FIT2099 Sem2,2020 Assignment 3

Group Name: Shibalnu

Members: Liu Pei Lin, Gue Jia Xuan

Design Rationale

SeekWaterBehaviour is created for thirst dinosaur to find water and drink it. SeekWaterBehaviour depends on the Action and GameMap.

DrinkAction class is created for dinosaur to drink water when they nearby the pool. DrinkAction is extended from Action.

Agilisaurus and Archaeopteryx classes are created by extending the Actor class. They inherit the Actor constructor so that these classes can be treated as ac character. Actor class depends on the Action interface as the Actor class holds the behaviours that an Actor class object should have.

Agilisaurus will wander around, find food and breed. It has HungerBehaviour class and SeekWaterBehaviour. HungerBehaviour and SeekWaterBehaviour implements Action interface. Agilisaurs class performs HungerBehaviour and SeekWaterBehaviour is dependent to the Action class.

Archaeopteryx also must be able to wander around, breed and find food, but unlike normal dinosaur it can fly so they can traverse water squares. Archaeopteryx are carnivores- they eat meat so they will scavenge and attack other dinosaurs . Archaeopteryx class performs HungerBehaviour and SeekWaterBehaviour is dependent to the Action class.

AgilisaurusEgg class and ArchaeopteryxEgg class is created. Player can buy them in vending machine. Both classes are extended from PortableItem. Both classes are used for create new Agilisaurus and new Archaeopteryx on the map.

Second map was created, when the player stand on the top of the old map he can move to second map, if he stand on the bottom of the second map he can move to old map.

Player can choose game mode to play before game start and player can quit game at any time.