**Game Object Classes Design - Overview**

Abstract Base Classes

* GameObject(int objID, int type, int degree, int posX, int posY)
* GameObjectMoveable(int objID, int type, int degree, int posX, int posY, int playerID, int speed)
* GameObjectStationary(int objID, int type, int degree, int posX, int posY)

Game Objects

* GOM\_Projectile(int objID, int type, int degree, int posX, int posY, int playerID, int speed)
* GOM\_Ship(int objID, int type, int degree, int posX, int posY, int playerID, int speed, int health, int attackPower)
* GOS\_Obstacle(int objID, int type, int degree, int posX, int posY)
* GOS\_PowerUp(int objID, int type, int degree, int posX, int posY)

Object Factory

* GameObjectFactory

Other Classes

* Point
* Direction

**Abstract Base Classes**

GameObject(int **objID**, int **type**, int **degree**, int **posX**, int **posY**)

* **objID**An integer value that represents an game object’s unique ID.
* **type**Used by graphics team to identify object type.
* **degree**An integer value that’s used to initiate a Degree object that represents the game object’s orientation on the map. (i.e. 0/360 degree is facing right, 90 degree is facing up…)
* **posX**The initial x coordinate of the game object on the map.
* **posY**The initial y coordinate of the game object on the map.

GameObjectMoveable(int objID, int type, int degree, int posX, int posY, int **playerID**, int **speed**) – inherits GameObject class

* **playerID**An integer value that represents a player’s unique ID. This same ID will be passed on to the projectile objects fired by the same player (projectiles fired by the player will have the same playerID as the player).
* **speed**The initial speed of the moveable object. Positive value means forward, negative otherwise.

GameObjectStationary(int objID, int type, int degree, int posX, int posY) – inherits GameObject class

* More to be added…

**Game Objects**

GOM – abbreviation for GameObjectMoveable  
GOS – abbreviation for GameObjectStationary

GOM\_Projectile(int objID, int type, int degree, int posX, int posY, int **playerID**, int **speed**) – inherits from GameObjectMoveable class

* **playerID**This will be the playerID of the player who fires the projectile.
* **speed**The initial speed of the projectile object.

GOM\_Ship(int objID, int type, int degree, int posX, int posY, int playerID, int speed, int **health**, int **attackPower**) – inherits from GameObjectMoveable class

* **health**
* **attackPower**