

Puppy Weight Tracking Application:

The app will show a puppy's weight in a line graph showing how much they weighed with the date of entry. It will allow them to add multiple puppies into the app and show all of the puppy's weight and age, or just one puppy at once. This will allow the user to compare their puppy's weight and date of entry. It will allow the users to enter a puppy's weight and image into the app, and store that data. The user can then see their puppy's growing progress and see what they looked like at those ages by displaying all of their images in tiles. The user will also have the option to add comments with each new entry, e.g. daily walks, puppy was sick the last few days, snowy days so no walks.

Things that are different from my initial Spec Document and the final:

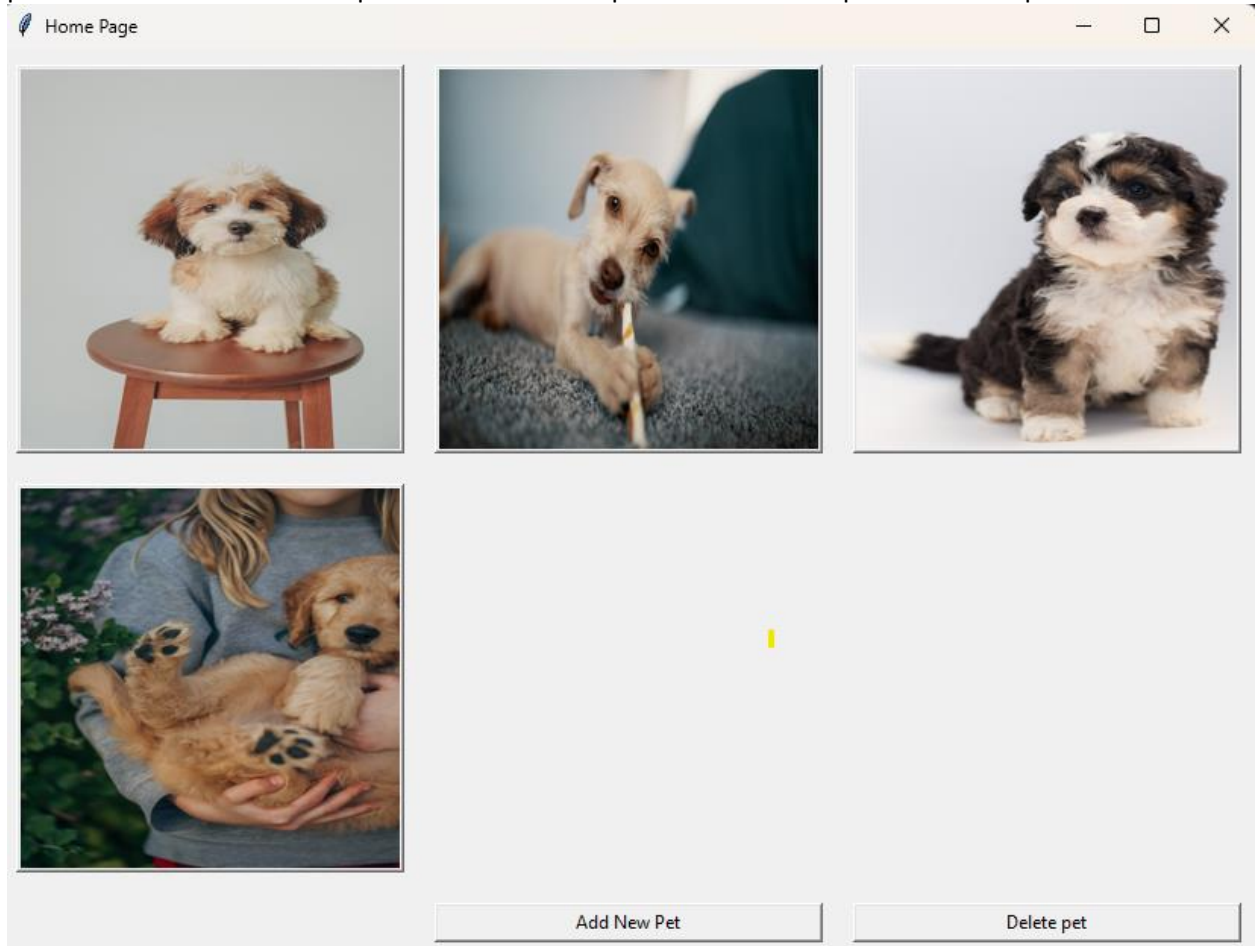
- The final has the line graph which shows the weight and the date of entry, versus in my initial Spec Document, it was the weight and age.
- I planned on using Pandas, Plotly, Dash, and HTML, however, I ended up using tkinter, Pandas, PIL, numpy, and matplotlib.

