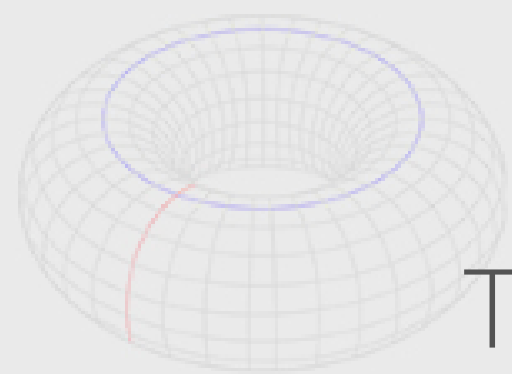
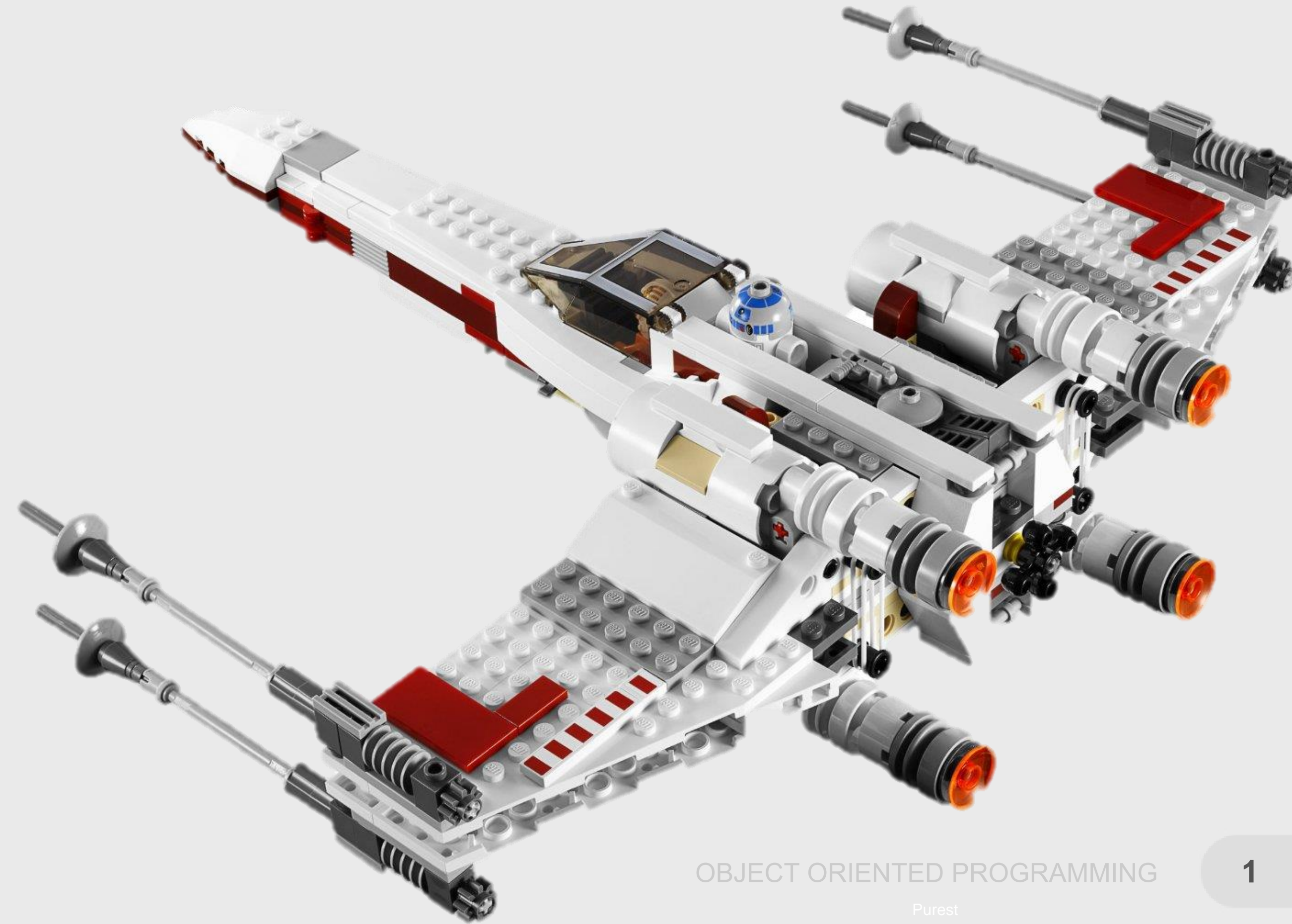


