Can Receive Transformations (Translation, Rotation about-self and Scaling, within the World Space)
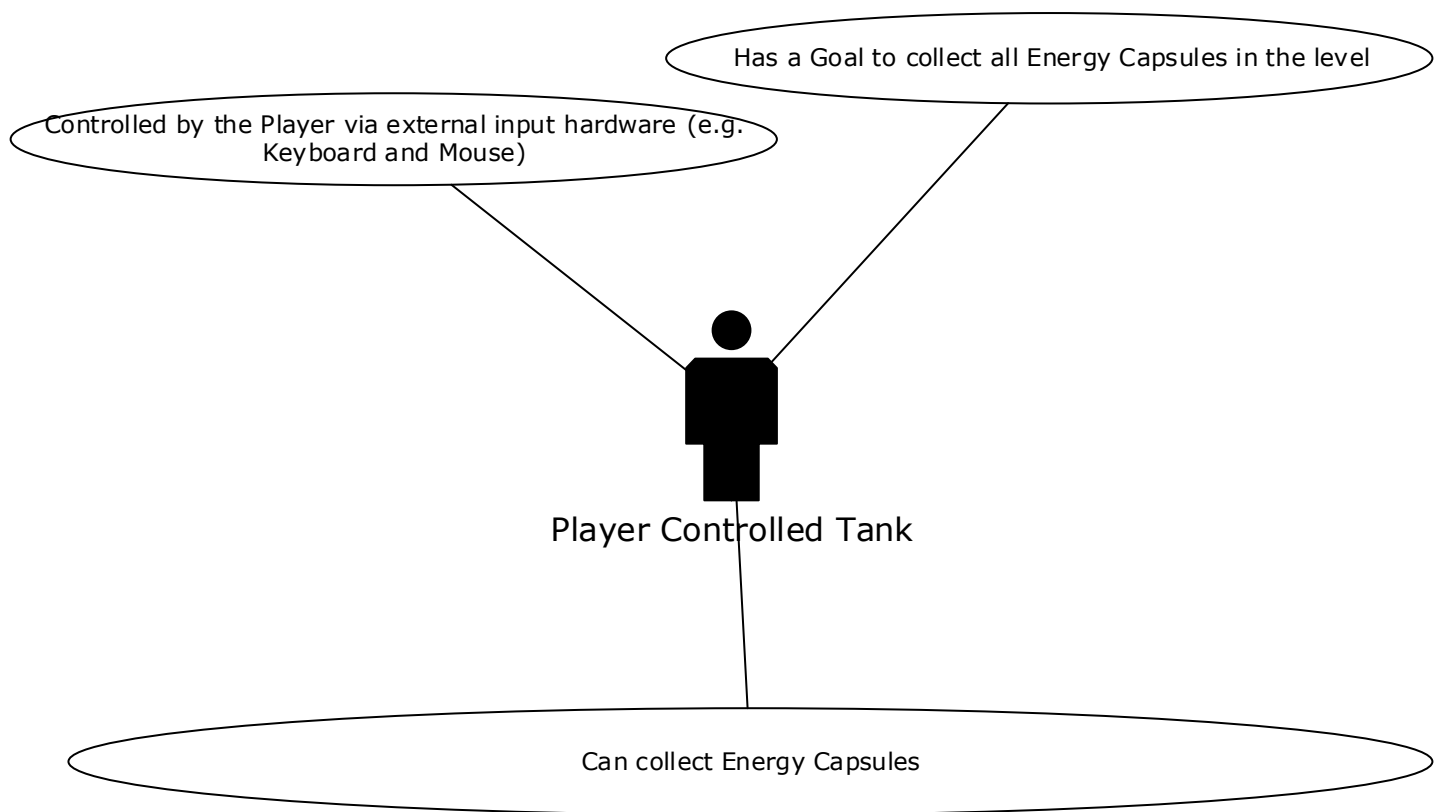
Game Object