Install/deployment/admin issues:

- This is implemented using tkinter, Pandas, PIL, numpy, and matplotlib.
- Nothing else to mention here as it runs in Visual Studio Code.

(End) User interaction and flow through your code ("walkthrough"):

- User starts at the home page. Query will return a csv file, PuppyProfiles.csv, which returns every pet in the file. Each has a unique ID. User has the option to add a new pet or delete a pet.



- Code has a section called "Read csv files" which is used to read csv files. It uses the functions as follows:

```
#####Read csv files#####  
  
read_pet_profile_file() #Reads PetProfile csv  
  
read_path_location_from_csv() #reads the csv file from puppy profile.  
    self.pupCSVPath to read files  
  
read_pet_file_from_csv() # reads csv file from puppy profile  
    has self.readFile  
  
whichfile() #which option was clicked by user on the homepage  
    self.weight_entries_page()
```

- User adds a new pet, which adds a record to the PuppyProfiles.csv file with a new unique ID. This includes the pet's name, date of birth, breed, and a profile image.

The screenshot shows a web application interface. On the left, a 'Home Page' is visible with a placeholder image of a small, fluffy puppy sitting on a wooden stool. On the right, a modal dialog box titled 'Adding a New Pet' is open. The dialog contains the following fields and controls:

- Enter New Pet Details:**
 - Pet's Name:** A text input field.
 - Date of Birth (Example: 02/28/2023):** A date input field.
 - Pet's Breed:** A text input field.
 - Select Profile Image:** A button labeled 'Upload Puppy Image'.
- You must click 'Submit'**: A large text prompt.
- Submit**: A button.
- Exit**: A button.

At the bottom of the main application window, there are two buttons: 'Add New Pet' and 'Delete pet'.

- Code has a section called "Add New Pet" that's uses the functions as follows:

