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Asteroids Like Game

Developed in Unity using C# Scripting

Files in Text File are Player.cs, Asteriod.cs, Bullet.cs, GameRunner.cs, Scene.cs, and SpawnElements.cs

Each File is separated by dashed line and has a header with name and date.

CheckList and Notes

☒ Modeling the Environment

(4 walls with spaceship and asteroids all self-made and imported into unity. Only prebuilt unity function is explosion (shown later)

☒ Keyboard Interactions

☒ Flying is controlled by WASD and can increase decrease and rotate the space craft

☒ Shooting is controlled using space, shooting a bullet from the spaceship

☒ Physics

☒ Float is implemented for the linear motion of different asteroids with no gravity or drag

☒ Bounce is implemented for using Newtons laws minus gravity for wall and asteroid collisions

☒ Break is implemented sending asteroids in different directions at different speeds when broken. They also start at random size and there is a cut off when broken, each time shot it breaks to be .7 of original

☒ Gameplay

(Different Levels when you clear all of the asteroids, level and score are shown on top left corner. Points are calculated as $10 \times \text{level}$ for each asteroid and then a $100 \times \text{level}$ point bonus for beating level. After a level end there are more asteroids that are spawned increasing the difficulty. This all resets when you die.)

☒ Creativity

(Added an exit button to close out of the game, added sounds for game over, level up, and each bullet shot. Added an explosion visual effect for when the rocket collides with an asteroid ending game, added an immunity with flashing when player advances and spawns, added Game Over Display)