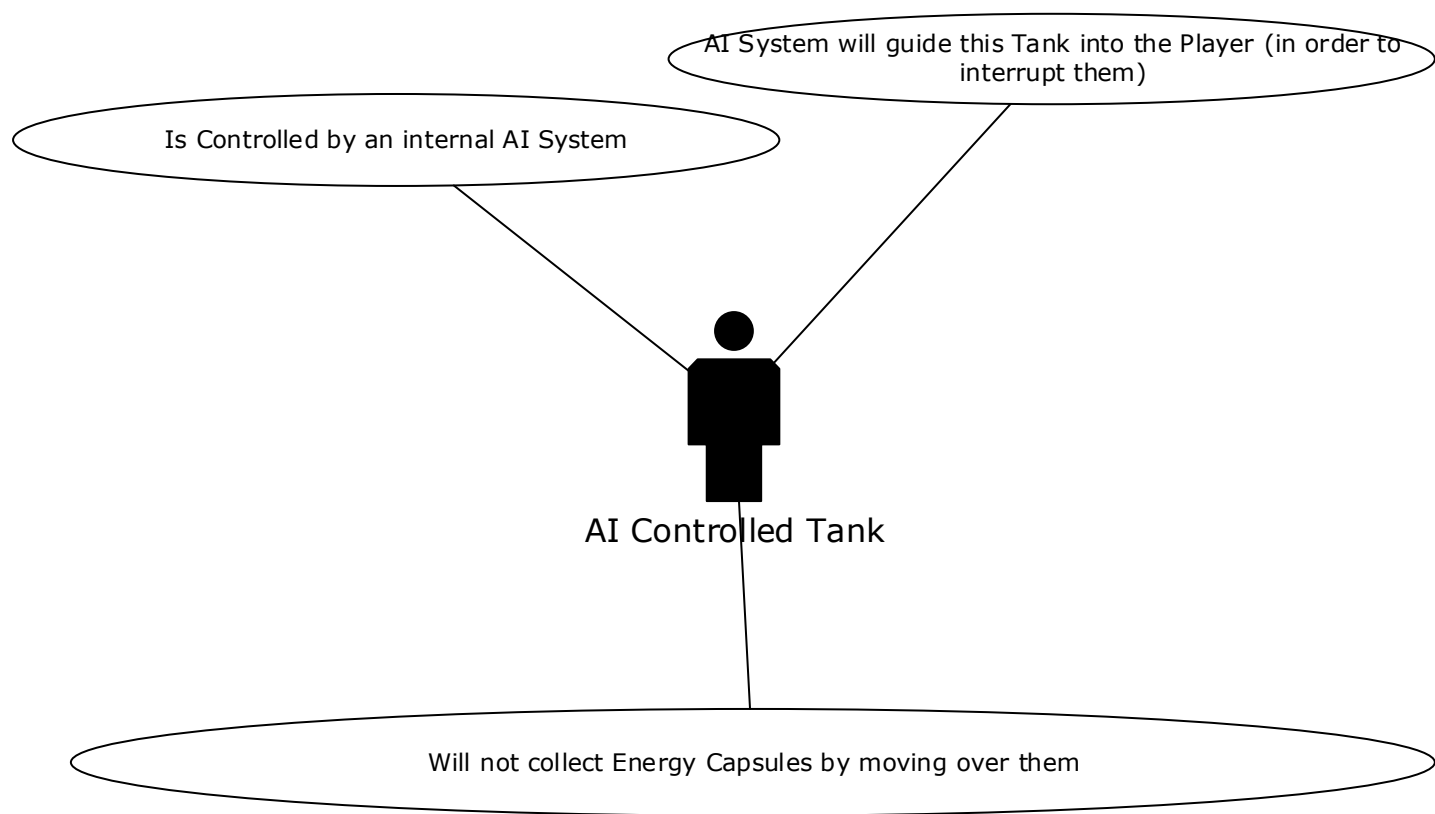Has Transform properties (For Location, Rotation and Scale, within the World Space)

