Assignment 5 – HeliAttack Part II

For this assignment, you will be elaborating on a side-scrolling helicopter piloting game using HTML5, CSS3, and JavaScript.

# Due Date

This homework assignment is due **Wednesday November 12 by 2:30pm** (Just before class). You can work from your Part I solution or the one provided with this assignment.

# Requirements

You will need to:

1. Implement at least four powerups, based on the target balloon from the first assignment that when collided with, give:
   1. An extra life (10 points).
   2. Extra missiles (10 points)
   3. Extra health (10 points)
   4. Damage (i.e. an aerial mine) (10 points)
2. Implement level transitions, including:
   1. Adding two more levels with at least three parallax scrolling layers each (10 points)
   2. A splash screen when the game is first loaded (10 points)
   3. Implement level transitions when player reaches the end of the level (10 points)
   4. Implement transition screens, which list the player’s score achieved in the level (10 points)
   5. A credits screen when the player finishes the game. Be sure to credit any sources of art, sound, and music assets you used (10 points)
   6. A death screen if the player runs out of lives (10 points)
3. Implement single-axis sweep-and-prune collision detection (see <http://www.codercorner.com/SAP.pdf>) (20 points)
4. Implement enemy jets which:
   1. Fly right-to-left (10 points)
   2. Fire missiles at the player which cause damage (10 points)
   3. Steer using AI (10 points)
   4. Are damaged/destroyed by player weapons (10 points)
5. Implement enemy gun encampments which:
   1. Fire bullets at the player which cause damage (10 points)
   2. Are damaged/destroyed by player weapons (10 points)
6. Implement enemy tanks which:
   1. Drive left-and-right under AI control (10 points)
   2. Fire bullets at the player which cause damage (10 points)
   3. Are damaged/destroyed by player weapons (10 points)
7. Add sound to the game, including:
   1. Sound effects for firing bullets (both yours and enemies’) (10 points)
   2. Sound effects for flying missiles (both yours and enemies’) (10 points)
   3. Sound effects for explosions (10 points)
   4. Sound effects for obtaining powerups (10 points)
   5. Background music which plays in a loop (20 points)

**Extra Credit**

1. Add a boss level to your game with a boss that requires destroying multiple components to defeat (40 points).

# Turning Your Work In

To turn your work in, you must:

1. Post your working solution on your personal CIS web space (or your own website). Supply the direct url to KSOL. *Make sure that your site is publicly visible!*
2. Zip your project files and attach them to your KSOL submission.

Failing to do one or the other will result in a 50% reduction in your grade