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IGME 202 Section 5

Project 2: Asteroids

**Description**

This project is my own version of the game *Asteroids* made in Unity. The goal of the player is to destroy all the asteroids on the screen without losing all their hit points. Asteroids are destroyed when bullets shot by the ship collide with them.

**User Responsibilities / Functionality**

The player moves around the screen with the arrow keys. The left and right arrow keys will turn the ship, and the up arrow key acts as the accelerator, gradually increasing the ship’s velocity to a maximum speed over time while pressed. Pressing the space bar will fire a bullet from the ship. If a bullet hits an asteroid, it will be destroyed. Large asteroids will split into two smaller asteroids when destroyed. The user wins when all asteroids on the screen are destroyed. Asteroids will harm the ship if they collide with it. Once the ship has been hit three times by asteroids, the player loses.

Up Arrow key – accelerate

Left Arrow key – turn left

Right Arrow key – turn right

Space – shoot a bullet

**Above and Beyond Features**

I went with a Fox McCloud theme for this project. I modeled the ship after Fox’s Arwing fighter, and I added some of Fox’s sound effects from *Super Smash Bros. Melee* to the project. Shooting, taking damage, losing, and winning all trigger specific sound effects of Fox’s from the game. Destroying an asteroid causes the target breaking sound effect from *Melee* as well. I also added a Shine ability to the ship, mimicking one of Fox’s moves from *Melee*. By pressing left shift, the ship’s sprite changes for one second to signal the ability being used. While the Shine ability is up, asteroids that collide with the ship get deflected off it rather than damaging it. It also has its own sound effect taken from *Melee*. The ability has a one second duration and a two second cooldown.

Left Shift – Shine ability

**Known Issues**

On rare occasion, and for reasons unknown, a level 2 asteroid will not be instantiated properly, causing it to appear near the center of the screen and to stop moving. When this happens, the ship and its bullets cease to affect or be affected by the asteroids. Again, this only seems to happen on rare occasion.

**Sources**

Fox McCloud sounds:

<http://www.mariomayhem.com/downloads/sounds/super_smash_bros_melee_sound_effects.php>

Fox shine image:

<https://mbtskoudsalg.com/explore/fox-shine-png/>

Asteroid images:

<https://www.pinterest.com/pin/436497388859578086/>

Target break sound:

<https://gamebanana.com/sounds/download/25803>

Note: all sound files are originally from *Super Smash Bros. Melee*.