Design Rationale: Enemies

Chart, box and whisker chart

Description automatically generated

Firstly, for the undead and skeletons it said it walks around and they follow the player when they are in radius, so I made it implement Wanderbehaviour and FollowBehaviour. It is an association because they only follow once they are in a certain radius and I assumed that once it starts following it stops wandering around. I created a class called attack action which is used for enemies to attack Player and vice-versa. The player uses it to attack all three of the enemies if they are in a radius. The multiplicity is like that because the undead can only attack one player whereas player can attack many undeads and skeletons but only one yhormthegiant as there is only one in the map. Then I created a class called RandomDeathAction which extends action. It is an association since the undead has 10% of chance to die every round, this class is called to check whether its alive or not. If its dead using this class no souls are give to the player. If it dies using the attack action class, the souls are given to the player. As for the skeletons it is said that multiple skeletons are spawned manually hence, I put it as a one-to-many multiplicity. When the skeleton dies using the AttackAction the player gains 250 souls but when it dies for the first time there’s a 50% chance it can be reset, if its true it calls the reset Manager and gets reset. Its an association because it has a 50% chance, and it cannot be used after the first death. As for yhorm, most of the weapon usage is explained in the weapon class. Finally, I created a class called YhormTheGiantDeathAction, its an association because its only called when the Yhorm dies which does the following:

* **prints** an appropriate message in the console, such as “LORD OF CINDER FALLEN”.
* **gives** 5000 souls to the Player
* **Drops** “Cinders of a Lord” item: the Player can drop it in the Firelink Shrine