

## Lab 6: Memory Game Mod

The current lab is an extension of Kahn Academy's Memory Game. First, watch the Kahn Academy videos on arrays, objects and on the Memory Game. Next, download all the parts of the Memory Game into a single directory from the class website and get it working through WebStorm on your personal or lab computer.

Some ideas that were suggested in class:

- 1) Add some rows and columns. The given game has 5 columns and 4 rows for a total of 20 cells. Since each picture needs to have a match, there must be 10 different pictures. If you add a row and or column, then you will need more pictures. Getting this to work would be worth 10/20, so you would also need to make another 10/20 mod to make the full 20/20 grade.
- 2) Change the images. This is not very hard and is just worth 5/20. So, doing this counts as part of your project, but you need to do a bunch more.
- 3) Change the game to require matching 3 of a kind. This, of course, would mean the number of tiles would need to be a multiple of 3. This mod would require making more changes to the code than (1) so it would count as a full 20/20 by itself.
- 4) Add an animation for when the tiles flip (such as changing the size to smaller and smaller, then change the image while the drawing is small, then increase the size again until it is full size. If you do this, you should keep the smaller tiles centered in the space (not shrink to the upper left corner). This would be a 10/20 change so together with (1) would make a full 20/20.
- 5) Adding sound effects and/or background sound. ~~If every tile plays the same sound, this would be a 7/20 mod.~~ (Note: the updated version I posted on our website already plays the same sound for every tile, so you cannot get points for it). If each tile face plays a sound different from every other tile face, but the same sound as its matching face, then this would be a ~~20~~ 10/20 mod.

Feel free to try other things. If unsure for how much it would count, then ask here (so other students all the graders see the answer too). Also, post questions about how to do whatever it is you want to do.

Turnin: You may either turn in a single .zip attached in Blackboard Learn containing your .html file and all required resources or create a website and submit the link into Blackboard Learn.