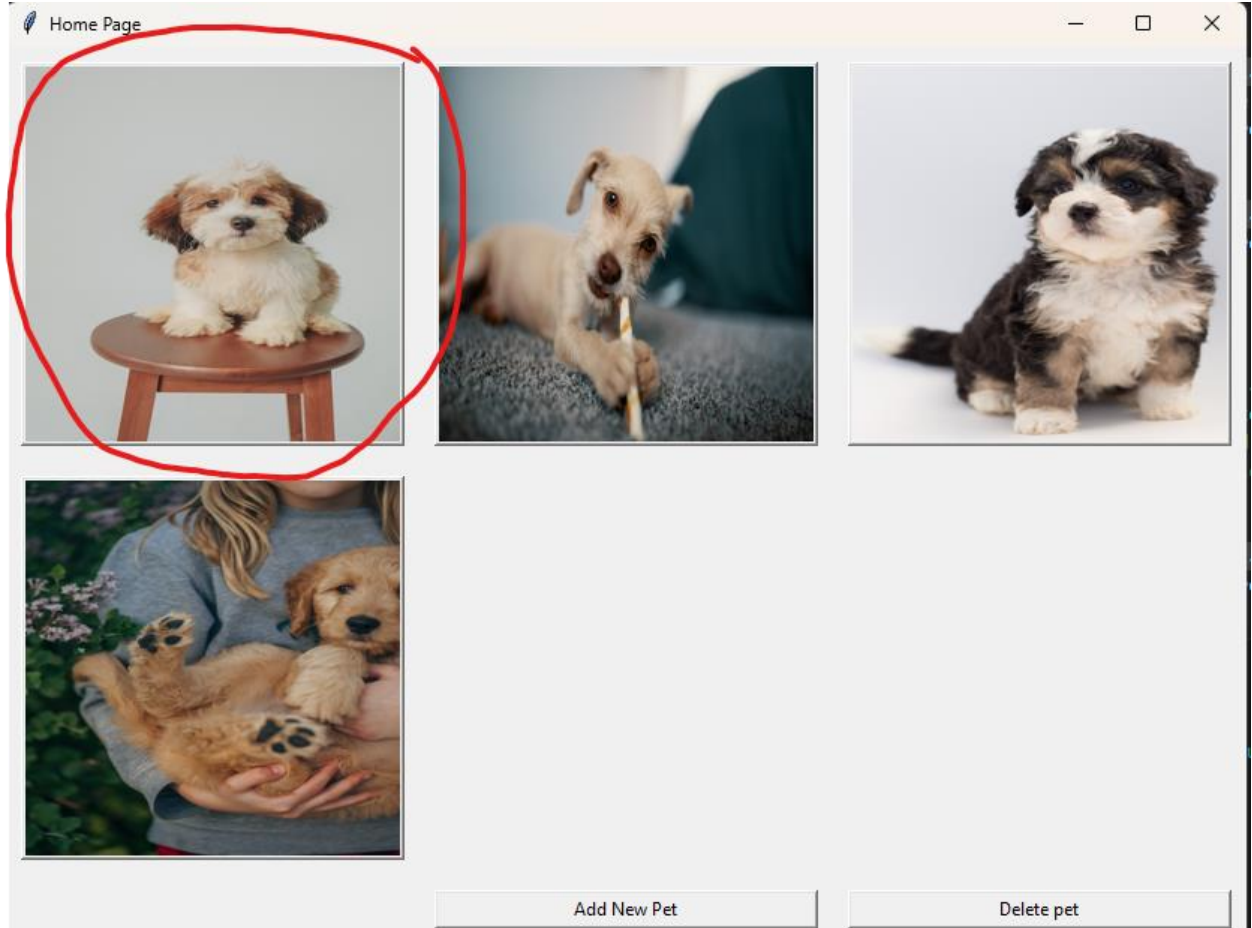
```
#####Add New Pet#####
new_pet_page() # adds new pet

write_new_csv_file() #creates a new csv file

