**VGP230 - 2D GAMES PROGRAMMING**

**Mid Term Assignment**

**Title:** Space Shooter Game Project

**Date Assigned:** Week 3

**Due Date:** Week 5

Requirements:

Your task is to create a complete a shooter game using your assignment 2 shooter and the Collision Test Scene we worked on in class.

Using the 2 different scenes, you should already have implemented:

* Player controllable sprite with movement and firing logic
* Collision detection
* Debug drawing Colliders

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| Basic **Required** Requirements for your game: |  |
| * Player controlled sprite with movement and firing logic * Enemies with some movement * Collision resolution for shooting and destroying enemies * Debug draw for showing colliders * In game, or readme file explaining player controls | * 2/2 * 3/3 * 5/5 * 2/2 1/1 |

After completing basic requirements above, -- you will have a score of 13/25, -- complete optional features to get more points, to a 25 point max.

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| Below are some ideas of features you can add to your game |  |
| Player Movement   * Rotation capabilities with weapon firing * Strafing capabilities (Sliding left or right)   Additional enemy types   * Enemy waves * Enemy dealing contact damage to the player * Bosses with AI   Powerups   * Speed boost * Shield * Weapon level up   Weapon system   * Bomb – (destroying all enemies) * Heat seeking missile – (enemy tracking)   Background   * Layers * Tiled background map * Parallax Effect   Sprite Effects   * Switching sprite based upon direction facing (example carrier\_XX.png) * Thrusters sprites (Show / Hide thruster sprites at back) * Shield visualization   Audio   * Sound effects * Music effects   HUD   * Player lives * Health bar for player and updating after being damaged * Player score * Victory screen   Debug draw   * Debug draw showing enemy states – aggroed, damaged, activated…   Menus   * Starting new game and exiting game | 0/1  1/1  1/1- 0/2 1/1-  0/1- 0/1 0/1  0/1  0/3  1/1 0/2 3/3  0/3  0/1  0/1  0/2 1/1  1/1  2/2  0/1- 1 /1  /1  /1 |

Questions about the grading rubric above and other in-game features that are not covered above can be asked about

Total score out of /25

Deliverables:

On Week 6, you will be showcasing your game to the class and give a code walkthrough on what you have implemented and how you implemented it.

Please hand in your project on Omnivox. Steps before handing it in:

* **Test your project!**
* Group all classes + headers + assets used in same folder
* **Add all features implemented in the grading rubric you implemented, -- can either be in a readme file, or can include this docx.**
* Zip all together and hand in on Omnivox.

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| Penalties |  |
| **Missing Basic Requirement** Compile error  Missing images in submission  Other runtime crashes  Missing code file(s) Missing Grading rubric  Adding unused code files Late | **-1 per missing** -2 (will be required to resubmit) -2 (will be required to resubmit) -2 -2 -1  -1 -1 per day |