**Programming Project – Pai**

Pai is a console video game of a virtual pet like a Tamagotchi or Pou. It will have the basics activities eat, sleep and play (if I have time, I will implement other actions or behaviors), so you are going to have to feed it, turn off the lights and play with it to keep it healthy.

**1-. Pointers**: To change variables of the pet in functions, for example increasing its health and energy when it eats.

**2.- POO:**

- The pet will be an object and it will have name, age, hungry and energy, and methods like eat, sleep and play.

- The food will be also an object with the amount of hungry and energy that it recovers.

**3.- Threads:** I will use 5 or more threads. One for the actualize the sprites (delete and write over the console), other two for the hungry and energy (they will decrease with time), other for the age (it will increase every 3 minutes), and other for the actions of the player.

**4.- Files:** I will use them to read my ASCII “sprites” from a txt to then print them, other to write, other for

**5.- Exceptions:** If any error occurs an exception will be thrown.

**6.- Vectors, maps, sets, stacks and queues:** I will use maps for the variables hungry, energy and age this way: data[“hungry”] = 100.

**USE CASES**

It may be like this:

* You will be asked for the name of the pet.
* Then with the sprite of the pet, and its data, it will appear this menu:

1 – Feed

2 – Sleep

3 – Play

* You will be able to put a number and the action will be performed.