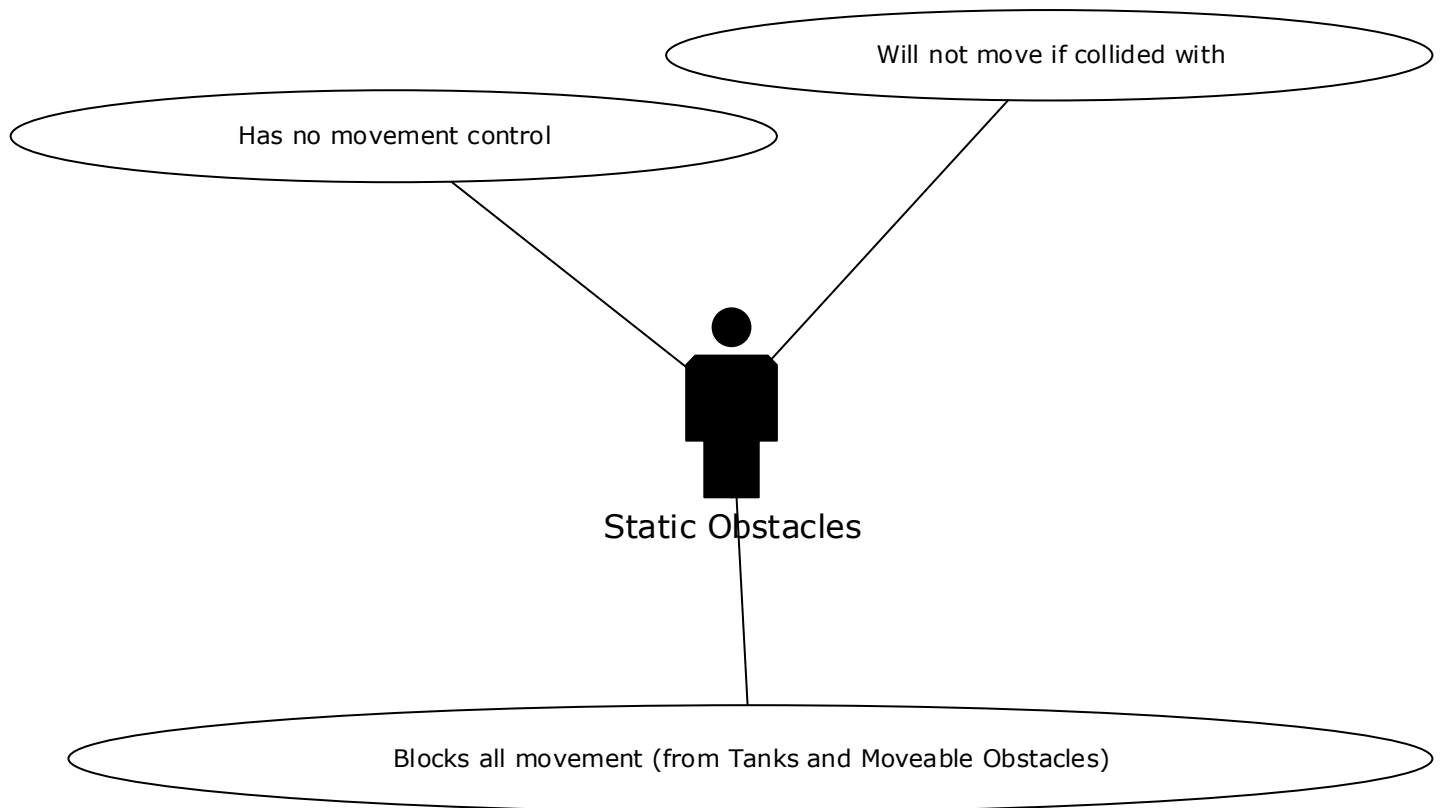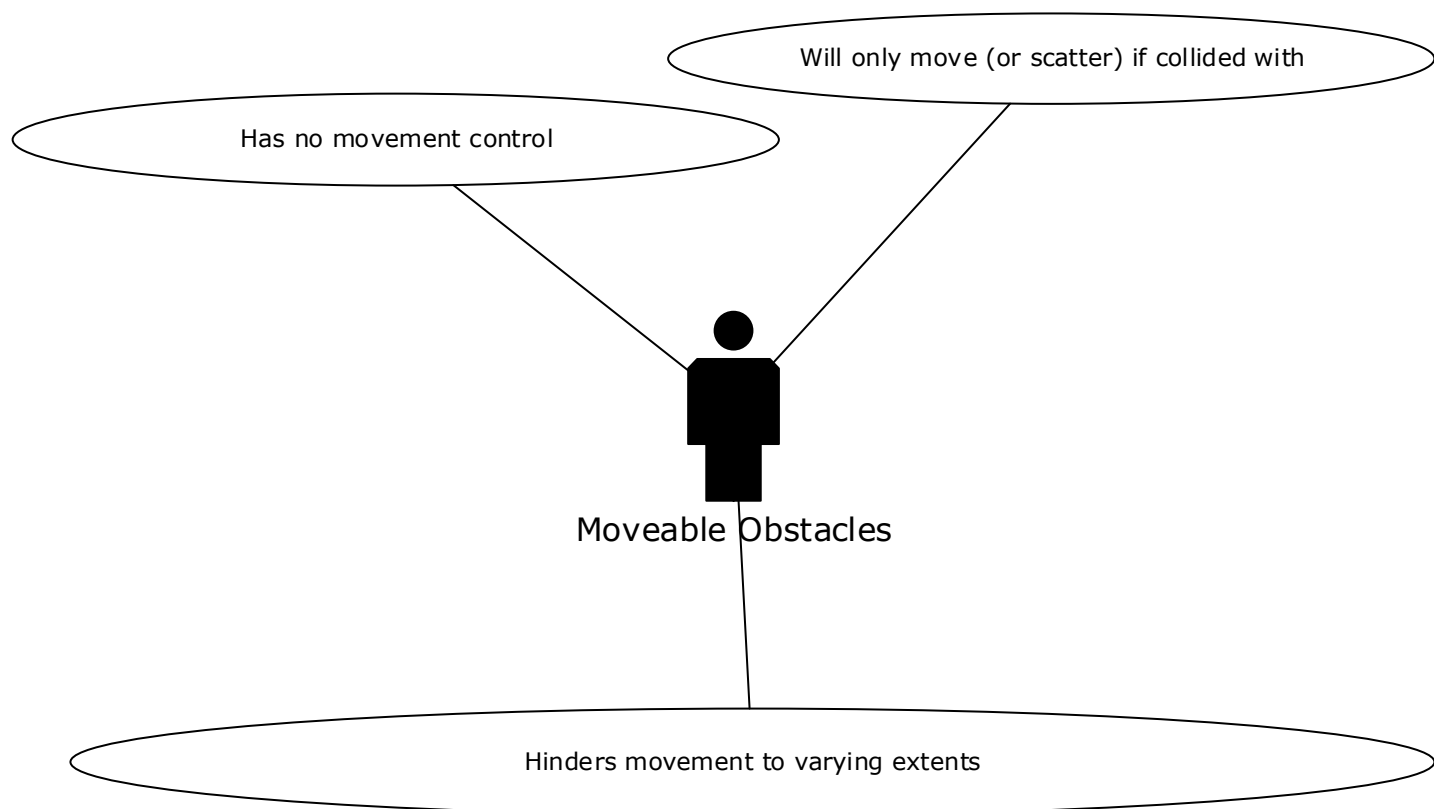Can collide with other types of Game Objects (Other types of Tank and Obstacles)

