Design Rationale

Eggs and Breeding

In our implementation, after a

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- After breeding, an egg will be created and stored in the female dinosaur's inventory. When it is time to lay the egg, it will be removed from the "inventory" and will be placed at the current location.
- An egg's attribute will contain a String that represents its species. As a result, its constructor will look similar to Egg(String speciesName).
- In our implementation, the baby dinosaur will be characterized as their dinosaur classes (Stegosaur, Brachiosaur, Allosaur). However, we will have either a boolean/integer attribute to indicate if it is a baby dinosaur.
- For now, we have implemented a maximum limit of 10 fruits for each tree, and a maximum of 5 fruits for each bush.
- Added the Allosaur class which is similar to the Stegosaur class from the default class diagram.
- Added new Action subclasses for eating fruits, eating others, player feeding, and breeding.
- The dinosaur classes will have a character attribute to represent its gender. 'F' for females and 'M' for males.
- Implement eatItem() method for the dinosaurs that accepts an Item as the parameter. This makes it more flexible and allows one method to control eating fruit, meal kits, etc.

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- The implementation of bushes would be done through the dirt object, where bushes would be initialized as a class attribute within dirt. The associated methods in dirt would account for the necessary parameters which indicates if the bush object would be instantiated or not. Each dirt block would only either have 1 bush or no bush. The bush class would generate instances of the fruit object placed in an arraylist as part of its attribute.
- The brachiosaur object has been created with Actor as its parenting class.
- An EcoPointStorage integer attribute will be instantiated within the player class, as each player will have a different amount of eco points obtained, depending on the world event instances. The player class would have the appropriate setters and getters for the Eco Points.
- With the creation of eco points, the vending machine class would be instantiated as a child of the item object as well. The vending machine class is dependent on eco points as the methods associated with the class utilizes (depends on) the eco points object as a parameter. The vending machine will be spawned within the Application class.

- A new action subclass would be added, named as PurchasingAction. PurchasingAction is the main interaction action between the player and the vending machine object.
- To tackle the Death portion for relating Dinosaur objects, a subclass of item named Corpse would be instantiated.