Game start Mode selection Start game Display Score

End Game

End Game

-display score

-game over message

End Game

-display score

-game over message

1st AI agent turn

-AI agent 1 controls ship

-AI agent 1 shoots

2nd AI agent turn

-AI agent 1 controls ship

-AI agent 2 shoots

Check\_win condition

-repeat until one AI agent wins or draws

the game

Human Player turn

-Input\_move

-Input\_shoot

AI agent turn

-AI calc\_move

-AI calc\_shoot

Check\_collisions

Gameover\_check

-if winner,end game

-if not,repeat game

Mode 2

Mode 1

enter name

AI PLAYER

calc\_move()

calc\_shoot()

HUMAN PLAYER

input\_move()

input\_shoot()

GAME MANAGER

current\_game()

initialize\_game()

start\_mode()

PLAYER

name:str

score:int

lives:int

time:double

level:int

GAME

Mode:int

Score:int

Player1:Player

Player2:Player

Enemy:Enemy

AI:AI agent player

HumanPlayer:Player

Start\_game()

Switch\_mode(mode:int)

End\_game()

Check\_winner()