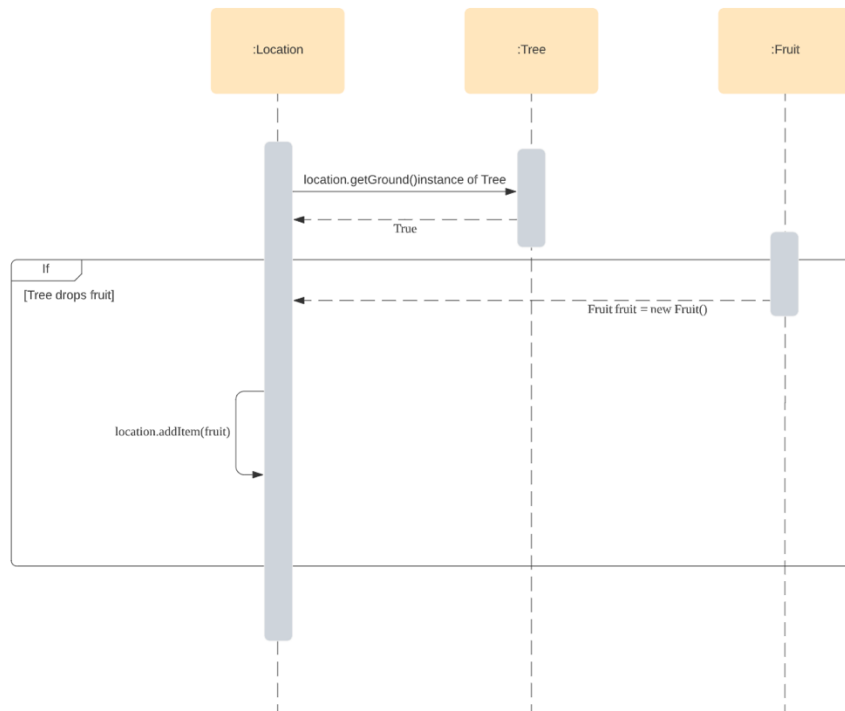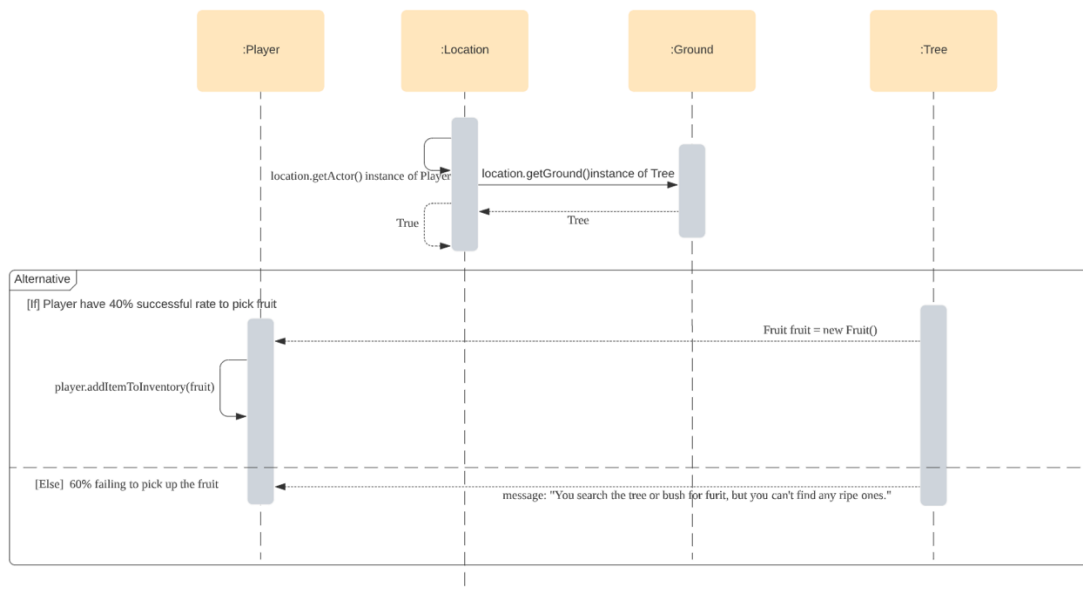# UML Interaction Diagram –
Lim Shir Yin (31059546), Tan