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IGME 202 - Section #1

Assignment: Project 2 - Asteroids

Description:

This project is a 2D Unity Game that contains a ship that can be accelerate and rotated and can fire bullets in the direction that it is facing. You must blast and avoid asteroids as you try to rack up the highest score you can.

User responsibilities: The user must press the Left and Right Arrow Keys to rotate the ship’s direction, and press the Up Arrow to forward in whatever direction the ship is facing. They must press the spacebar to fire bullets at asteroids. If the ship is hit with an asteroid, you lose 1 health. Once all three health disappear, the game resets and you start all over

Above and Beyond:

Made sure to go extra above and beyond this time. I added a level system which, after all asteroids on a set level are destroyed, a new one starts with more copies in new places and keeps going. At levels six and ten, the medium and large asteroids are added to the game respectively. There are three levels of asteroids instead of two to make it more difficult, and all asteroids bounce off the sides of the screen to make the levels more challenging. To compensate for the increased difficulty, the ship’s rotation vector was changed from 2 to 5. The game will reset for you when your health drops to 0. Created all assets myself. The ship, three asteroid sprites, and the background were all created in Adobe Animate by me. The bullets also curve if you rotate the ship after you fire them, allowing you to hit interesting angles from across the screen.

Known Issues:

Weird index of out range exception occurs when shooting the first bullet towards the bottom left corner of the screen, however it does not appear to interfere with gameplay. Was unable to make the asteroid’s force vectors have random functions due to an inability to save them in separate objects, so each type of asteroid uses predetermined force vectors saved in the prefabs for them.

Requirements Not Completed:

None: Was unable to assign random force vectors for movement of the asteroids.

Sources:

* IGME 202 - Random enemy generation function, GUI Text Screen, Ship Movement Function, Ship and Asteroid Collision methods.

Notes:

None