

Requirement 1

Implemented FogDoor to extend the Item class and utilized the Application class to give the FogDoor actions to allow a MoveActorAction to the other map.

Requirement 2

Updated Bonfire by implementing a new capability *LIT* to determine whether a Bonfire has been activated or not, and hence determining what actions a Bonfire should output to the player. Added two new actions LightAction and teleportation. LightAction is used on Bonfires that do not possess the *LIT* capability. teleportation which allows the player to teleport to other Bonfires with the *LIT* capability. The Player class is also given an Array List of Locations which are the locations of all *LIT* Bonfires as the player must be given the option to teleport to any of them. A new constructor for Bonfire was introduced to allow them to be given a name which allows for easy identification as the player needs to know what Bonfire they are teleporting to.

Requirement 3

Created a new abstract RangedWeapon class, where the attack Action is handled within the tick method called every turn. Here the distance from the performing actor is calculated depending on the range of the weapon, and any blocking ground that is between the performing actor and the target will block the shot. DarkmoonLongbow then simply extended from this class, taken a range parameter of 3.

AldrichTheDevourer then extended from the LordOfCinder class with no additional changes to methods. The only behavior that needed to be edited was the AttackBehavior class to take into account the Aldriches ranged attacking capabilities.

Requirement 4

The 'Chest' in the game is created extending the 'Ground' type. This is because the chest is not portable and only the player can interact with it. The chest is also not portable and will need to be removed after it is once opened. The best way to meet all these requirements is to extend the Chest class from the Ground class. When near a chest, the player is given the option to open the chest. When the player opens the chest, the OpenChestAction random selects to either spawn a Mimic or drop up to three TokenOfSouls by randomly selecting a number between 0 and 1 (50% chance). The Mimic extends the enemy class and is initialised to not hold any weapons and do damage of 55 with its kick. The Mimic spawn location is set to be the chest location. On the other hand, if TokenOfSouls are dropped, they will be dropped each with a probability of $1/3$. These are placed at the first 3 that exist next to the chest location. Tokens can be picked up and the amount is added to the player's wallet.

Requirement 5

The Cinders of Lord is a class that extends the item class. This is because the cinders are meant to be portable and tradeable so it would make the most sense to make them an item. These cinders have a protected attribute of a WeaponItem which contains the weapon that their corresponding enemy was armed with. This attribute is protected as we should only have access to this once it has been traded at the vendor. There is also a new interface that is created for this action called TradeWithWeapon. This interface contains a getter for a WeaponItem type. This is done to maintain the SRP principles and avoiding any downcasting. These cinders are dropped in the AttackAction class as this is where we can

detect when an enemy is defeated. The item will have the symbol '!' and will be dropped exactly where the player is standing. The player will have the option to pick up the item and drop it at their will. Upon taking it to the vendor, the TradeCinderWithWeapon class is used to perform the trading. The trade is done by accessing the weapon of the enemy within the Cinder class and removing the current weapon from the player's inventory.