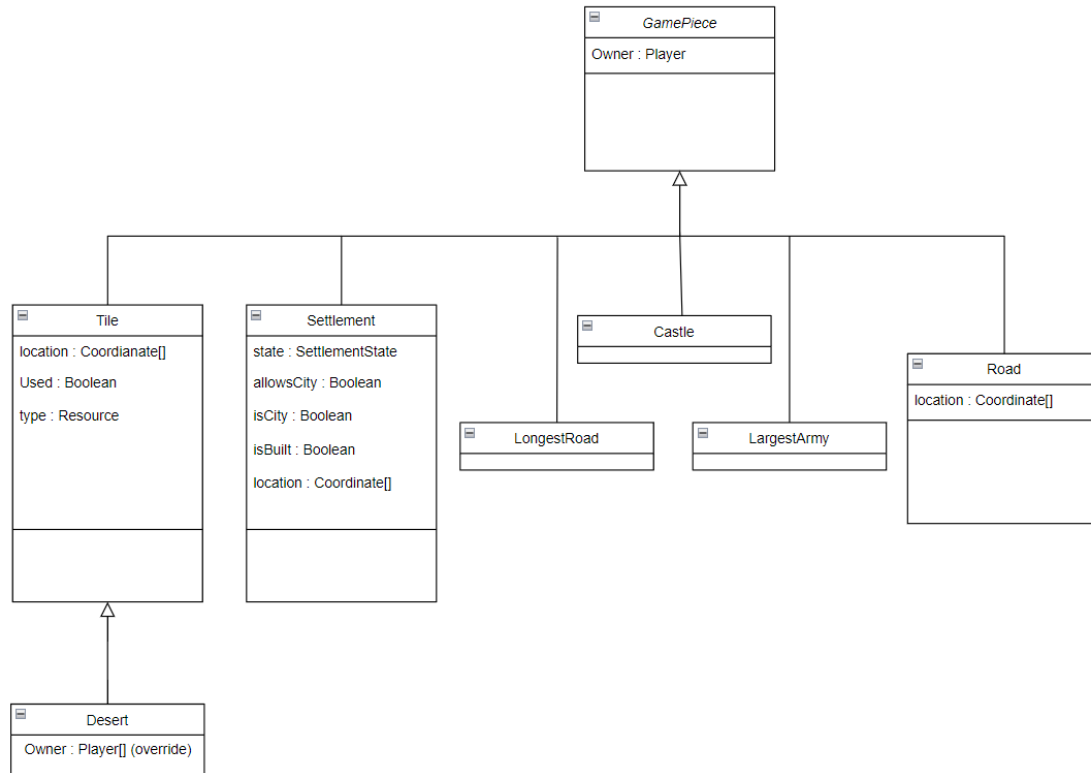# Enums

Enums

SettlementState

notBuilt
settlement
City

Resource

wood
brick
sheep
stone
wheat
gold

Action

PlaceKnight
BuildSettlement
BuildCity
AssignCastle
UseKnight
BuildRoad
TradeForGold
ReRoll

RoadState

notBuilt
Built

Classes (part 1)

```
┌─────────────────────────┐
│ ▣          GamePiece     │
├─────────────────────────┤
│ Owner : Player           │
│                          │
│                          │
└─────────────────────────┘
```

GamePiece

Owner : Player

Tile

location : Coordianate[]

Used : Boolean

type : Resource

Settlement

state : SettlementState

allowsCity : Boolean

isCity : Boolean

isBuilt : Boolean

location : Coordinate[]

Castle

Road

location : Coordinate[]

LongestRoad

LargestArmy

Desert

Owner : Player[] (override)

Classes (part 2)

Coordinate

x : int
y : int

CatanDiceGame

StartGame() : Void
CheckBoard() : Void
newTurn() : Void
GameOver() : Void

Prices

HashMap<list(resources), gamepiece)

Player

Name : String
resources : Resource[]

takeTurn() : Action

Board

pieces : HashMap<Tile, Gamepiece:

InstantiateBoard() : void
GetTile() : Tile
GetGamePiece : GamePiece

AI

@Override
takeTurn() : Action

ExampleGames