

## 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/](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. Use the `createElement` procedures and not the `innerHTML` field. Avoid printing HTML tags. 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 dropdown box at the top of the page to choose the number of penguins (+ Yeti) in the game. This will be an integer between 2 and 64. Construct this dropdown in javascript, and use a loop to add all the numbers. As soon as the user selects a new number, the new game should load (no submit button).
- Make the penguins stay up when clicked, and disappear when the Yeti is awoken.
- Optional: add real squawks, chirps, and roars.