiz working and getting the LEDs working. They seemed to really enjoy the idea of the quiz both at the first milestone and now at the second milestone—they offered praises for it as well as how much there is to the product as well as the use of Najja’s backgrounds to give it character.