## CSCI 342, Fall 2017, Homework # 5

Due date: Friday, December 1, midnight. ZIP all files together, including images and other resources.

## **Instructions:**

- First, follow the instructions found here to build a popup penguin game using just HTML and CSS: https://googlecreativelab.github.io/coder-projects/projects/pop\_up\_penguins/
- Now modify the program and add Javascript (Vanilla or jQuery) to accomplish the first two "Bonus Rounds" as follows.
- For this assignment, use the Javascript DOM as much as possible. Avoid printing HTML tags with your Javascript, and instead create objects and attach them as children to existing objects in the page.
- Use Javascript arrays and for-loops to populate the page with penguins instead of hard coding every penguin in HTML. This will allow you to put any number of penguins on the page.
- Choose the position of the Yeti with a random number. Every time you play the game it will be in a different position.
- Add a text input at the top of the page to choose the number of penguins (+ Yeti) in the game. Validate that this is an integer between 2 and 64. As soon as the user enters a number, the new game should load (no submit button). The currently chosen number of penguins (+ Yeti) should remain in the text box while the game is played.
- Make the penguins stay up when clicked, and disappear when the Yeti is awoken.
- After the Alert panel is closed, focus should go back to the number of penguins (+ Yeti) box, so the user can simply hit return to play a new game (or change the number).
- Optional: add real squawks, chirps, and roars.