



Design Rationale:

This requirement takes advantage of using the capabilities class to easily check to see what the player can and cannot do with the bottle. I did this to avoid having to have many check statements to see what attributes the fountain has. I can assign the Status POWERFOUNTAIN or HEALTHFOUNTAIN to each fountain based on the character passed in the constructor on initiation. This allows me to add another fountain by just adding another capability and therefore does not violate any SOLID principles.

I created an Enum for the bottle to keep track of what water is stored inside each bottle. By doing this, I can simply change the enum of the object Bottle in the player's inventory with a single line. I chose to do this because it means I can do this based on the attributes the fountain has instead of having to use a bunch of if statements.