Jie Yen (31171184)
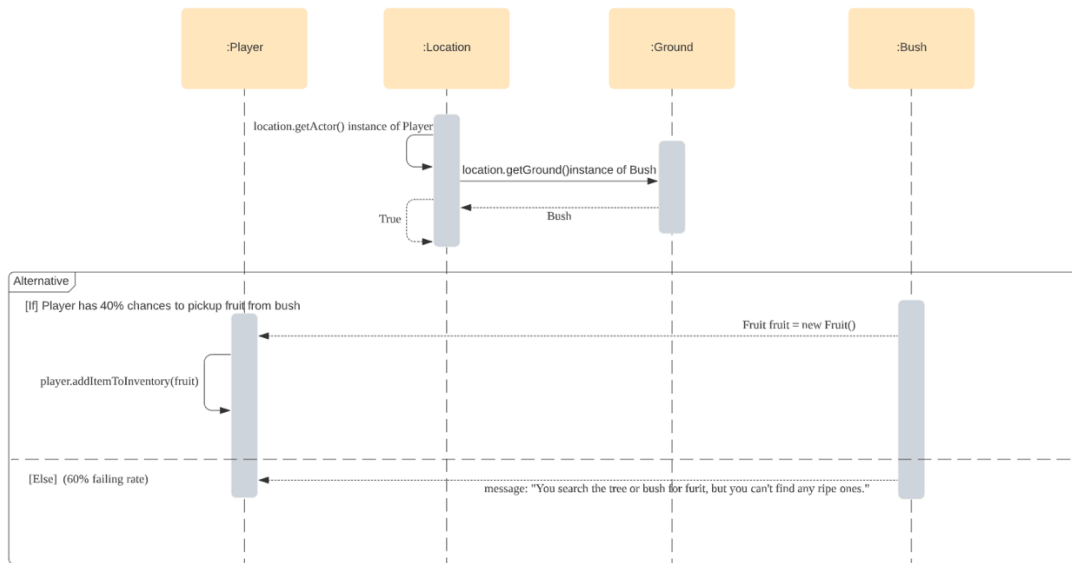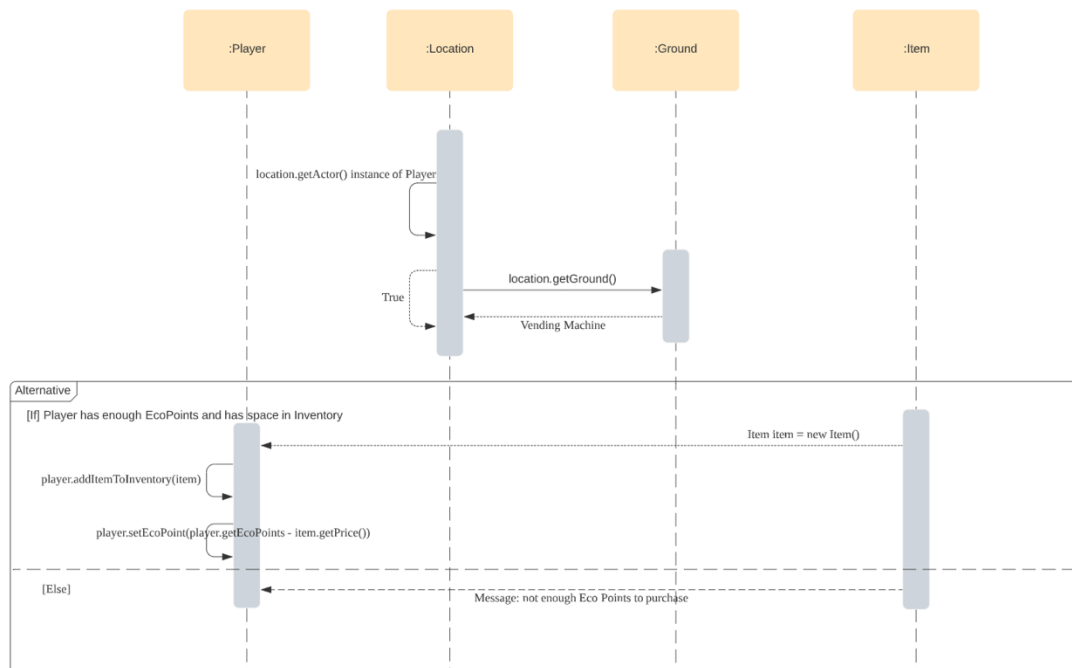
When a Tree drop Fruit

