DCD

Base

- Health: double

Player

- Name: String
- Difficulty: int
- Money: int
- TowersBought: ArrayList<Tower>

+ placeTower(tower): void
+ buyTower(): void
+ updateTower(tower): void
+ accessStore(): void

1   base

inventory{List}

Tower {abstract}

- damagePerSecond: double
- xVal: int
- yVal: int
- Level: int
- priceOfUpgrade: int

+ attackEnemy(enemy): void

*

Tower1

Tower2

Tower3

positions{List}

Map

- TowersPlaced:ArrayList<Tower>

1

itemsPurchasing

1

items{List}

Store

- Towers: Tower[]t

+ displayTowers(Towers[t]): ArrayList

Enemy {abstract}

- Classification: String
- Health: double
- damagePerSecond: double
- walkingSpeed: double

+ attackBase(): void

*

contains

Enemy 1

Enemy 2

Enemy 3

Use Case: Inputting Game Requirements
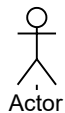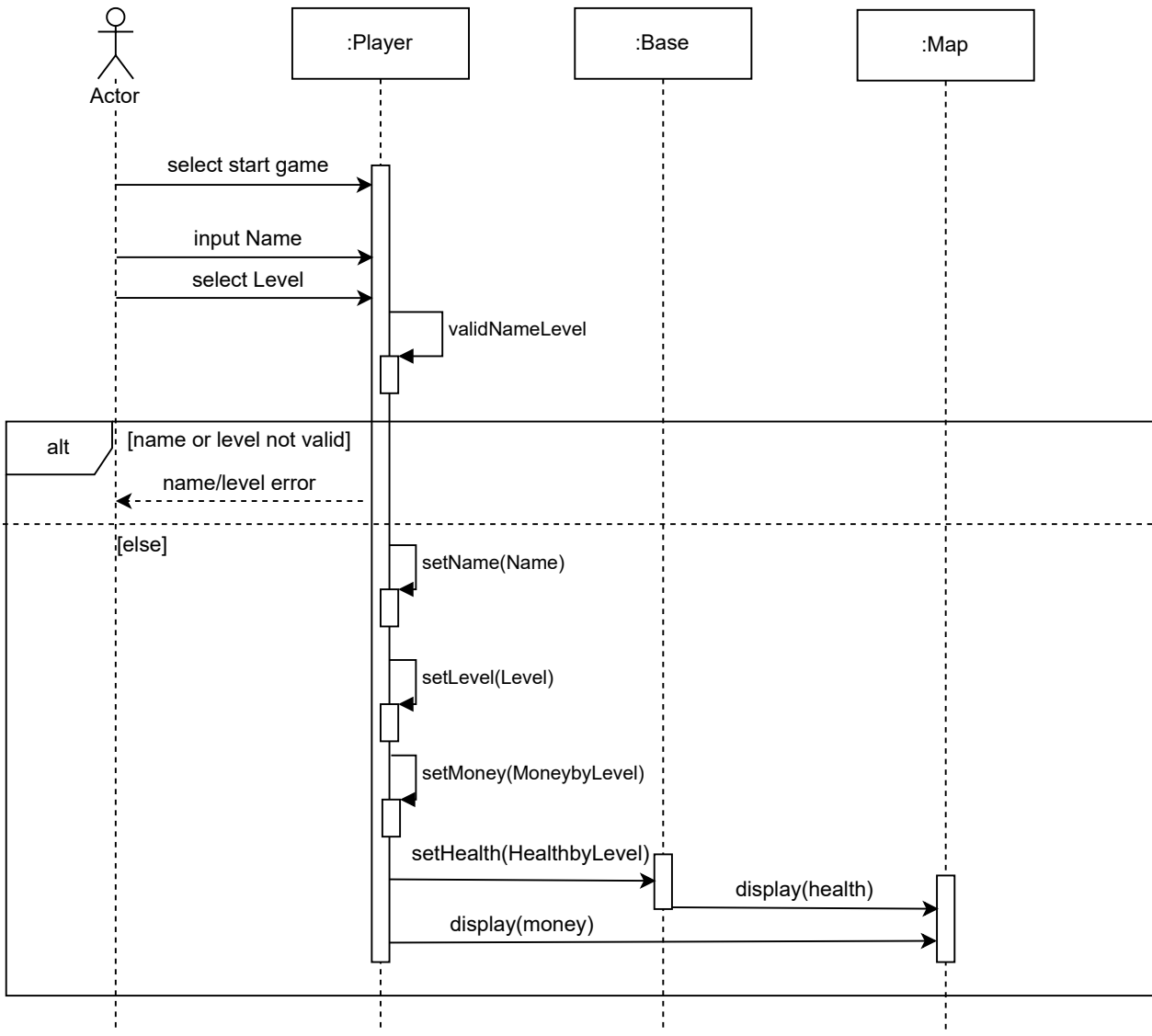
Use Case: Player Buys Tower

