**Design rationale for Requirement 4**

* **Magical items package with Super Mushroom and Power Star**

A magical items package was made to keep together similar items. Super Mushroom and Power Star both extend from Item as they are items and need to inherit all of the necessary methods and variables.

Powerstar uses the tick method to keep track of how many turns are left for consumption and effects. We are able to keep track of this using a powerStarCount variable that increments each turn.

* **Destroy Wall Action, Consume Item Action and Pick Up Magical Item actions added**

All of these actions were added to make it easier to implement the magical items. Destroy wall is an action used by the player that enables them to convert a wall to dirt when they are near it.

Furthermore, consume item action allows for items to be consumed. That is, removed from the inventory and from the game entirely but with effects added to the player. The action then is removed from the console. This is needed for magical items as they aren’t just picked up and dropped but instead eaten by the player.

PickUpMagicalItem is an action added that is specific for magical items. It takes into account the slight differences between normal items and magical items as sometimes magical items cannot be dropped. And when some are picked up, they need to be consumed.

* **BuyableItem interface**

The magical items implement the buyableitem interface as they all have a price. This is relevant for the trading with Toad requirement.

* **Updating Status**

We have decided to update the Status enums with different capabilities as this is what determines and grants the player their effects and invincibility.

When a magical item is consumed using the consume item action, the player is granted certain statuses like TALL and INVINCIBILITY. This tells the program what effects need to be in place when these capabilities are added.