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CSC 102

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

**The Pet Matcher**

For our final project, we want to make adding a new pet to one’s life and/or family much easier. The Pet Matcher—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, their lifestyle, and their family best.

Once the match has been made, the second part of the program will help the user compare essential items such as different breeds of the pet, food, equipment, toys, and more, and will show details such as ingredients and cost to compare at the user’s request. Both this part and the first part will most likely heavily use classes to store the information (which will likely be imported from .txt files as of right now) about each type of pet, its diet, its needs, as well as each type of toy and its functions or each brand of food and its ingredients. Once narrowed down to a breed, the user can compare different dogs of that breed, with information such as age, whether they’re at a shelter or part of a reputable breeder’s litter, and more.

Lastly the program will help the user design a routine for the new family addition, such as when and how much to feed the pet, when to play with the pet, and more. In this part of the program, we hope to incorporate GPIO, utilizing different colored LEDs as signals that will blink to signify that it’s time for a certain activity with the pet to occur. For example, a blinking blue LED will be the signal that it’s time to feed the pet. A timer function could likely be utilized here. When the task is completed, the user can press a button to stop the LED’s blinking. We can craft an encasement with labels for the breadboard so the user doesn’t have to remember which color represents each task.