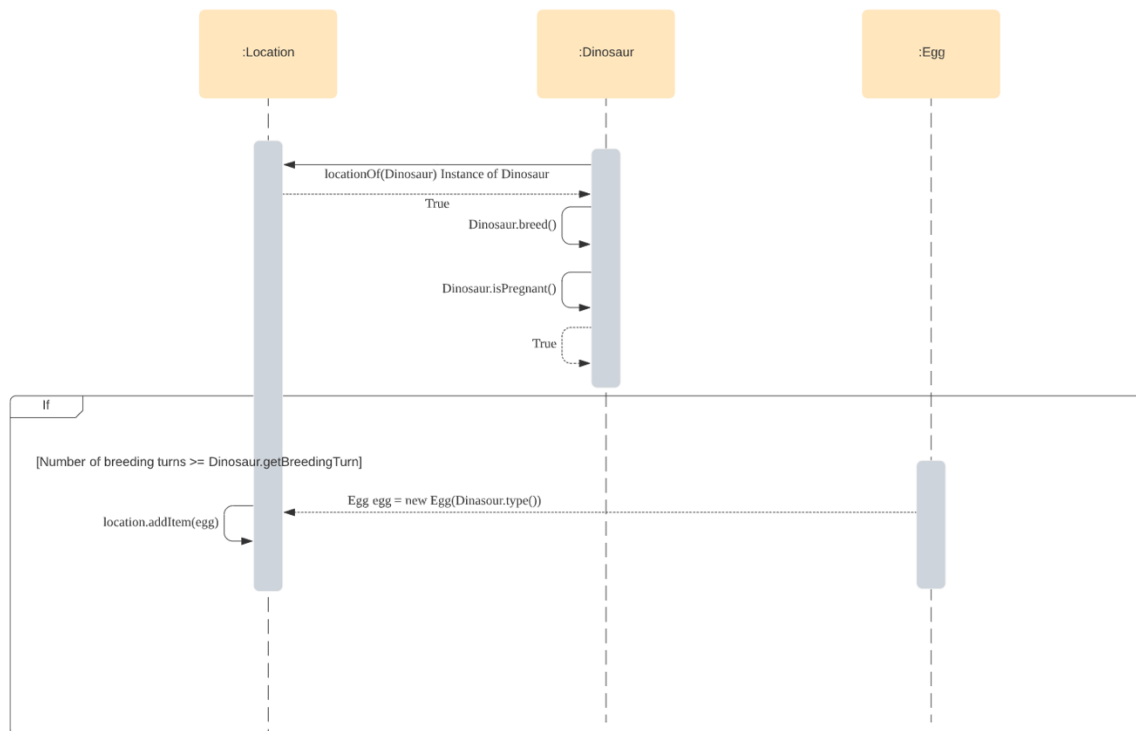*When Player try to pick fruit from the Tree*