Actor

:Player

:Store

Selects "Store"

accessStore()

displayTowers
(Towers[t])

loop

*(number of towers
player wishes to buy)

buyTower()

TowersBought: ArrayList<Tower>

opt

[not enough money to
make purchase]

errorMessage
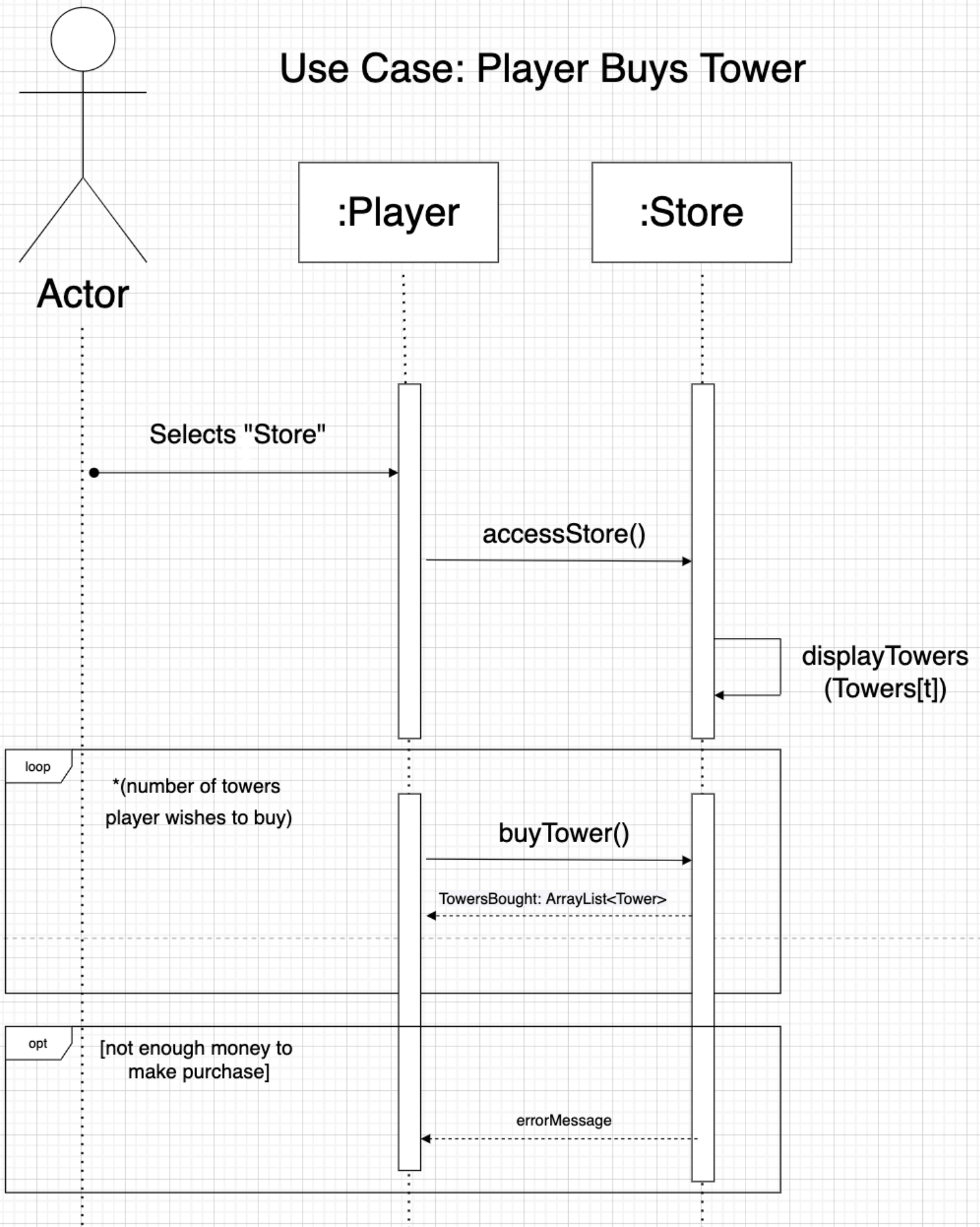
Use Case: User upgrades Tower

