README

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Our Critters GUI consist of three screens: the control screen, the critter world, and the stats screen.

Critter World:

Screen that is scalded based on the Params.worldHeight and world width.

Displays all the critters graphically on a grid each time step.

The shape and color of each critter is based off of their viewcolor and viewshape.

Stats Screen:

Displays the output for runstats based on the selected critter in the control screen.

Control Screen:

The first choice box allows you to select a critter that is in the package to add to the critter world. The second choice box specifies the number of critters to add, you can input your own number into this box if you want. The 'make' button actually adds the specified critter X number of times to the critter world, where X is decided based of the second choice box.

The third choice box allows you to pick the number of worldsteps to execute. The 'step' button runs worldstep X number of times then updates the Critter World screen after all worldsteps have been executed, and updates the Stats Screen.

The fourth choice box allows you to select which critter to run runstats for after the Critter World is updated or if the 'stats' button is pressed. The 'stats' button updates the Stats Screen based off the specified critter.

The fifth choice box allows you to select an animation speed. The 'run' button will start animating the Critter World based off the selected animation speed. During animation worldStep is executed X number of times where X is based off the animation speed, then the Critter World is updated, then repeat. During animation all buttons are disabled except the 'stop' button. The 'stop' button is not selectable until the run button has been pushed. Once animation has started pressing the 'stop' button will end animation and enable all other buttons, then make 'stop' button disabled again.

The text box allows the user to input a long integer to be set as the random number seed. The 'seed' button takes the inputted long and runs setSeed with that number.

The 'clear' button will run clearWorld (erase all critters) then update the Critter World and the Stats Screen. The 'quit' button will end the program.

The scaling of our project based on the world height and width works rather well on different screen sizes.