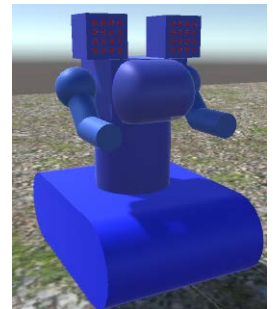


Player Movement Assignment

Using what you have learned in class you will be required to create a player controlled mech that can fire a minimum of two different weapons. You are required to submit a compressed build version of your game in the following format **<Firstname><Lastname>Lab1**. You will receive **-10%** if your file is not named properly. In the class after the due date you will have **5 minutes** to demo the build that you submitted. If you do not demo your build you will receive **-10%** on your final mark for the assignment. If the build does not work you will receive a **zero** so take extra care to make sure that it works on the machine that you will demo on. If you submit late you will lose **10%** and an extra **10%** for every 24 hour period after the due date.

For this lab you will be creating a player controlled Mech. Each task will receive one mark for completion and 1 mark if it works consistently.

1. Create a base for the mech that will move forward and backward.
2. The base should also be able to rotate left and right.
3. Create a torso for the mech that can rotate left and right separate from the base.
4. Clamp the rotation of the torso to rotate only 90 degrees in either direction.
5. Create two cannon arms for either side of the torso that can rotate up and down.
6. The arms should rotate from the shoulder.
7. Clamp the rotation of the arms so they can move 45 degrees up or down.
8. Create a grenade projectile that can be fired from the arms.
9. The grenade should alternate firing from the left and right arms.
10. There should be a fire rate of 0.5 seconds between the grenades.
11. The grenade should destroy itself upon colliding with anything.
12. The grenade should also destroy itself after 3 seconds has passed without collision.
13. Create a rocket projectile that can be fired from a box on the shoulder.
14. There should be a fire rate of 0.25 seconds between the rockets.
15. Limit the rocket ammo to 16.
16. Have each rocket fire from a slightly different location within the box.
17. The rocket should destroy itself upon colliding with anything.
18. The rocket should also destroy itself after 3 seconds has passed without collision.
19. Add a third person camera that will follow behind the mech.
20. Add a first person camera that is positioned in the cockpit of the mech.
21. Give the player the ability to press the 'C' key which will toggle between camera views.
22. Add ammo boxes that the player can run over in order to replenish the rocket ammo.
23. Add stationary targets that will be destroyed when hit by a projectile.



Total Marks: 46