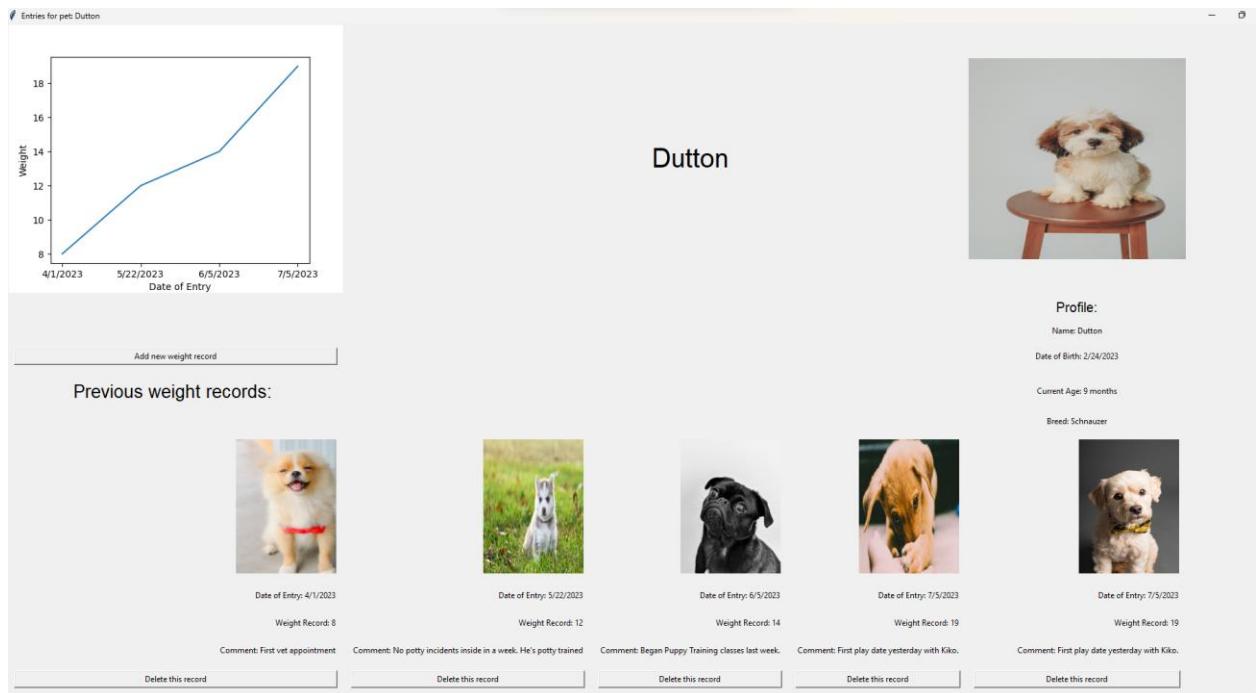
add_new_pet() #adds pet to puppyprofiles.csv file.
    self.write_new_csv_file()

upload_image() #adds an image file to the images folder
```

