

Design Rationale, REQ1

Changes made: Changed symbol that extends from sprout, sapling and mature to Tree.
Added **REQ7 reset game, Trees have 50% chance to be converted back to dirt.**

REQ7 reset game, Trees have 50% chance to be converted back to dirt. By having Tree abstract class, sprout, sapling and mature no longer need to implement resettable interface. Only Tree class needs to implement the resettable interface.

Sprout, sapling and mature extends tree. Since they are cycled and has common attribute/method such as turns(int, counter for number of turns in the map), they can be categorized as tree. If it does not extend tree abstract class, it could be hard to understand their relation (It has cycle and common method/attribute). In future implementation, it is easier to create method/attributes that they share.

Each tree subclasses requirements can be coded inside override tick(Location). It has Location as input param, so that can be used to add actor, add item, or change ground.