

Design rationale:

Fire flower is implemented as item and not grounds as it is spawned and not grown. This allows to implement Consumable on this fire flower. Further, allowing us to follow the open close principle.

Fire is also implemented as an Item so that it can be removed from the map after a set amount of turns and can be dropped on the map as "v" when using fire attack. Both implementations the dependency inversion principle as they depend on abstractions.

AttackAction has been made abstract to allow Liskov Substitution principle. This abstraction allows us to create Normal Attack and Fire Attack that extend Attack Actions, also it means its open for extension in future too, if we do need to add some other sort of attacks.

Also when fire flower is consumed, as it is not specified in specifications. The 20 turns counter just prints the next 20 turns counter if 2 fire flowers are consumed and so on.