## **Current Code State**

Current Scripts	Functions	Variables
BulletEffects	Bullet Damage on Collision	Parent Canon
CanonShoot	Fires Bullet	Bullet Properties, Firing Properties
EnemyMotion	Paths the object towards the player	TargetLocation
EnemyShooter	Rotates towards player	Rotation speed, rotation, targetLocation
HealthController	Death on 0health	health
PlayerController	Moves the player	Position, Rotation,
PlayerMotion	None	None

My scripts are a little bloated in places, so the following are a set of rule i will abide by for good practice:

- All scripts will go through the controller script of the object it's trying to interact with, in theory all scripts within an object are private except the controller, abiding by the MVC design, to the best of Unity's ability.
  - All objects must have a controller Script
- All scripts will serve exactly 1 function and only have the variables required for exactly that one function.
- All script functionality should be done in their own functions, and not within the Update of FixedUpdate functions, which should call specific functions instead
  - Generally speaking, graphical updates should be done in update, while all other updates should be done in fixed update (the difference between them being important, and explained in the Unity Technical Document)
- Any time-based events must be done in a CoRoutine, preventing the repeated call of time checks
- Spawned prefabs should be children of the 'factory' object that created it
- All shared features will be noted to be flywheels, while specifying features will be within TypeObject Scripts, enforcing the use of 2 appropriate design patterns.