

Assignment 3 design document update

What classes will exist in the extended system

Engine:

No changes made

Game:

- Application
- AttackAction, Behaviour, BreedingBehaviour, Buy, EatBehaviour, FollowBehaviour, Quit, WanderBehaviour
- Items: Egg, Fish, LaserGun, MealKit, RipeFruit
- Allosaur, AllosaurLocation
- Brachiosaur, BrachiosaurLocation
- Pterodactyls, PterodactylsLocation
- Stegosaur, StegosaurLocation
- DinosaurStatus, GameCapability, PlantStatus
- Bush, Corpse, Dirt, Ecopoints, Entrance, Floor, Lake, Player, PortableItem, Rain, Tree, VendingMachine, Wall

Reason for the changes

In this assignment, the dinosaur class is removed since it's unused and it's inefficient to have this folder. Therefore, each dinosaur is separated into different classes, and the dinosaurLocation classes are created for capturing the location of those dinosaurs.

The reason to add the DinosaurStatus is for tracking the dinosaur's status including hungry, thirsty, alive, unconscious and dead. By doing that, it's easier to implement the changes of their status in different scenarios. For example, when detecting the rain, the status of RAINED can be checked so the dinosaur will be watered. Similarly, the plantStatus is used to check for example whether the fruit is ripe or not.

In this assignment, the option of purchasing the Pterodactyls' eggs was added when accessing the vending machine. One special implementation of the Pterodactyls class would be its breeding behaviour. Here, the ground was checked whether it contains trees because Pterodactyls can only breed on trees.