Storage Design Plan for Saving and Preferences Features in HugLife

Overview

- `savedStates/quickSave.ser`: contains the most recent state of the previous HugLife run.
- savedStates/XXX.ser: contains a HugLife `Grid` saved using the s command
- savedStates/XXX.png: contains a screenshot of the world grid contained in `XXX.ser`
- ./preferences.cfg: contains the execution speed preferences for `HugLife`.

Sequential Example

$ java Huglife strugggz is executed and allowed to run for 5 seconds before the letter q is pressed.

- The directory savedStates is created.
- After the first frame is drawn to the screen, the file savedstates/quickSave.ser is created, and the contents of the HugLife Grid including the energy levels of all creatures are written to the file.
- After every subsequent frame is drawn to the screen, the file savedstates/quickSave.ser is overwritten with the new corresponding HugLife Grid.
- The file ./preferences.cfg is created containing the number 50.

$ java Huglife strugggz is executed and run for 5 more seconds before q is pressed.

- After every frame is drawn to the screen, the file savedstates/quickSave.ser is overwritten with the new corresponding HugLife Grid.

$ java Huglife is executed and run for 5 more seconds before q is pressed.

- After every frame is drawn to the screen, the file savedstates/quickSave.ser is overwritten with the new corresponding HugLife Grid.

$ java Huglife is executed and run for 3 seconds before s is pressed, and 2 more seconds elapse before q is pressed.

- After every frame is drawn to the screen, the file savedstates/quickSave.ser is overwritten with the new corresponding HugLife Grid.
- At the 2 second mark, a random filename is generated. Let's suppose this filename is wetFish. The state of the HugLife Grid at that time is written to

savedStates/wetFish.ser and a picture is created and stored in savedStates/wetFish.png.

$ java Huglife wetFish is executed and the following events occur at the indicated times:

- **At t=3: s is pressed**
- **At t=4: + is pressed 3 times**
- **At t=6: – is pressed 2 times**
- **At t=7: q is pressed**

- After every frame is drawn to the screen, the file savedstates/quickSave.ser is overwritten with the new corresponding HugLife Grid.
- At t=3: A random filename is generated. Let's say hugeLeg. The state of the grid is written to savedstates/hugeLeg.ser, and a picture is created and stored in savedStates/hugeLeg.ser.
- At t=4: The ./preferences.cfg file is overwritten with the values 45, 40, then 35.
- At t=6, the ./preferences.cfg file is overwritten with the values 40, 45.