OBJECT ORIENTED PROGRAMMING

MCC. Arturo Jafet Rodríguez Muñoz



Tuesday & Friday 03.00pm – 05.00pm

PARTIAL PROJECT 01



Evaluation

10% - Quiz

10% - UML for all the solution

10% - Coding psychopath (vars, comments, ...)

70% - Code Solution

Rules of engagement

Can be done in pairs

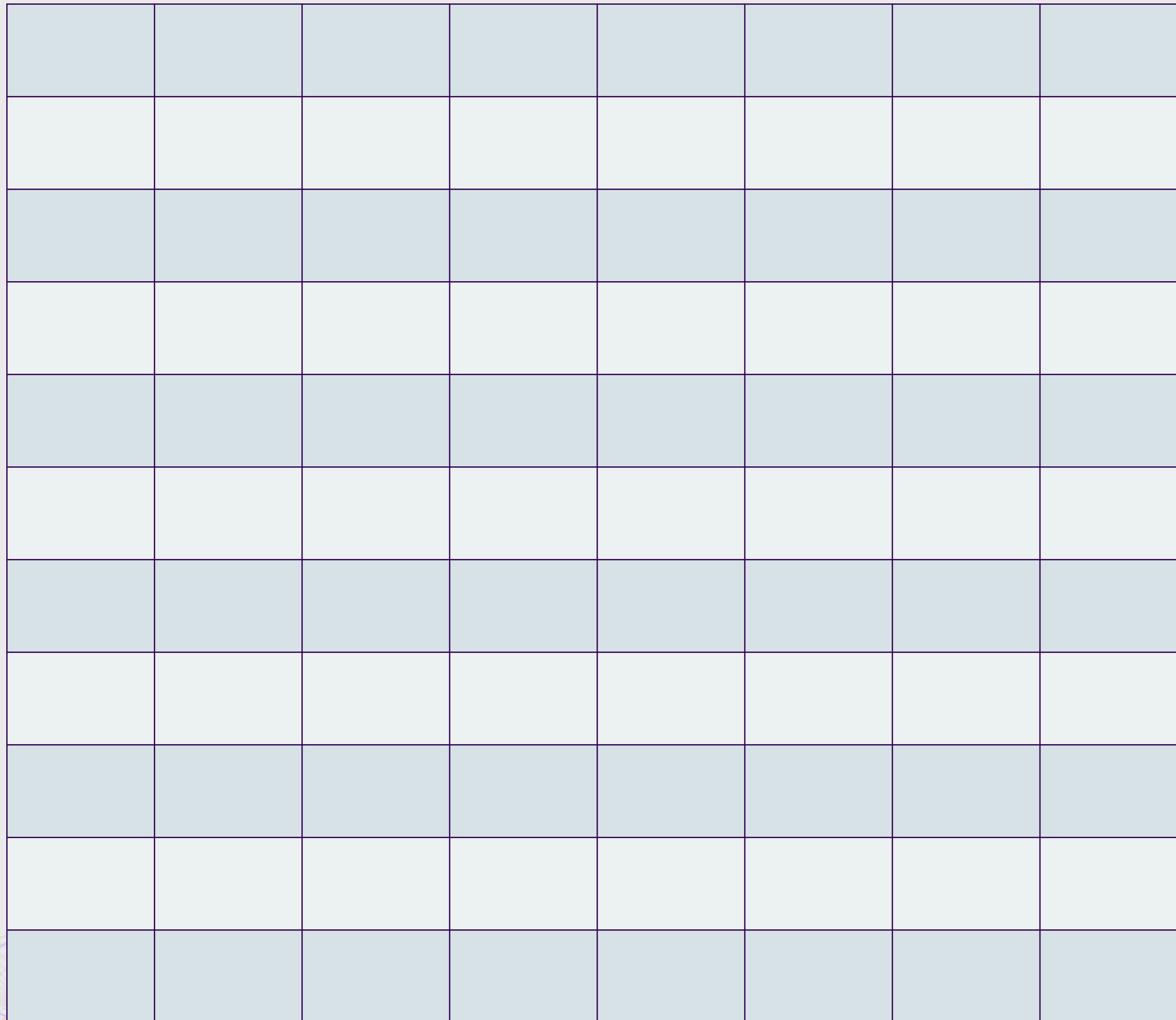
Cannot get help from other classmates or people

Do not try to steal or copy the work of others

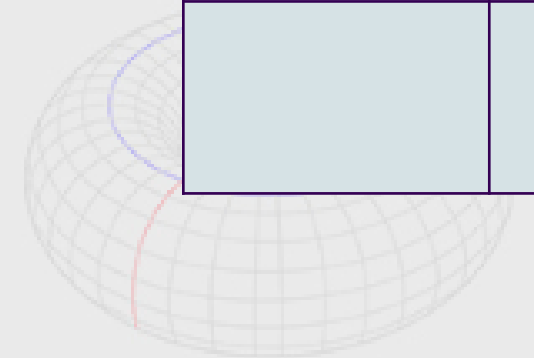
Enjoy it!

Due date: Saturday, February 17, 23.59

PARTIAL PROJECT 01

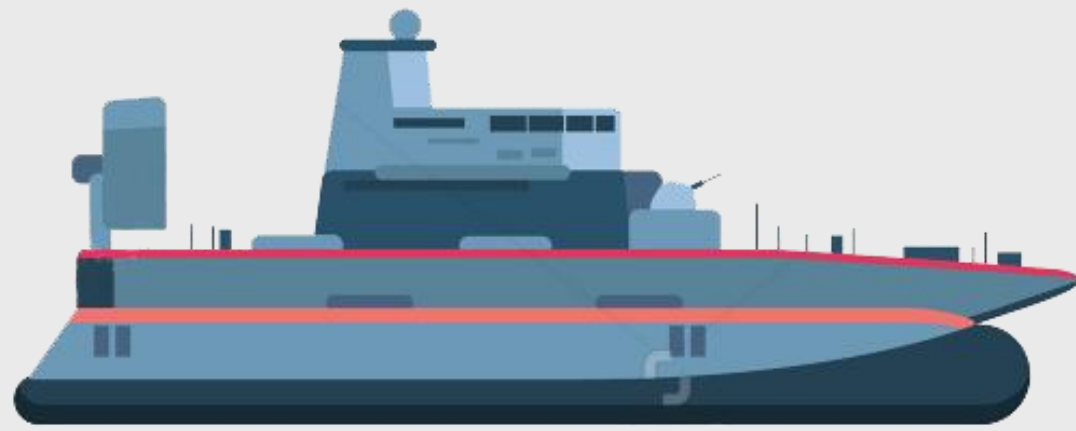


Each player – Board 8 x 11

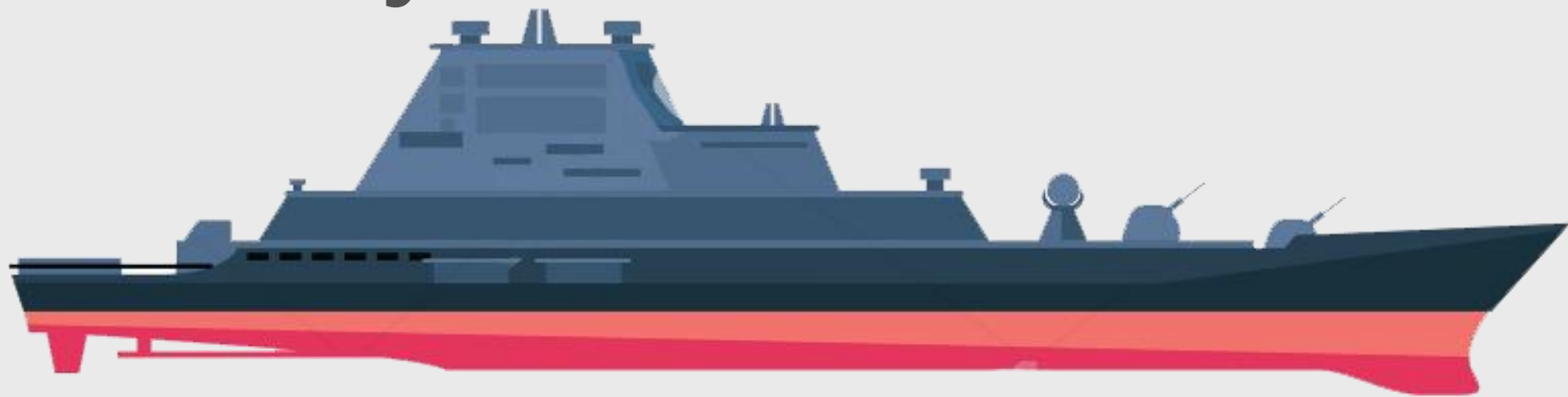


PARTIAL PROJECT 01

Patrol Boat

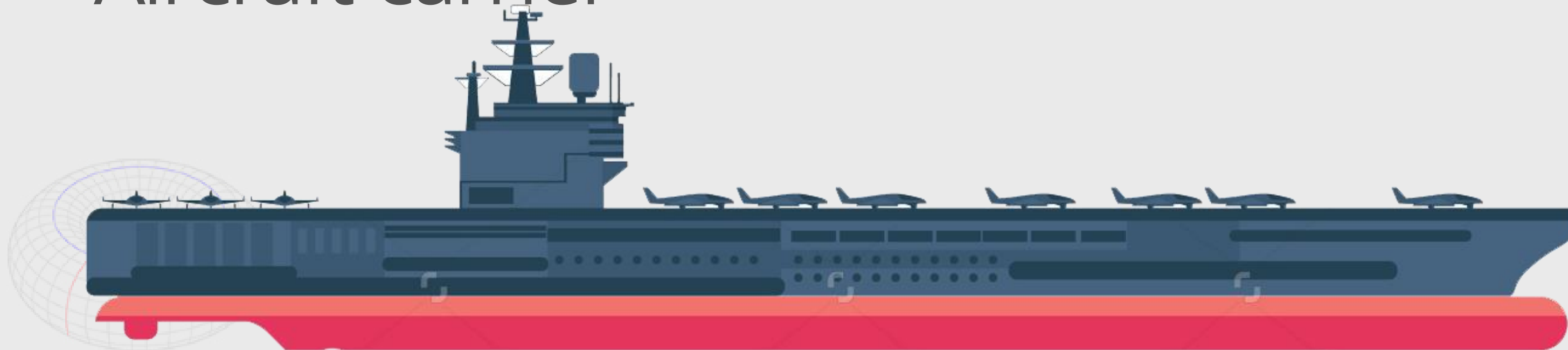


Destroyer

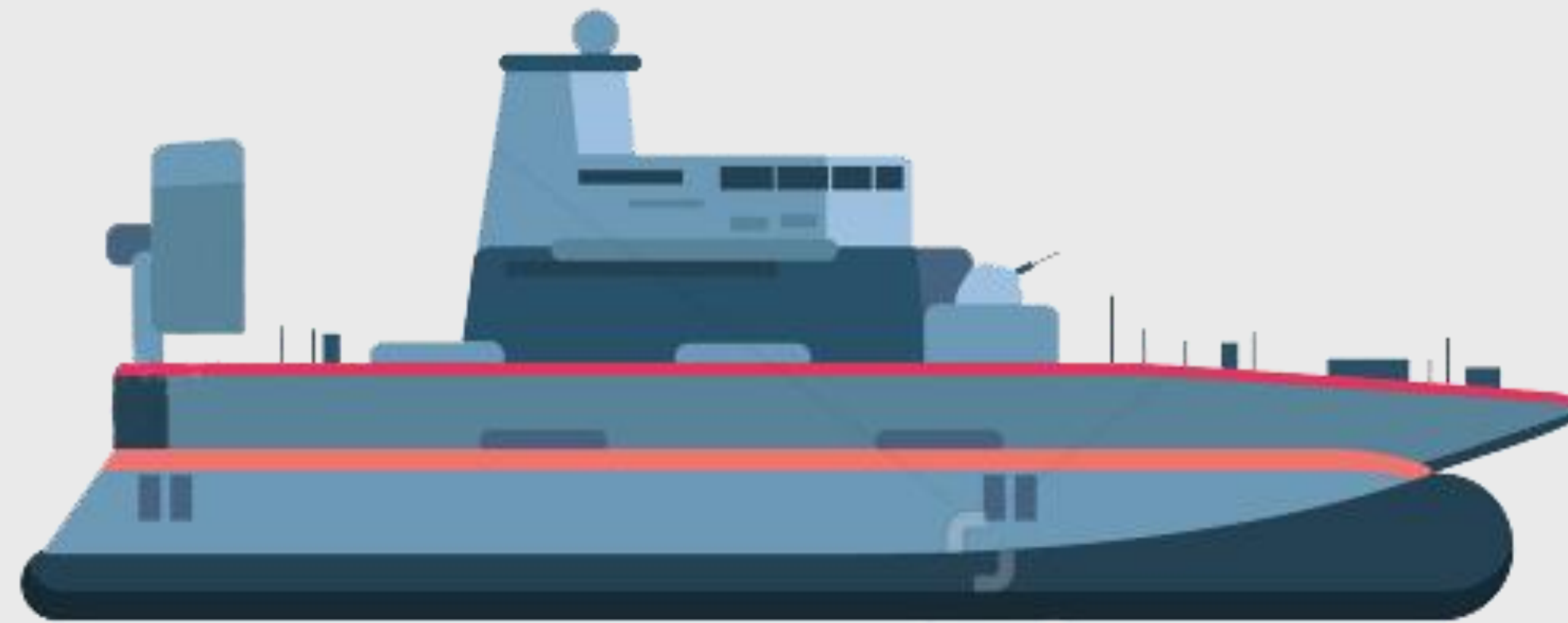


Each player – 3 ships

Aircraft carrier



PARTIAL PROJECT 01

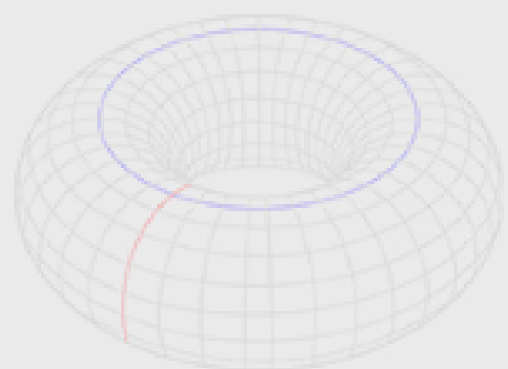


Patrol Boat

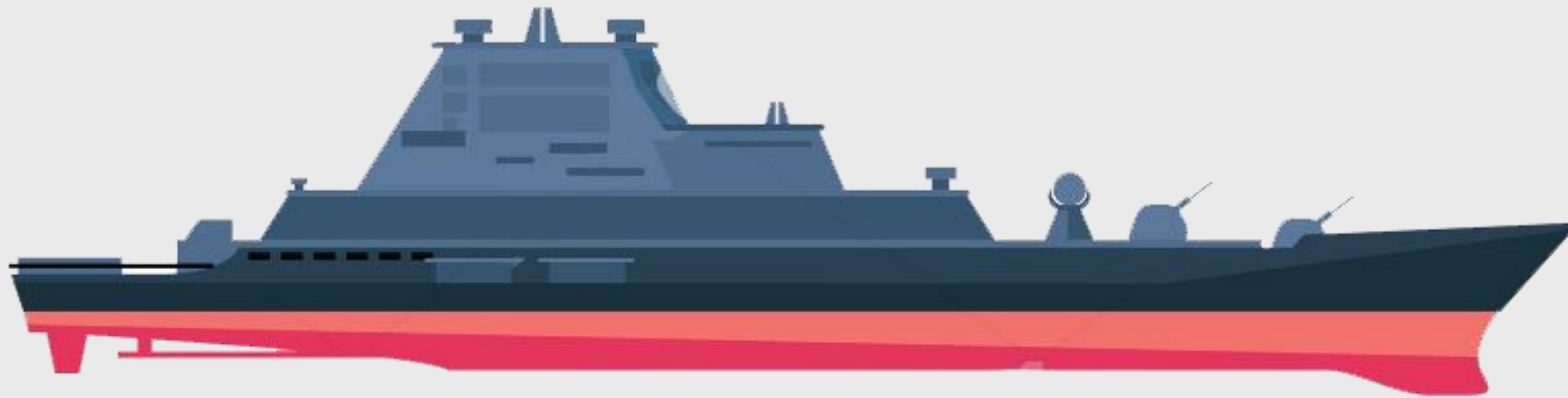
Size: 2 spots

