

CMSC 113: Computer Science I
Owl Project
due on Gradescope by the beginning of class on September 27, 2017

For this project, you will write a fully-featured rendering of our deal pet owl Erichthonius, or Richie for short. A fully-featured Richie contains all of the following:

- An outline with nose
- Ears that grow longer with time, growing every 100ms (10 pts)
- Black pupils that turn yellower with every click, becoming fully yellow at 10 clicks (10 pts)
- A beak that opens every time the mouse passes over Richie's face (10 pts)
- A drastic change in Richie's face that happens after 10 clicks, representing the fact that she is tired of being clicked on. At a minimum, you can draw a big X over her face, but creativity is encouraged! (10 pts)
- Eyes that blink every second (10 pts)

Some particulars:

- Once you get Richie's pupils to yellow, it is quite likely that something bad will happen after you click too many times. This badness will be accompanied with lots of red text printed out to the *Console* display in Eclipse. To get the full 10 points for Richie's pupils, figure out what is causing the red text and stop it from happening.
- To get full credit for the pupils, they must smoothly transition from black to yellow in 10 clicks.
- To get full credit for Richie's drastic change, you must prevent Richie from moving again thereafter.
- To get full credit for the blinking eyes, they must blink every second, not every timer tick. The ears, however, must grow faster than just once a second. The challenge here is to get two elements operating at different rates.
- The eyes (with their pupils) must be written using compound objects. So, you will have two files: *Richie.java* and *Eye.java*. Note that your Richie will have two *Eye* objects – do not write your *Eye* compound object to have two *GOvals*.

Feel free to add extra features to your Richie. Have fun with this project!

