# CptS 483 Homework #4

In this homework, you must use the supplied JavaScript files to create a video game. Detailed below are the base requirements. As discussed in class, you are free to implement your own game, but you first need to obtain permission from me.

## Requirements

Your game will be similar to the classic arcade game [Galaga](https://en.wikipedia.org/wiki/Galaga), in which the player must destroy several AI ships ([play game here](http://www.classicgamesarcade.com/game/21637/galaga.html)). Your requirements are:

* The player controlled ship is moved by the mouse
* Left mouse click fires a projectile that moves in an upward direction
* Enemy AI ships move from top-down. As the enemy ship moves, it periodically fires down towards the player's ship
* If an enemy ship reaches the bottom of the screen, reset the ship to the top of the screen (similar how our bouncy-ball worked)
* If a player's projectile hits an enemy ship, it is destroyed
* If an enemy ship hits (overlaps) the player ship, the player ship is destroyed.
* If an enemy's projectile hits the player's ship, it loses health
* The game ends on one of two conditions:
  + If the player's ship is hit 3 times, the game is over
  + If the player destroys 10 enemy ships, the game is over

### Grading

Your project will be graded based on the following criteria:

1. [10] The player's ship can be moved about the screen with the mouse
2. [10] Left clicking the mouse causes the player's ship to fire
3. [80] The game follows the rules as described above

## Due Date

Your assignment must be submitted through the course LMS by Monday, April 11, 2016.