Team GSNDM

Class Diagram Design Rational

1. Enemy:

Extends Actor.

Enemy acts like a parent class of various enemy creatures, like grunts, goons, ninjas or the mini-boss. Enemy uses ActionFactory to make actions, such as attack, move or drop item. Enemy can deal damage to player and follow the player if they are ought to. When an enemy is defeated, a key may drop on the ground where the enemy was defeated. Moreover, if the mini-boss is defeated, player will receive a rocket plan as the prize of defeating the boss.

Advantages: The use of enemy can make adding new enemy trivial, since they may have common attributes and methods.

Disadvantage: an enemy may not necessary need certain action (e.g. Doctor Maybe may not need to move).

1. Rocket:

Extends Item.

Rocket is a subclass of item which the player can build it using a rocket engine and a rocket body. Player can find the rocket plan in a locked room and ask Q for rocket body in return. The aim of the game is to build the rocket and exit the place.

Advantages:

Disadvantage:

1. NPC:

Advantages:

Disadvantage: