Model::Main

Environment

-weather: int
-treasure: bool
-port: bool
-ship: bool

+Environment(): void
+setWeatherCond(x: int): void
+setTreasurePos(x: bool): void
+setPortPos(x: bool): void
+setShipPos(x: bool): void
+getWeatherCond(): int
+getTreasurePos(): bool
+getPortPos(): bool
+getShipPos(): bool

Ship

#type: int
#x: int
#y: int
#maxLife: int
#curLife: int
#treasure: int
#speed: int
#totalNum: int
#shipNum: int

+Ship(): void
+*Function(): void*
+*setMaxLife(): void*
+*setCurLife(): void*
+*setSpeed(): void*
+*setTreasure(): void*
+*setX(): void*
+*setY(): void*
+*Move(): void*
+*getMaxLife(): int*
+*getCurLife(): int*
+*getSpeed(): int*
+*getTreasure(): int*
+*getType(): int*
+*getX(): int*
+*getY(): int*
+*getSnum(): int*
+getNum(): int

Every Ship(Pirate, Merchand, Repair, Explorer) inherits the base class Ship.

Every ship has also a dependency of the class Environment for their functions(Function, Move) that use vectors of Environment instances.

This diagram was created using UML.

PirateShip

-pirNum: int
-damage: int

+PirateShip(): void
+Function(v: vector, map: vector, i: int): void
+setMaxLife(x: int): void
+setCurLife(x: int): void
+setSpeed(x: int): void
+setTreasure(x: int): void
+setX(a: int): void
+setY(a: int): void
+Move(v: vector, map: vector, i: int): void
+getSnum(): int
+getMaxLife(): int
+getCurLife(): int
+getSpeed(): int
+getTreasure(): int
+getType(): int
+getX(): int
+getY(): int

MerchandShip

-merNum: int

+MerchandShip(): void
+Function(v: vector, map: vector, i: int): void
+setMaxLife(x: int): void
+setCurLife(x: int): void
+setSpeed(x: int): void
+setTreasure(x: int): void
+setX(a: int): void
+setY(a: int): void
+Move(v: vector, map: vector, i: int): void
+getSnum(): int
+getMaxLife(): int
+getCurLife(): int
+getSpeed(): int
+getTreasure(): int
+getType(): int
+getX(): int
+getY(): int

RepairShip

-repNum: int

+RepairShip(): void
+Function(v: vector, map: vector, i: int): void
+setMaxLife(x: int): void
+setCurLife(x: int): void
+setSpeed(x: int): void
+setTreasure(x: int): void
+setX(a: int): void
+setY(a: int): void
+Move(v: vector, map: vector, i: int): void
+getSnum(): int
+getMaxLife(): int
+getCurLife(): int
+getSpeed(): int
+getTreasure(): int
+getType(): int
+getX(): int
+getY(): int

ExplorerShip

-exNum: int

+ExplorerShip(): void
+Function(v: vector, map: vector, i: int): void
+setMaxLife(x: int): void
+setCurLife(x: int): void
+setSpeed(x: int): void
+setTreasure(x: int): void
+setX(a: int): void
+setY(a: int): void
+Move(v: vector, map: vector, i: int): void
+getSnum(): int
+getMaxLife(): int
+getCurLife(): int
+getSpeed(): int
+getTreasure(): int
+getType(): int
+getX(): int
+getY(): int