Actor

:Tower

:Player

press upgrade

display tower specs

get player money

money

alt

[money is greater than upgrade price]

level up tower

new upgrade price

[else]

not enough money error
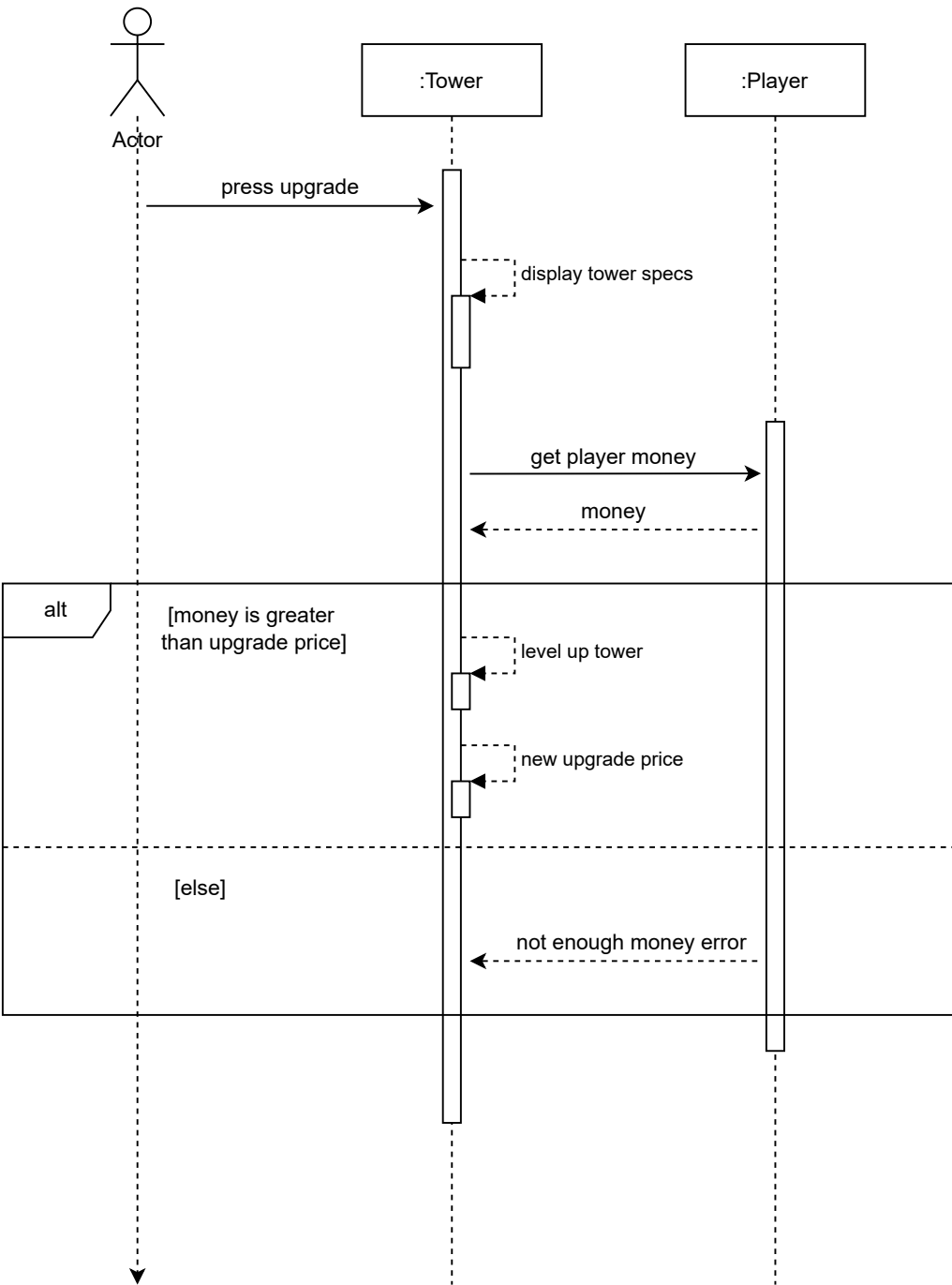
Use Case: User loses all base health