Author: Jason Ngo, Jayden Jung, Jueun Kang
Class: INF 0452H; Information Design Studio V: Coding
Instructor: Maher Elshakankiri
Assignment: Final Project
Date Created: 12 / 9 / 23
Last Modified: 12 / 11 / 23

**Refer to GitHub link |** https://github.com/thejasonminh/crittercraft

# Purpose

Crittercraft is a virtual pet simulation game where users can select (sheep, duck, panda) and customize (name and colour) their character. In this virtual environment, each pet is presented with health, hunger, and love statistics. Through random events, the character loses health, hunger, and love points over time, encouraging the user to take care of their pet through the care button (clean, feed, cuddle). To increase the maximum health, hunger, and love points a pet can have, users can play games: Brain Booster, Tic Tac Bone, and Guess the Love respectively. The game ends if the pet's health, hunger, or love goes to zero.

# Execution Instructions

1. Ensure you have python installed on your machine.
2. Open the terminal and navigate to the directory containing the file CritterCraft.py
3. Install Pygame library (pip3 install pygame)
4. Install tkinter (pip install tk)
5. Download the zip file (crittercraft_assets.zip) and put the assets in the same file as the python file:
   - Refer to GitHub link:
     https://github.com/thejasonminh/crittercraft/blob/main/crittercraft_assets.zip
6. Run the CritterCraft.py script (python CritterCraft.py)

# How to Play

1. Click "Create Your Critter" on the landing screen of the game.
2. Select your critter through the buttons (sheep, duck, panda).
3. Choose the colour of your critter using the radio buttons.
4. Give your critter a name by typing into the textbox and confirming.
5. View your critter and their health, hunger, and love statistics on the homepage – these stats will randomly decrease over time, encouraging you to take care of your critter.
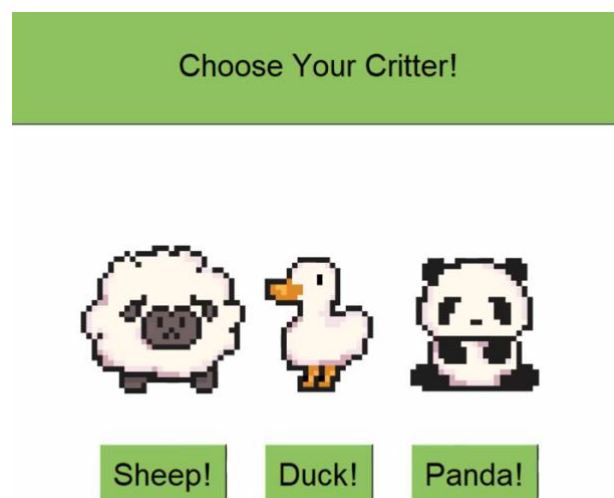
6. Take care of your critter through the 'Care' button – clicking clean, feed, and cuddle will increase health, hunger, and love respectively. Note that the critter dies once health, hunger, or love reach zero.

7. To increase the maximum health, hunger, or love points a critter can have, click the 'Play' button to play games; Brain Booster, Tic Tac Bone, and Guess the Love increases maximum health, hunger, and love respectively.

   a. Note: Complete the game instead of closing the game window mid-game: if the game window is closed during the middle of playing, the game may break (the health, hunger, and love statistics will not decrease) due to Tkinter limitations.

8. If the critter dies, use the 'Restart Game' button to create a new critter and play the game again.
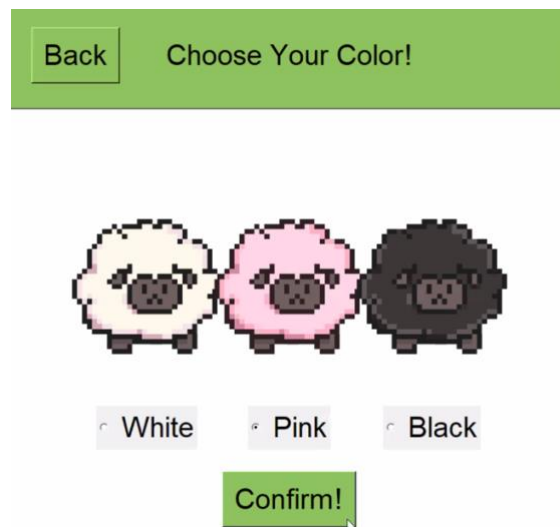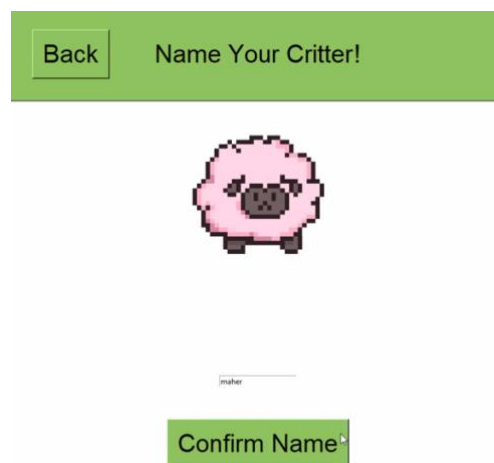
# Sample Output

