**Class Responsibilities**

**Farmer, Player & Human**

Human

- Included additional behaviours:

- FoodBehaviour

- DeadBehaviour

- Included additional attributes:

- corpseAge initialised at 0

- reincarnationAge intialised at random number between 5 and 10

Farmer

- Extends Human

- Includes additional behaviour:

- FarmerBehaviour

Player

- Included additional behaviour:

- CraftBehaviour

**Craft Club & Mace**

CraftBehaviour

- Implements Behaviour Interface

- Accessible by Player

- Generates a

- CraftAction if the current Player is holding a ZombieLimb

- using getInventory to achieve this

CraftAction

- Extends Action

- Creates instance of ZombieWeapon if holding a ZombieLimb

- If ZombieLimb = ZombieArm

- create instance of ZombieWeapon titled ZombieClub

- If ZombieLimb = ZombieLeg

- create instance of ZombieWeapon titled ZombieMace

- Removes instance of ZombieLimb

- Add ZombieWeapon to inventory

ZombieWeapon

- Extends WeaponItem

- ZombieClub

-damage = 30

- verb = "clubs"

- ZombieMace

- damage = 40

- verb - "maces"

**FarmerBehaviour & Corresponding Actions**

FarmerBehaviour

- Implements Behaviour Interface

- Accessible by Farmer

- Dependent on Location

- Generates a

- SowingAction if the current Farmer is standing next to a patch of dirt

- FertlizeAction if the current Farmer is standing on unripe crop

- HarvestAction if current Farmer is standing on or next to a ripe crop

- Loops through Farmers location and surrounding locations using getGround and \_\_\_\_ to check if the above actions are executable

FertlizeAction

- Extends Action

- When standing on an unripe crop, a Farmer can fertilize it, decreasing the time left to ripen by 10 turns

- method to increment Crop.Age by 10

- method for menu description

- (name of Farmer) fertilized unripe crop

SowingAction

- Extends Action

- When standing next to a patch of dirt, a Farmer has a 33% probability of sowing a crop on it

- happens every move

- 1/3 chance per turn its successful (use random number generator)

- if successful, creates instance of Crop class on location in map

- uses setGround to achieve this

- method for menu description

- (name of Farmer) sowed a crop

HarvestAction

- Extends Action

- When standing on or next to a ripe crop, a Farmer can harvest it for food

- Food is placed on the ground

- Create instance of Food

- Remove instance of Crop

**Crops & Food**

Crop

- Extends Ground

- age attribute

- tick method

-if age <20

- unripe

- displayChar 'c'

- if age >= 20

- ripe

- displayChar 'C'

Food

- Extends Item

- displayChar 'F'

- Food can be eaten by the player, or by damaged humans, to recover some health points

- Actor is the current player/human

- 20 health points

**Eat Food**

FoodBehaviour

- Dependant on Behaviour Interface

- Accessible by Human

- Generates an EatFoodAction if the current Player/(damaged) Human holds food in their inventory

EatFoodAction

- Extends Action

- Actor is current human/player

- Recover health points 20

- Removes Food instance

- method for menu description

- (name of Player/human) ate food and recovered 20 health points

**Rise from the Dead**

DeadBehaviour

- Dependant on Behaviour Interface

- Accessible by Human when Zombie.Capability.UNDEAD

RotCorpseAction

-Extend Action

- method to increment corpseAge

- method for menu description

- (Human)’s corpse rots

RiseFromDeadAction

- Extends Action

- Creates instance of ZombieActor

- removes instance of Human

- at current location

- -method for menu description

- a Zombie (name) rises from the dead!