

Design Rationale (REQ4):

FireFlower is a concrete class that is extended from the MagicalItems abstract class. The sprout and sapling classes spawns the fire flower in their growing phases hence they have a dependency with the FireFlower class.

The ConsumeItemAction class which extends the Action class takes in a parameter of the fire flower and does the consume action and assigns a FIRE_ATTACK capability to Player. The FireAttackAction class checks if the player has the capability and performs the fire attack on enemies.