Defense: 1 point each spot

Attack: 1 point



PARTIAL PROJECT 01

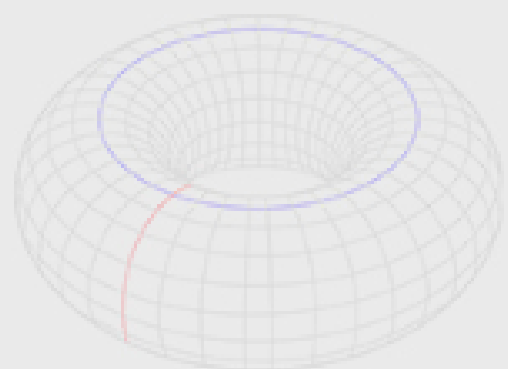


Destroyer

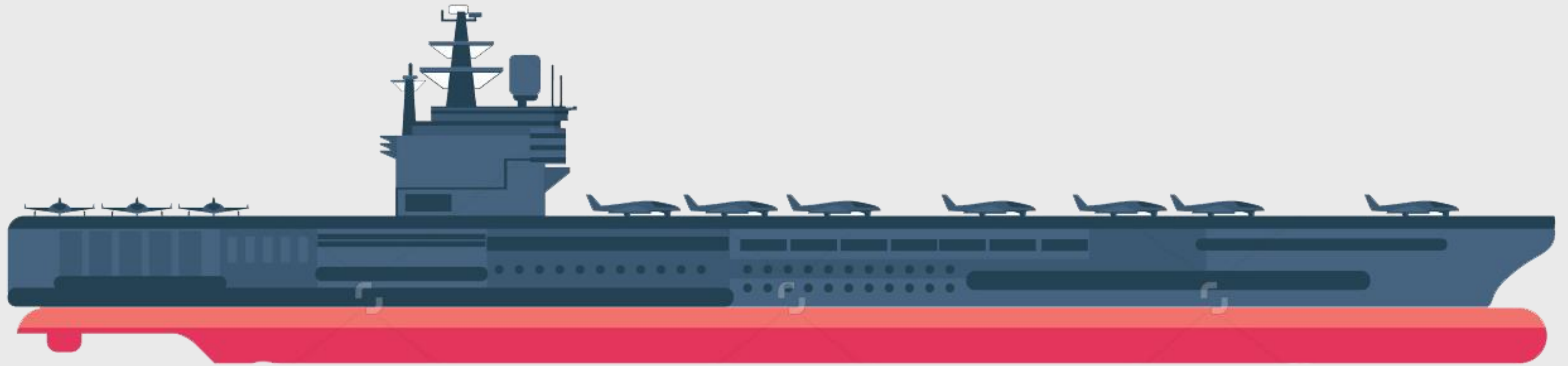
Size: 3 spots

Defense: 2 points each spot