1. Landing screen:



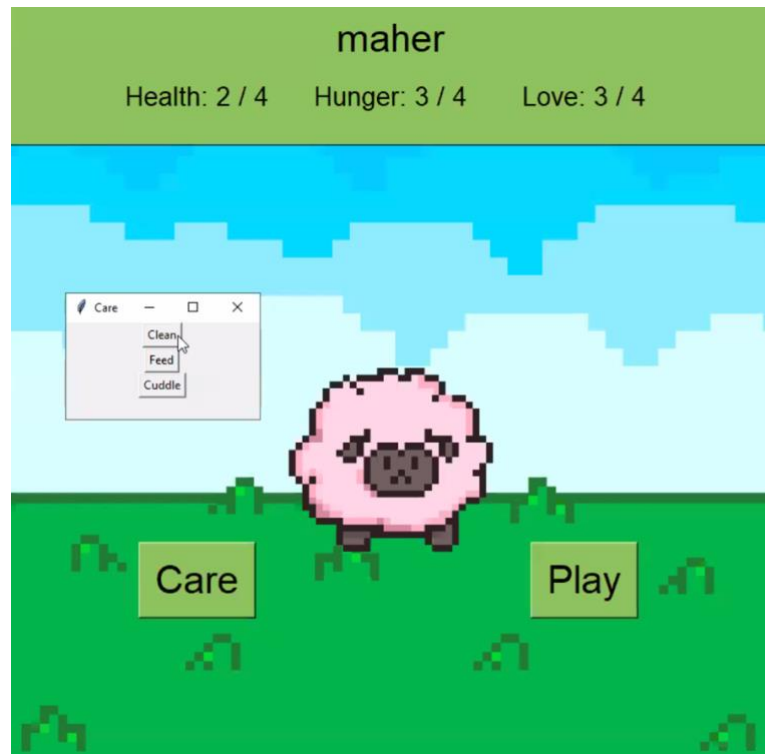2. Choose your Critter:

3. Choose your colour:

Back    Choose Your Color!

○ White    ● Pink    ○ Black

Confirm!

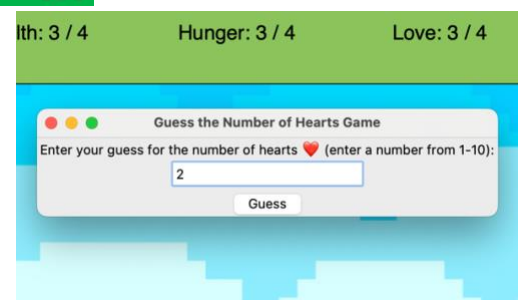4. Name your critter and confirm:

Back    Name Your Critter!

maher

Confirm Name

5. View critter statistics and choose to care or play:

maher

Health: 3 / 4    Hunger: 3 / 4    Love: 3 / 4

Care    Play

6. Care: increase health, hunger, and love stats through clean, feed, and cuddle

7. Play: increase maximum health, hunger, and love through playing games (Brain Booster, Tic Tac Bone, Guess the Love):
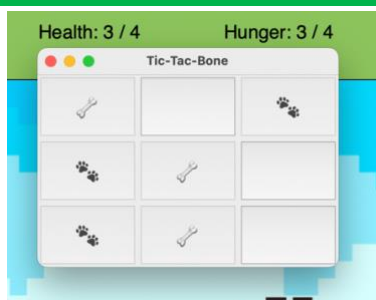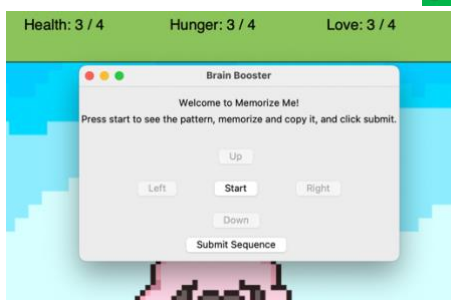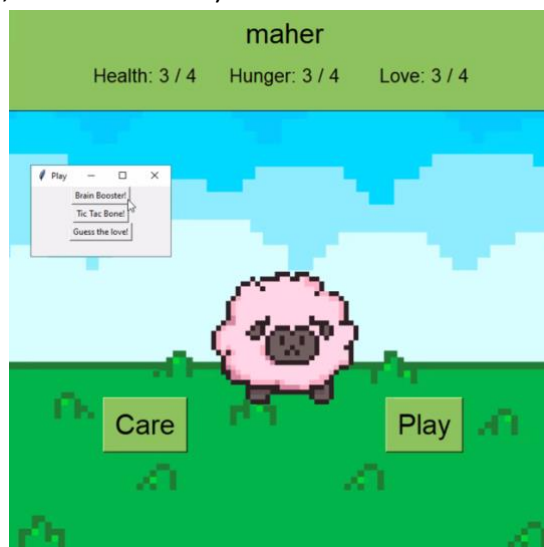




8. Choose to restart game if critter dies:

maher DIED

Restart Game