Hover-Tank

Can 'float' around the environment via a particular input method (either from a Human Player, or an AI System)

Has a Goal to collect all Energy Capsules in the level

Controlled by the Player via external input hardware (e.g. Keyboard and Mouse)

Player Controlled Tank

Can collect Energy Capsules

AI System will guide this Tank into the Player (in order to interrupt them)

Is Controlled by an internal AI System

AI Controlled Tank

Will not collect Energy Capsules by moving over them

Has no movement control

Will not move if collided with

Static Obstacles

Blocks all movement (from Tanks and Moveable Obstacles)

Will only move (or scatter) if collided with

Has no movement control

Moveable Obstacles

Hinders movement to varying extents

Destroyed only if the Player's Hover-Tank moves over them

Has no movement control

Collectables

Will not block movement

Shows the remaining time left to complete the level

Shown only to the Player

Heads-Up-Display (HUD)

Shows how many Energy Capsules the Player has collected, as well as how many Energy Capsules remain in the level, to be collected

Uses certain shader techniques (depending)

Is Static or Dynamic (depending)

Lighting

Is for each Game Object, or a global 'sky-light' to act on all Game Objects in the level
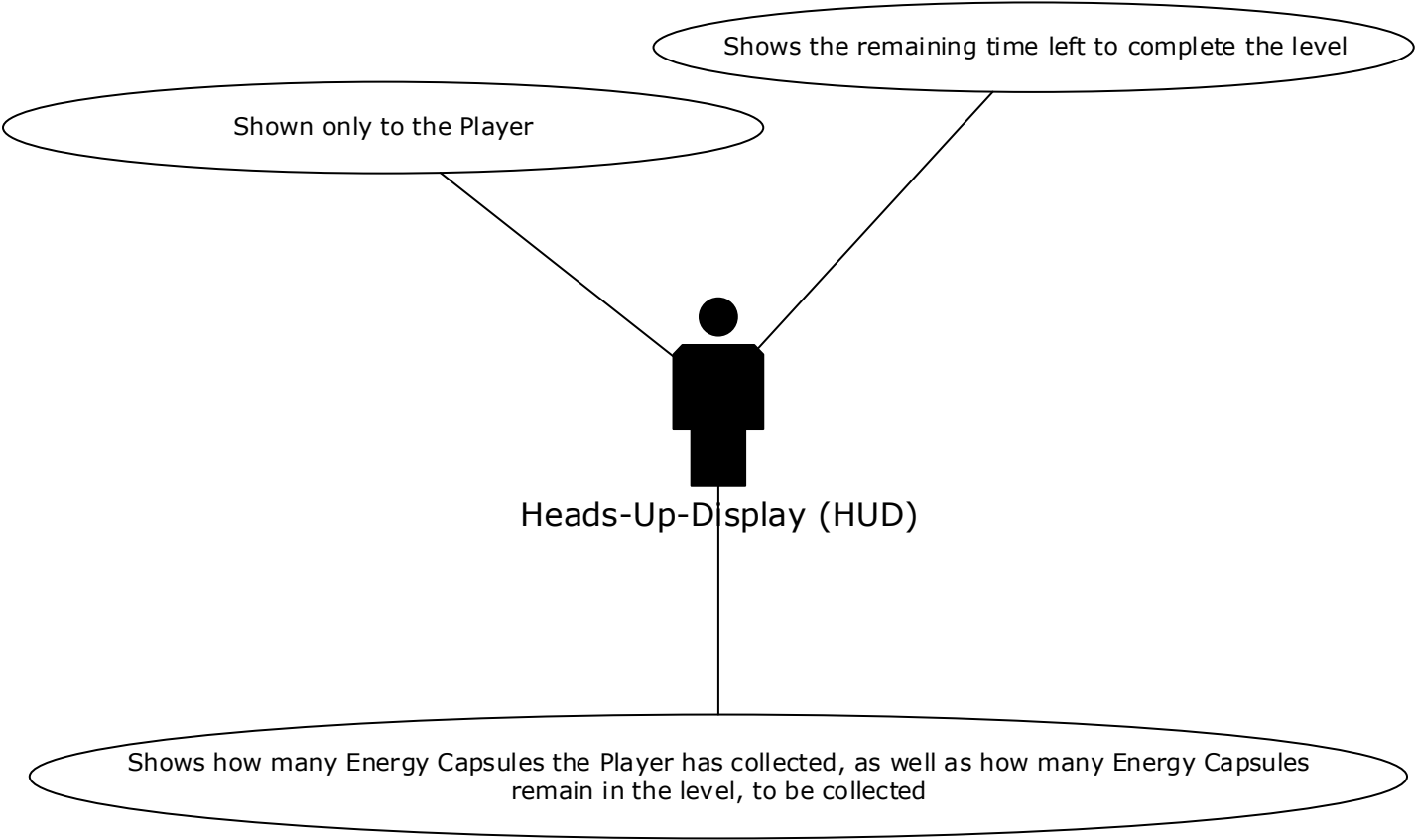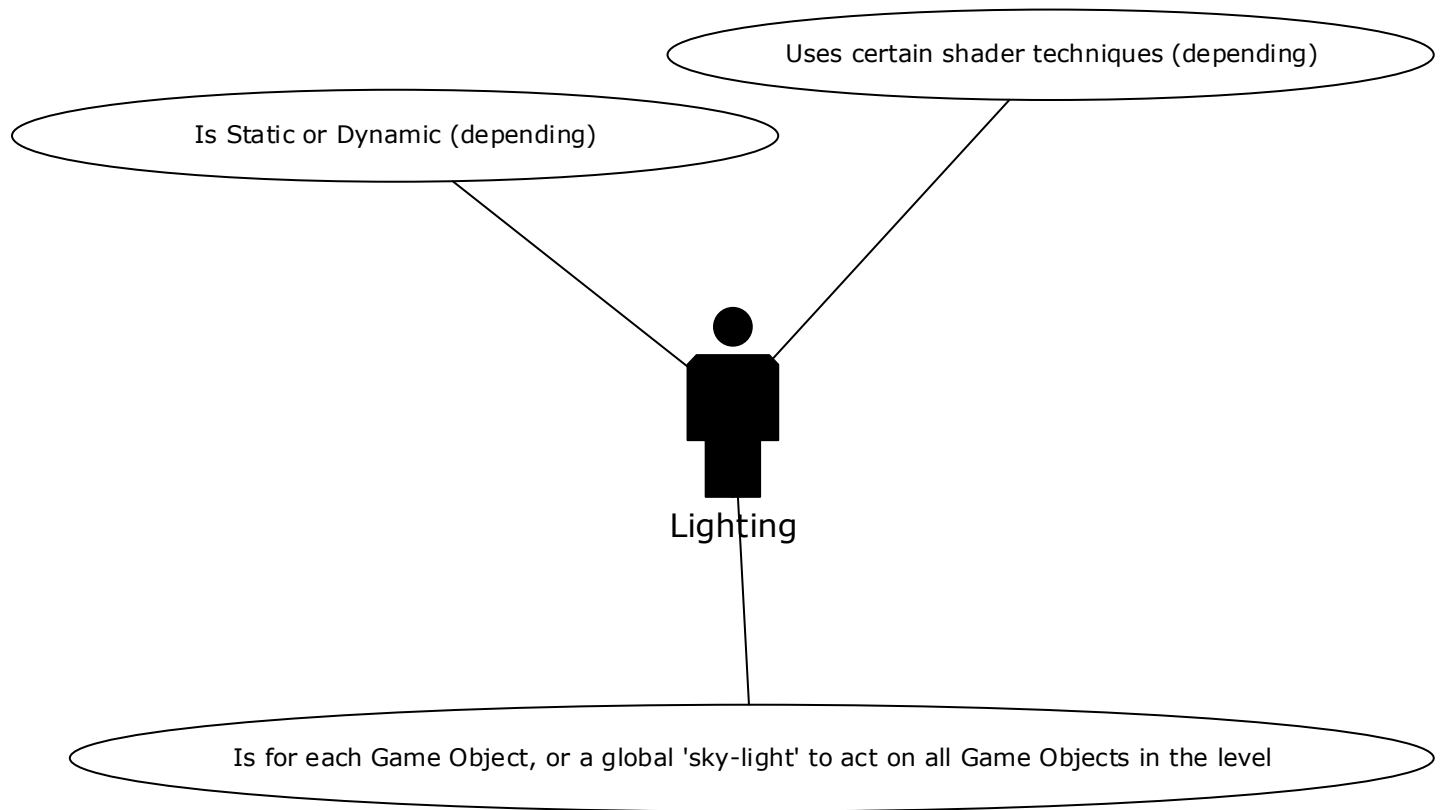
Exists for only sub-classes of Game Object, that are capable
of colliding with other appropirate Game Objects

Collision Management System

Collision is checked for using Axis-Aligned Bounding Boxes (AABB)