

## Team Assignment 1

Last updated: Feb 22, 2016 7:00 AM  
20 Points

Due Mar 10 11:59 PM  
Late due dates as described in syllabus

*Write a 3D game in Unity 5 that combines features from a couple of popular carnival games. Handout 06 has been updated to include the name of your Blender artist; your team should contact this person as soon as possible and engage them in the project.*

1. Create a 3D Unity project.
2. Your game will be a combination and adaptation of two carnival games: the milk bottle game (<https://www.youtube.com/watch?v=0eN1rZpL3Qc>) and the duck shooting game (<https://www.youtube.com/watch?v=hLIAGlu9cB4>).
  - In your game, you will have pyramids of three objects, but the pyramids will move past the player in a manner similar to the duck movement.
  - There must be pyramids of at least 5 different types of 3D objects (only one type of object in a given pyramid). The different types of objects should be of similar size.
  - Your team will work with a student from the *Blender* course, who will design the pyramid objects for you.
  - Each pyramid sits on a circular platform, and all objects from the pyramid must be knocked off of the platform to score a point.
  - The player shoots balls out of an air cannon at the front of the arcade booth. The air cannon pivots left-to-right and up-and-down on some point along the barrel. The air cannon and balls will be designed by the *Blender* course student.
  - The player uses the mouse to pivot the cannon and uses the left mouse button to shoot.
  - The main camera of the game is approximately 45° to the right of the line between cannon and the center of the pyramid area, and approximately 45° up from horizontal. (Similar to a 2.5D RTS game.)
  - The main UI consists of a score and a countdown timer (60 seconds).
  - The game is over when the timer reaches zero.
  - When the game begins, an overlay UI menu should display a “Start” button.

- When the game ends, an overlay UI menu should display the current score and the highest score since play began; if the current score is the high score, display a message to that effect.
- The game end UI also displays “Play Again?”, along with “Yes” and “No” buttons. If the player presses “Yes”, reload the scene; if the player presses “No”, exit the game.
- The game should have sound effects for shooting the air cannon and for knocking down object pyramids.
- Stereotypical carnival music should play in the background (softly) at all times.

### **Submission**

- After closing the Unity editor, Copy your project folder to one that is named according to the following format:  
     *Team01\_TeamColor*  
     where *TeamColor* is *Red, Green, Blue, Silver, Orange* or *Black*, corresponding to your team.
- In this project folder, remove everything except the *Assets* and *ProjectSettings* subfolders.
- Zip the remaining contents of this project folder.
- Submit the zip file to the appropriately-named D2L Dropbox folder.