

1. Leave Affordance:

We chose to implement the requirement this way similarly to the way the class Take was implemented since they perform exactly opposite actions. Implementing them in separate classes still complies with the DRY principle since they do opposite things.

2. Force

We chose to make it an attribute of the SWActor class because it applies to all actors; either they have the force ability, or they do not. This implies that it should be an attribute of the class. Also by doing so, we follow the principle that states that Classes should be responsible for their own properties. If the attribute was to be placed elsewhere in another class, this principle would be violated.

We chose to make it an integer attribute because the specification asked that Ben should be able to train Luke in order to increase his force ability. This is done much easier and more efficiently by having it as an integer where as having it as a Boolean would not enable us to gauge an actor's force level who can use the force like Luke but cannot use a lightsaber without training.

3. Lightsabers

We implemented it in the Attack class because implementing it in the lightsaber class would not allow access the actor's force level. This follows the principle that states that Group elements that must depend on each other together inside an encapsulation boundary.

4. Ben Kenobi

We chose to implement the requirement as an action because we need to have the option show up when both actors are in the same location similar to picking up an item or dropping one. Another reason it's an action and not a behavior is that it involves an actor (Luke) interacting with the world and is not a predetermined script like behaviors. Training only happens between Ben(trainer) and Luke (trainee); only these two actors are involved. This complies with the principle that states that we should Reduce dependencies as much as possible, instead of involving all actors in the SWActor class.

5. Droids

We chose to make droids as actors because unlike entities, actors can move on their own, which droids do. However, entities need to be carried around by an actor in order to move. They have health like actors and can potentially attack like actors can.