Smart Turret Template
Template for the smart security turret.
The automatic turret searches for objects with specific tags and attacks them.

Features:
- C# solution;
- Physics based; |
- Targeting with tags;
- Shooting by ray-casting and send messages;
- Demo assets included; Content:
- Example 3D models of turret with PBR textures;
- Some environment models with PBR textures;
- FX with particle systems;
- Sounds;

In the example scene the turret shoots some targets.

Smart Turret Template contain two component: STT_Actor and STT_Turret;

The Actor is:
Actor - The component that works with Rigidbody and serves to determine incoming damage.

Actor.Parameters:
Toughness - the "Health" of the object;
Armor - Threshold for the incoming damage;
Damage Factor - The incoming damage will be multiplied by this value. The result will be applied as an explosive force to the rigidbody.;

Actor.VFX:
Damage FX - This GameObject will be instantiated at the point of the hit.
Deactivate FX - This GameObject will be instantiated when toughness = 0.

Actor.SFX:
Destroy Clip - Audio clip that will be played when the object is destroyed.

Turret.parameters:
Active - Activate or deactivate the turret;
CanFire - Permission for turret's fire;
Power - The amount of damage that will be sent upon hit;
Shooting Delay - delay between shots;
Radius - The radius of detection of enemies;
Turret.targeting: Aiming Speed - Speed of the turret rotation;
Aiming Delay - delay before the turret start aiming;
Tags To Fire - Array of tags (string) which will be identify as enemies;

Targets - List of all targets in the radius;
Target - Current target;

Turret.VFX:
Muzzle - a Transform, origin for the shooting raycast and transform for the Shot FX;
Shot FX - This GameObject will be instantiated at the Muzzle transform in the shot event;

Turret.SFX:
Shot Clip - Audio clip that will be played when the turret shots;

Recommendation:
- Lock the rotation of the turret for X and Z axis;
- Increase the angular drag of the turret;