When Player try to pick fruit from the Bush

Players buy items from the vending machine

When a Dinosaur breeds and lays an Egg

```
        :Location              :Dinosaur                :Egg

            |<------- locationOf(Dinosaur) Instance of Dinosaur -------
            |-------------------- True -------------------->|
            |                Dinosaur.breed()
            |                Dinosaur.isPregnant()
            |                      True
    If
    [Number of breeding turns >= Dinosaur.getBreedingTurn]
            |<----------- Egg egg = new Egg(Dinasour.type()) -----------
            location.addItem(egg)
```

When Brachiosaur step on the bush

```
        :Location             :Brachiosaur              :Dirt

            |<-------- locationOf(Brachiosaur).getGround --------
    If
    Ground  instance is bush
            |------------- return Ground ------------->|
            location.setGround(dirt)
            |------------- return False -------------->|
            |<----------- Dirt dirt = new Dirt() ----------------
```
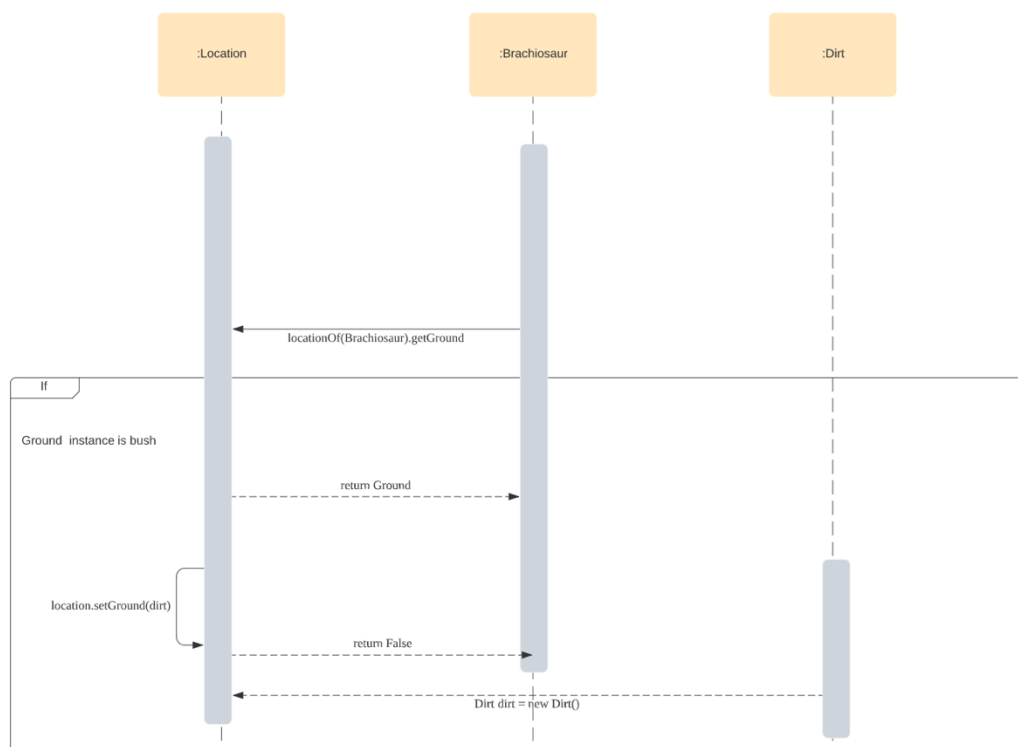
When player feeds Stegosaur

:Stegosaur   :Location   :Player

locationOf(Player).getAdjacentLocation()

ArrayList<Location> adjacentLocation

Player.inventory.contains(Food) = True

Loop

Location.validLocation

If

[Location contains Stegosaur]

location.getActor() instance of Stegosaur

actions.add(feedDinosaurAction())

stegosaur.setFoodLevel(stegosaur.getFoodLevel()
+ food.getFoodLevel())

Player.feedDinosaurAction(food, stegosaur, location)

When hungry Stegosaur seek food

:Location   :Stegosaur   :Food

Stegosaur.isHungry

locationOf(Stegosaur.getAdjacentLocation)

If

[isHungry = True]

ArrayList<Location> adjacentLocation

Loop

Loop through location items

Break

Location contains food

location.getItem().contains(Food)
return True

return location

return Item(food)

Stegosaur.moveActorAction(location)

Stegosaur.sestFoodLevel(Stegosaur.getFoodLevel()+food.foodLevel))
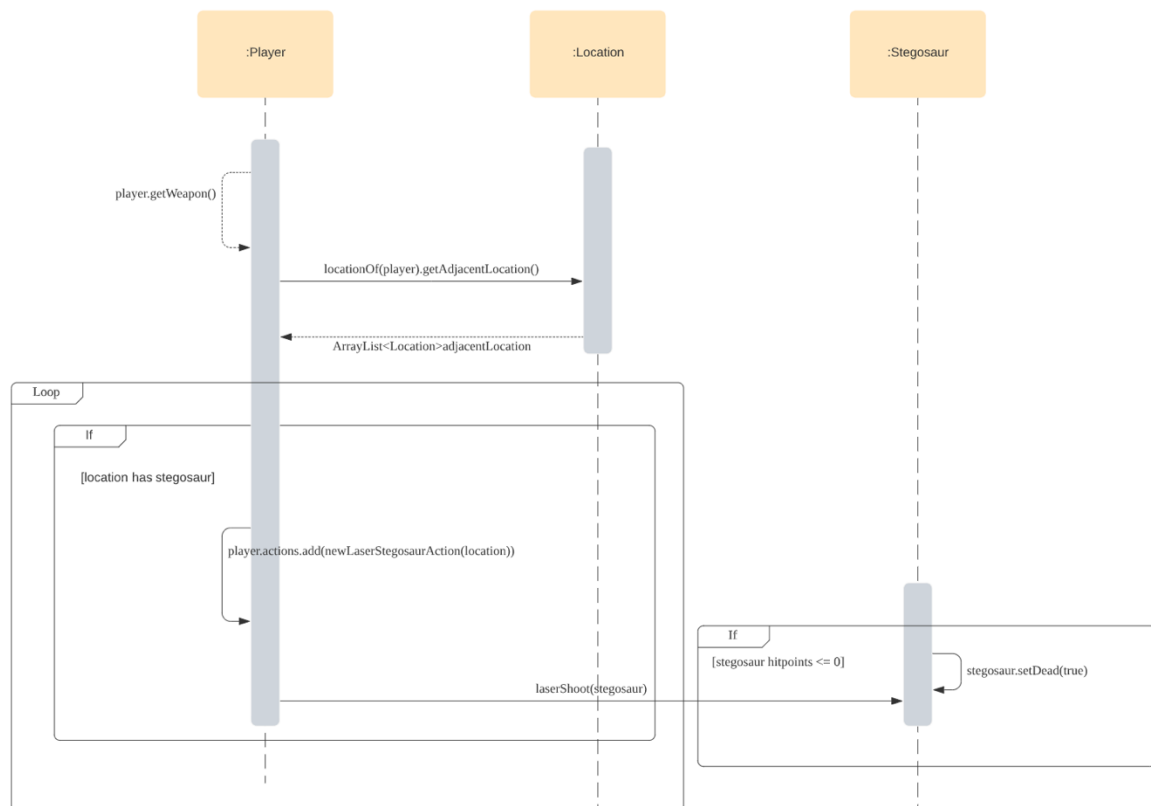
location.removeItem(food)

