Design Rationale

First, all three dinosaurs can extend a <<Dinosaur>> class, and all three dinosaurs can mate and lay eggs, therefore we create three kind of dinosaur classes which all extend from one <<Dinosaur>> class, then create three kind of dinosaur egg classes.

Secondly, we create <<Ground>>, <<Dirt>>, <<Tree>>, <<Bush>> classes, since dirt, tree and bush all must be on the ground, these classes should extend <<Ground>> class. Also tree and bush can grow fruits, tree also can grow bush.

Thirdly, we create a <<Vending>> class which contains all usable objects, including fruit, meal kits, eggs and the laser gun. And we create a <<Ecopoints>> class, It sells these objects using points object.

Lastly, we create a <<Player>> class, the player can interact with fruit, meal kits and the laser gun.