- User re-runs the application and clicks on a record from the home page, from here they can also see the new record.



- Query returns the pet's unique data stored in a separate csv, petname.csv which stores the pet's weight, date for the input, comments, and an image.
- Query on the page return's the information unique to that pet from the PuppyProfiles.csv file when the user clicks on a unique pet. This shows the weight and date for the input is shown in a line graph, the pet's profile including image and previous weight entries entered.
- The age will be calculated based on the date for each record was added and the date of birth. Date of birth comes from the PuppyProfiles.csv file.



- The code uses the Individual Pet Pages section with the functions as follows:

```
#####Individual Pet Page#####
weight_entries_page() #pet's page
    self.plotcsv()
    self.read_path_location_from_csv()
    self.get_uniquedogprofile()
    self.get_puppy_profile_image()
    self.print_individual_entry_record()

get_puppy_profile_image() #get's profile image and prints image in a label.

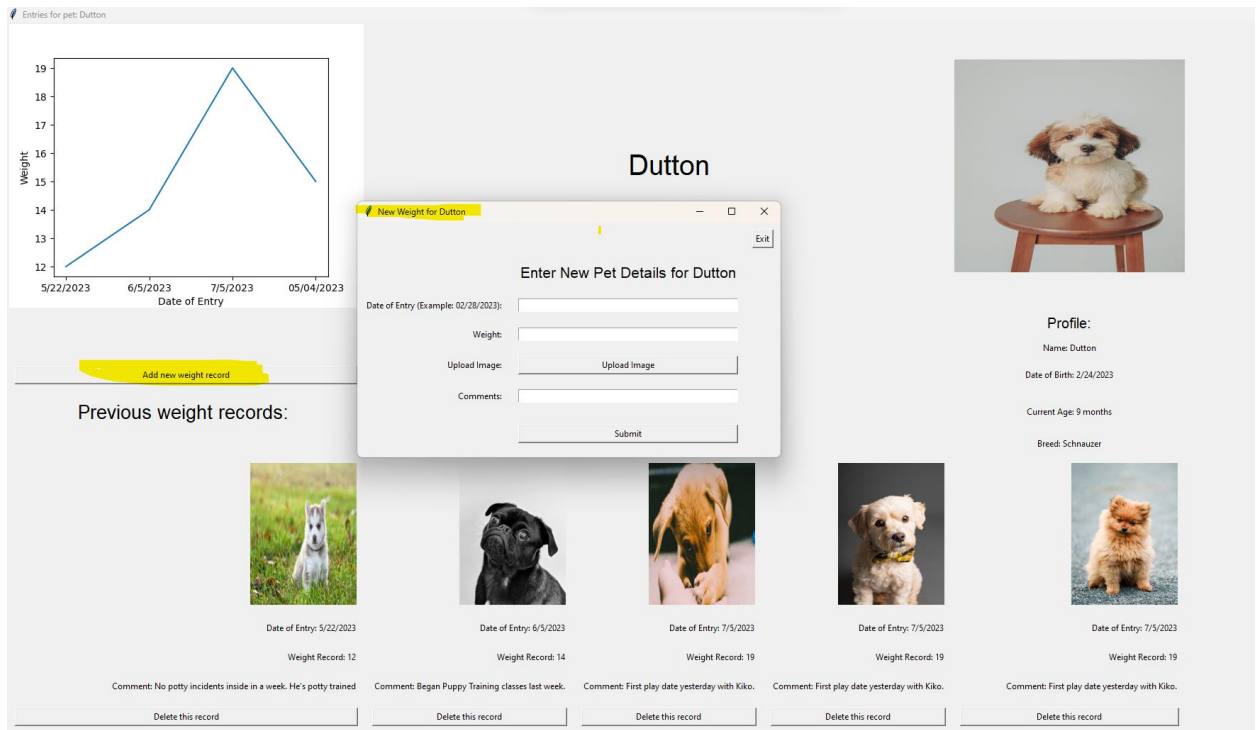
get_uniquedogprofile #gets dog's profile based on petid and prints on page.
    self.getAgeforProfileInfo()

plotcsv() #plots pet csv file
    self.read_pet_file_from_csv()

getAgeforProfileInfo()
    self.read_pet_file_from_csv()
    self.read_pet_profile_file()

print_individual_weight_record() #Prints out individual pet's row weight records,
e.g. an entry for a day
```

- The user has the option to also add a new weight record or delete from a weight record.
- When user clicks on "Add new weight record" the user is presented with a new page that allows user to add a new weight record.



