CS-376 Final Project  
Self Assessment

# Group

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# Goals

We wanted to consolidate the knowledge we’ve learned this quarter on designing 2D games. Inspired by Battle Cats, which has many similarities to what we’ve been doing, such as object spawning and movement, confliction detection, sound and visual effects, etc, we designed Battle Warriors by utilizing existing resources and implementing learned techniques, hoping that we could not only enjoy playing the game of our own but also earn a rewarding grade on this course.

# Lessons learned

***What went right?***

* A good game architecture.
* Animation and beautiful interface layout design.
* Great teamwork. Enough discussion and communication to make sure a good division of work.
* And many others! :)

***What went wrong?***

* Object.Find() method is time-consuming if there are too many objects active in our game.
* It is hard to tuning parameters to make the game playable and balanced.
* Coordination between the parameter setup and the actual animation of the minions makes the designing process challenging.

***What do you wish you knew when you started?***

* How to improve the efficiency of the update functions with a number of active objects in the game, and what are some alternative methods that could be used.
* How to find the optimal parameters that make the best of player-enemy balance.
* More about animation implementation.

# Annoying grading bookkeeping

Please list all the things you think you got points for based on the criteria given in the assignment.

**Objects:**

* For each of the 7 kinds of minion objects: 1 point for appearing on screen, 1 point for moving, 1 point for responding to collisions, 3 points for changing appearance based on walking, attacking and dead, 1 point for making sound when attacking. (7 \* 7 = 49 points)
* For each of seven buttons for minion generation: 1 point for appearing on screen, 1 point for controllable (click). 1 point for the same sound for clicking. (7 \* 2 + 1 = 15 points)
* Two castles: 1 point for appearing on screen, 1 point for sound when being destroyed. (2 \* 2 = 4 points)
* Two health counters for each castle: 1 point for appearing on screen and 1 point for changing based on time. (2 \* 2 = 4 points)
* Gold counter: 1 point for appearing on screen and 1 point for changing based on time. (2 points)
* Instruction text (scrollable): 1 point for appearing on screen, 1 point for scrolling. (2 points)

**Controls:**

* Mouse click (1 point)
* Press left and right key or move the mouse to the edges of the screen to move the camera view (1 point)
* Press ESC to display pause menu. (1 point)

**Others:**

* Save and restore (10 points)
* Three menus: start, pause, instruction. (15 points)
* Automatically spawn of enemy minions (1 point)

*The total points we think we get is* 105 points.