

An Asteroids replica where the player shoots asteroids for points with the occasional hostile UFO shooting back. The player can accrue points by destroying asteroids and UFO's, and spend said points on permanent upgrades for their rocket in the ingame shop - may they be upgrades for the weapons power or efficiency, or the ships shield capacity (HP). As score increases, frequency of asteroids and UFO's increase for scaling difficulty. Possible customization of HUD elements, choosing to have shields as a bar, or a physical shield (circle) around the ship. Possible alternate game types, time permitting. Classic with no upgrades and set lives. Basic as specified. Time Trial - start with a few seconds, destroy asteroids to gain time. Roguelike - get upgrades every milestone through gameplay.

- [Asteroids](https://youtu.be/S9Ejj_ORGo8) - https://youtu.be/S9Ejj_ORGo8
 - Shoot asteroids for points
 - Gives points to spend in a shop
 - Shop has improvements
 - Increase ammo count
 - Increase thrust intensity
 - Side thrusts?
 - Back thrust?
 - Weapon power
 - Destroy larger asteroids faster
 - Charge weapons?
 - More lives per level
 - Time increase per level
 - Enemy UFOs
 - Seeker - follows player
 - Guardian - Follows a set path
 - Piggy - High value target, runs away from player
 - Colliding with asteroid destroys player
 - Set amount of lives?
 - Maybe use shield (health) that drops when inside collider
 - Set time per level
 - Buy more time?
 - Getting power ups in level?
 - Asteroid destruction adds time?
 - Possible gamemode variant
 - Level Type
 - One screen
 - Warp player to opposing corner
 - Player centered
 - Make level around player as they move

Gamemodes

- Single Level - Classic - Survive for as long as possible
- Upgrade Based - Powered - Points gained can be spent for upgrades
- Rogue Like - Powerups gained at end of level, lost on death.

Player Equipment

- Laser - ammo pool of heat. Overheat leads to cooldown where weapon cannot be used
- Rockets - High power, limited ammo, slow projectiles. Set fire rate.
- Shields - Once at zero, next collision will kill player

Player Variables

- Shield Power - Max amount of shields
- Shield Regeneration - How fast shields regenerate when not damaged for a set time
- Heat (Ammo) - how much the player can shoot in quick succession
- Fire Rate - the time between each bullet shot
- Thrust - speed at which player builds speed
- Ray Power - How much damage each bullet deals per hit
- Rocket Supply - max amount of Rockets allowed to carry
- Rocket speed - how fast the rocket flies
- Rocket Power - how much damage the rocket deals

Powerups

- Active - Rocket Up - Get rockets
- Active - No Overheat - Infinite beam shooting
- Active - Shield Up - Restore Shields to full
- Active - Invulnerability
- Passive - Heat Capacity - Pulse Laser fire time
- Passive - Ammo Capacity - Rocket count
- Passive - Beam Rate - Beam Laser time between each shoot
- Passive - Rocket Rate - Time between each rocket shot
- Passive - Shield Capacity - Amount of total HP
- Passive - Boosted Thruster - Increase acceleration and deceleration
- Passive - Horizontal Thrust - Allow for horizontal thrust (left / right thrust)
- Passive - Turn Speed - Increase speed at which player turns
- Passive - Automatic Fire
- Equipment - Beam Laser - Hold to fire continuous laser

- Equipment - Hyperspace - Warp out of danger - Creates excessive heat prevents shooting
- Equipment Upgrade - Heat Seek Rocket - Follows set target. Hold to lock, release to fire
- Equipment Upgrade - Cluster Rocket - Splits into mini rockets after launch

Controls

- W - Forward Thrust
- A - Turn Left
- S - Turn Right
- D - Backward Thrust (Upgrade)
- Shift - Fire Rocket
- Space - Fire Beam
- Esc - Pause
- Arrow keys - Swap current weapon