

<b>Game</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Know whose turn it is/get player	Player

<b>Board</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Creates Board and as its being created we put the 3d coordinate i,j,k into hash map called grid	Location, Cell
Checks to see if coordinate is on board	Location
Checks to see if ship is below surface	Location
Get cells at location	Location
Get the current player	Player

<b>Player</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
What board is mine	Game
Which ships are mine	Board
Which ships are alive	Ship
Did I lose the game?	
Initiate shots	

<b>Ship</b>	
<u>Responsibilities</u>	<u>Collaborators</u>

What type of ship	
Get dimension of the ship	Location
Gps of the ship	ShipGPS
Has captain armour or does not have it	

<b>ShipGPS</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Get the coordinate of the ships	Cell (cell has a ship ship has a gps)
update	cell

<b>Cell</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Has location	Location
Has observers if ship on cell	Observer
Has the cell been attacked?	Observer

<b>CaptainQuarterBehavior</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Set and get if captains quarters	Location
Check if captain quarters has been hit	Location

<b>CaptainQuarterArmour</b>	
<u>Responsibilities</u>	<u>Collaborators</u>

Set and get captains quarters	Location(location gives x,y,z coordinate)
Check if it has been hit	Location

<b>CaptainQuarterNoArmour</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Sinks ship	Location

<b>Minesweeper</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Adjust minesweeper object	Ship
Get dimension of the ship	Location
Ship has a gps	ShipGPS
captainquartersbehavior	CaptainQuarterNoArmor

<b>Destroyer</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Adjust destroyerobject	Ship, CaptainQuarterBehavior
Get dimension of the ship	Location
Ship has a gps	ShipGPS
CaptainQuarterBehavior	CaptainQuarterNoArmor

<b>Battleship</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Adjust battleshipobject	Ship, CaptainQuarterBehavior
Get dimension of the ship	Location
The ship has a GPS	ShipGPS

CaptainQuarterBhavior	CaptainQuarterNoArmor
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<b>Submarine</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Captain quarter behavior	
Has a GPS	ShipGPS
Get the dimension of the ship	Location

<b>Sonar</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Checking how many moves left	
Checking if we can use this weapon	
Use sonar at	Location
Set and get target	Location
Check to see if the target set is valid	Board(cant be underwater)

<b>Bomb</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Player owns bom	Player
Use bomb at	Location
Notify the status of the result(observer pattern)	Observer
Check to see target is valid place	Board

<b>Laser</b>	
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<u>Responsibilities</u>	<u>Collaboarators</u>
Player owns laser	Player
Use laser at	Location
Notify status of the result(observer pattern)	Observer

<b>Weapon(abstract)</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Player has weapon	Player
Use weapon at	Location

<b>Observer(interface)</b>	
Gets updates of observer object	

<b>Subject</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
add observer	Observer
Remove observer	Observer
Has observer	
Notify observer	

<b>Location</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Get x,y,z coordinates	
Set up ihat,jhat,khat( k represents	

underwater)	
plus,minus,times	
equals	

<b>Command(interface)</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
execute	
undo	

<b>MoveFleetCommand implement command</b>	
<u>Responsibilities</u>	<u>Collaborators</u>
Player commands fleet	Player
Shif affected are kept track of	Ship
Movefleetcommand given by player	Player
Move ship to a direction	Ship
execute	Command
undo	Command