When Egg is hatched and baby dinosaur is born
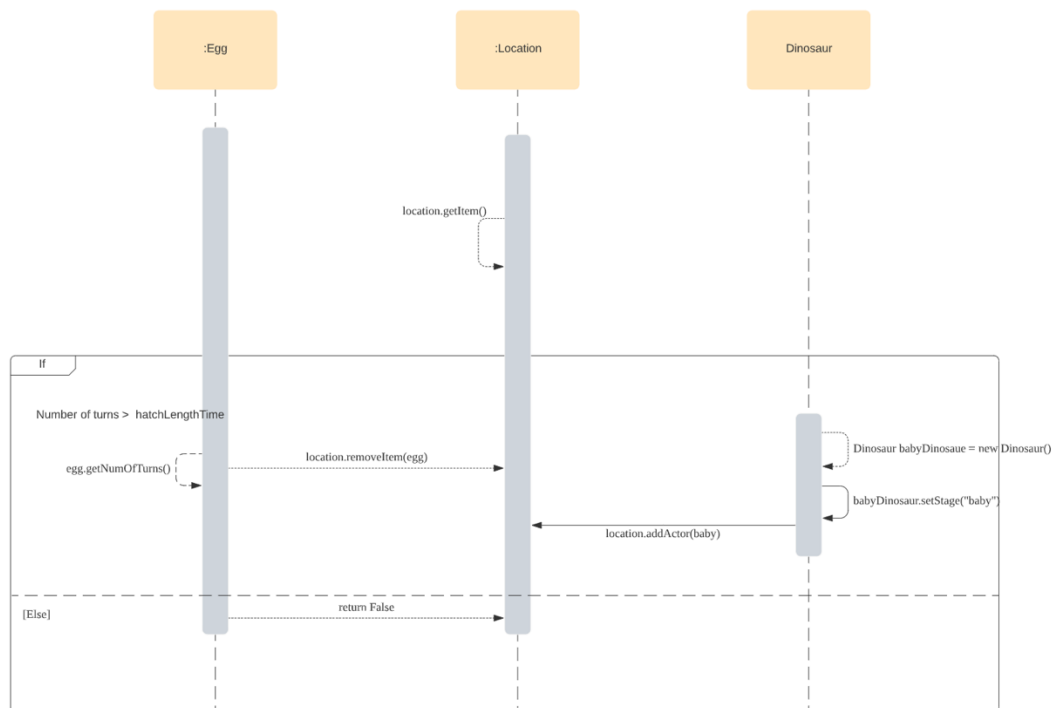
When player shoot Stegosaur with Laser Gun

When Allosaur attack Stegosaur

```
:Allosaur              :Location                :Stegosaur

   |  locationOf(allosaur).getAdjacentLocation()  |
   | ------------------------------------------> |
   |                                             |
   |  ArrayList<Location>adjacentLocation         |
   | <- - - - - - - - - - - - - - - - - - - - - |

Loop
   If
   [If location has Stegosaur]

   location.getActor() instanceofStegosaur

      Break
      [location has stegosaur]
                    location.getActor().hurt()
      | ----------------------------------------> |

      If
      [stegosaur hitpoints <= 0]
                                                   stegosaur.setDead(true)
         location.removeActor(stegosaur)
         | <------------------------------------ |
```