

Player

- -board (matrix)
- -shipList [Ship, Ship, ...]
- +boolean allSunk()
- +void shoot(tuple coords)
- +void setBoard()
- +boolean placeShip()

PyGame Loop

- -runningGame (Battleship)
- + pixToCoords(tuple pix)
- + coordsToPix(tuple coords)
- +setUpGame(int numShips)

Battleship

- -boardZero (player)
- -boardOne (player)-turn (int)
- +void switchTurn()
- +int checkWin()
- +int takeTurn(tuple coords)

Ship

- -coords [tuple, tuple, ...]
- hitFlag [bool, bool, ...]
- +boolean isHit(tuple coords)
- +boolean isSunk()

AIBattleship

- -difficulty(string)
- + randomPlaceShips()
- + aiTurn()
- + aiEasyTurn()
- + aiMediumTurn()
- + aiHardTurn()

SoundManager

- -soundManager()
- + playHit():
- + playMiss()
- + playSink()

AnimationManager

- -animationManager()
- + animateHit()
- + animateMiss()
- + animateWin()
- + animateLoss()