

We used buttons instead of typing instructions. For the make instruction, users need to type in how many critters they want. For the step instruction, users can either choose to step 1, 10, 100, 1000 times or type in the number of steps they want. In the run stats part, users can check the box of critters they want to show or update all critters' stats. There is also an "animate" button. This button will let the program invoke "worldtimestep" and "DisplayWorld" continuously until the users click the stop button. In the animation part, we created another thread so that during the simulation the BorderPane can respond to users' actions. We also created a thread for large numbers of steps to avoid "not responding" of the BorderPane.