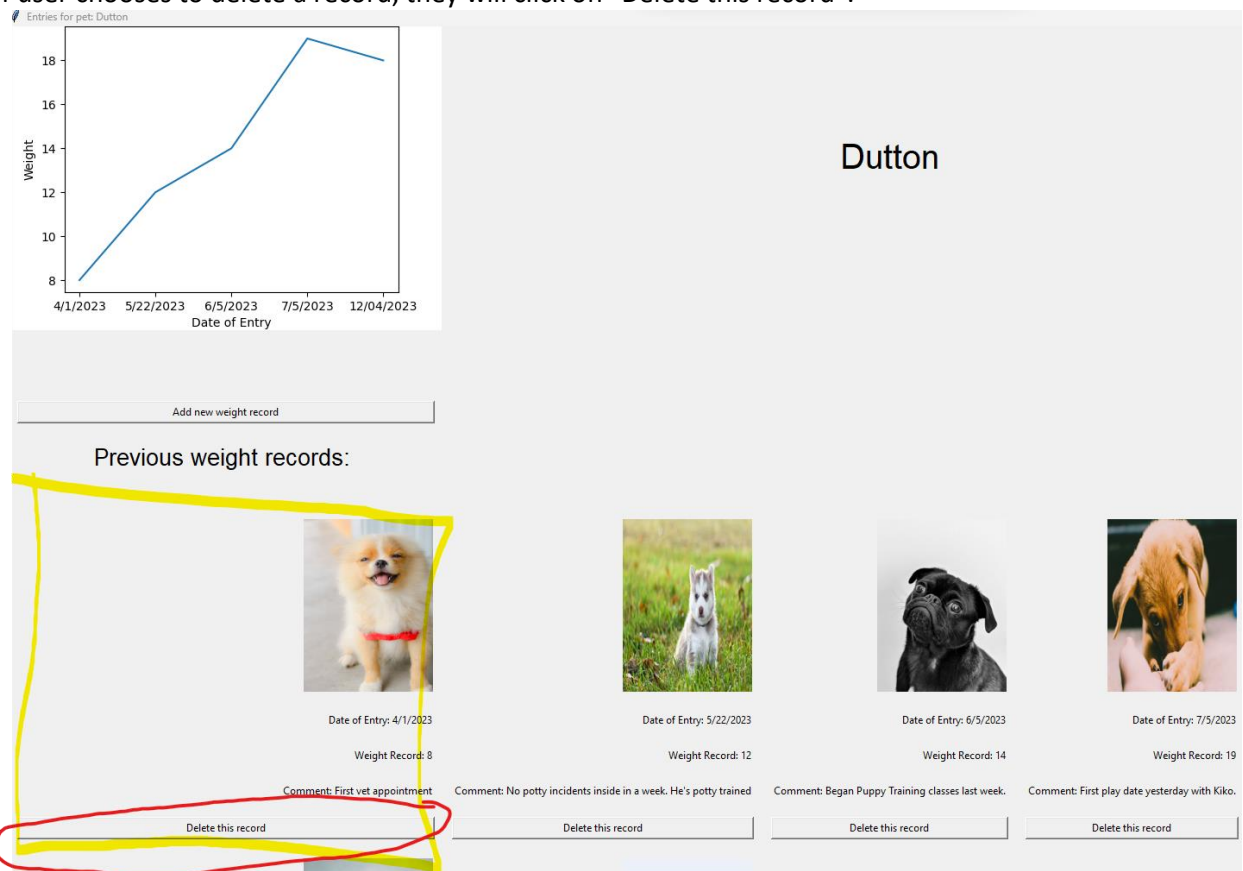
- Once the pet is added and the application is ran again, you can see the new record added. The code used in this section is called “Add new weight record” which uses the functions as follows:

```

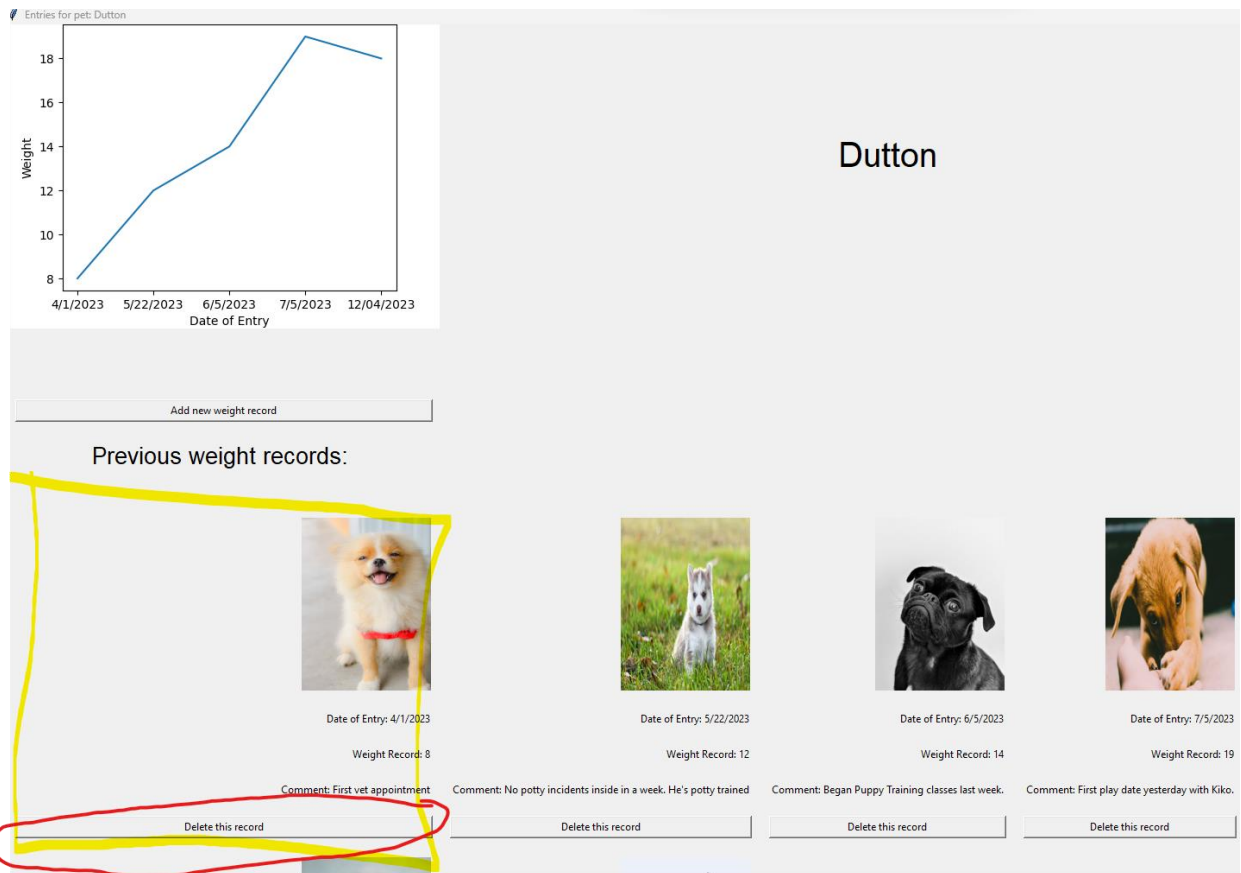
• #####Add new weighrecord#####
• add_weight_page() #Page to allow user to add new weight record.
•
• new_weight_record() #Adds new row to file for new pet weight record
• uses self.pupCSVPath from the read_path_location_from_csv() function

