



Design Rationale (REQ4):

Bowser and Piranha Plant are enemies that inherit from the Enemy abstract class. Princess Peach is an ally that extends from Actor class. Application uses both Bowser and Princess Peach and places them on the map. This establishes a dependency between Application and the other classes mentioned. Each of these classes inherit from Actor either directly or indirectly. The reason for this is because these characters are actors even if they are not playable.

We have made an AbstractKoopa class that extends from the abstract Enemy class and FlyingKoopa in turn extends from AbstractKoopa. This is because we have multiple Koopa types (Normal and Flyable) and this also allows us to extend the functionality of the respective Koopa for further implementation and extension without violating SOLID principles.