```

- If user chooses to delete a record, they will click on “Delete this record”.



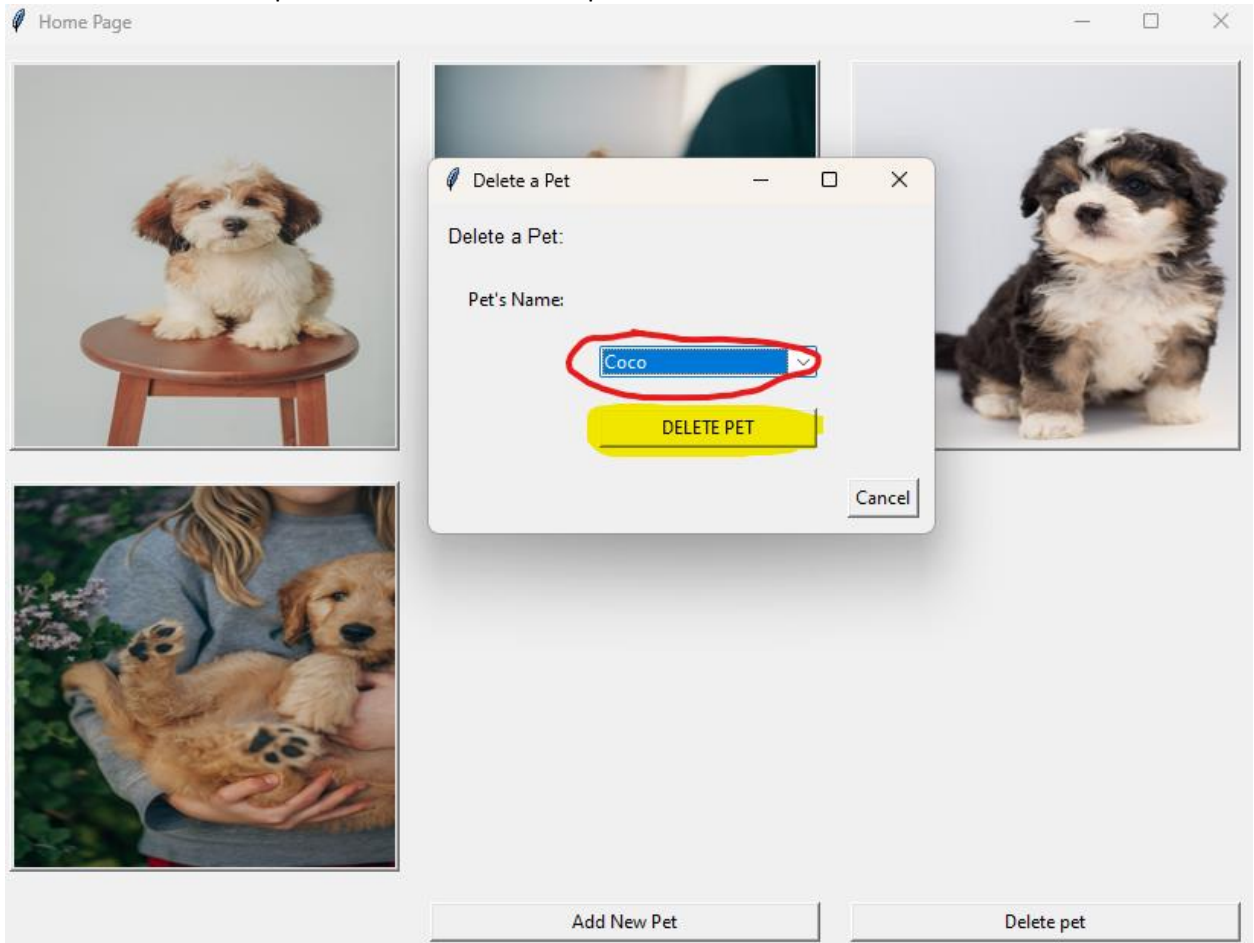
- Once the application is closed and refreshed, the record will be deleted.
- If user deletes a pet, they'll select “Delete pet” from the homepage.



The code uses the section titled Delete Weight Records which uses only one function below:

```
#####Delete Weight Record#####
delete_weight_row_from_file() Delete row from weight file
```


- The user will choose a pet to delete from the drop-down list and click on “Delete Pet”.



- Once the application is closed and re-ran from Visual Studio Code, the pet will no longer appear on the home page.
- The code section for this is titled “Delete Pet” which uses the functions as follows:

```

• #####Delete Pet#####
• delete_pet_page() #delete pet page
•
• delete_pet_from_csv() #Delete file from profile file
•     delete_csv_file()
•
• delete_csv_file() #Deletes csv file when pet is deleted

```

Known Issues: You should mention any issues you know about (or suspect):

When a new pet is added, it does not get a petID of 0 assigned. Therefore, when we try to add a new weight record, a weight record is not added as the code is currently: `weightID = self.readFile['WeightID'].max() + 1`. This only works if there is an existing WeightID in the csv file.

Future work:

- It would be really great to have the UI look better over all. I know right now it doesn't look very nice, but with more experience with the UI side, I believe it could make it look better with more time.
- I'd like is to add an Edit Profile option on the Pet's Weight page so they can edit the existing profile data. I believe this could be done with showing the current field in a text box and allowing editing this way.
- I'd like to get the weightID set so it sets it to 0 or 1 if no existing weightID exists. I believe this could be achieved by a simple If else statement, but didn't see this until today.
- I was hoping to add a default picture so images are not required. As of now, my code requires pictures but it would be nice to make an image optional.