Attack: 2 points



PARTIAL PROJECT 01

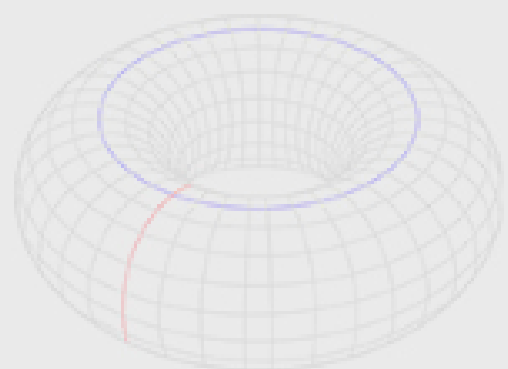


Aircraft Carrier

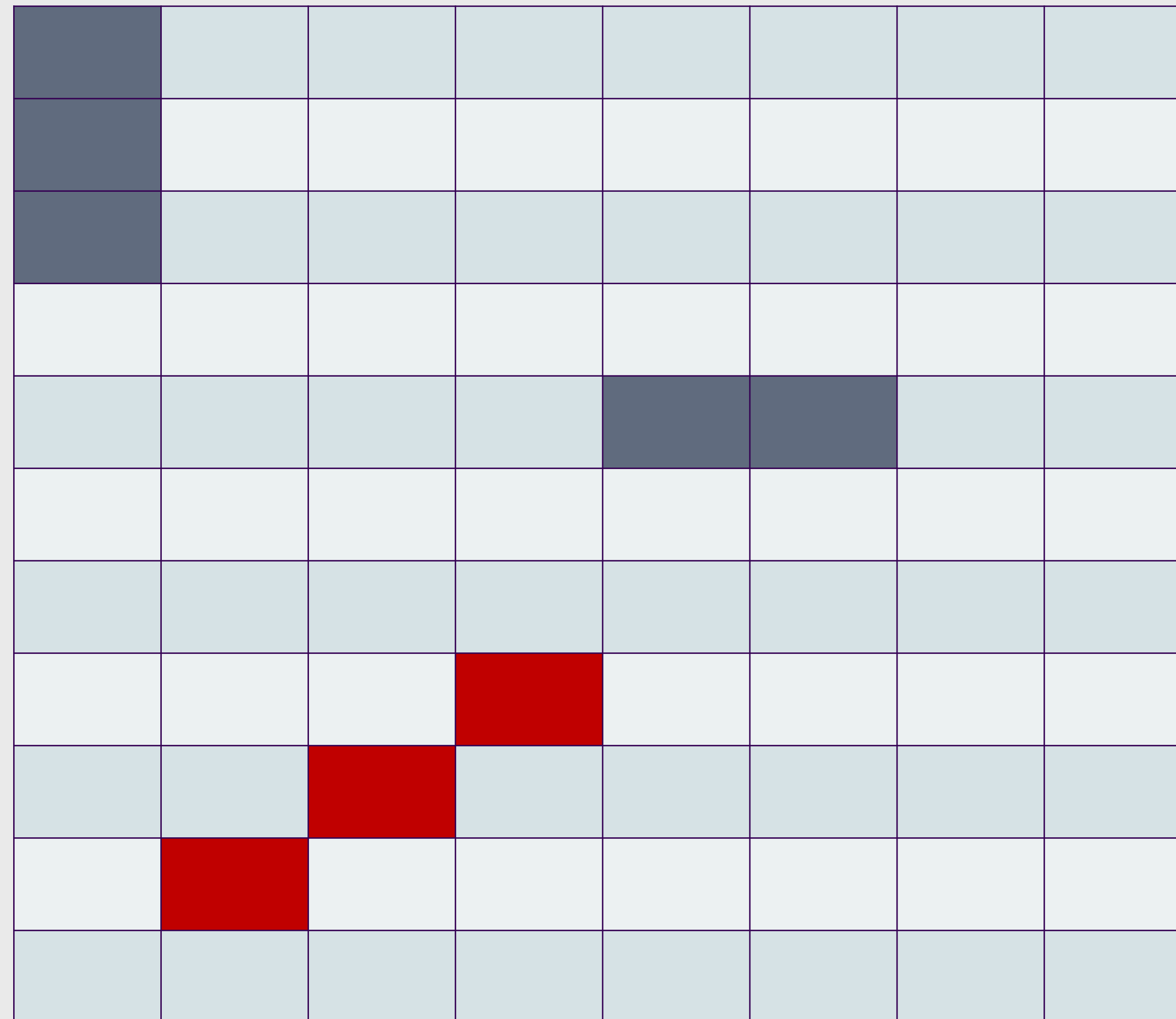
Size: 5 spots

Defense: 4 points each spot

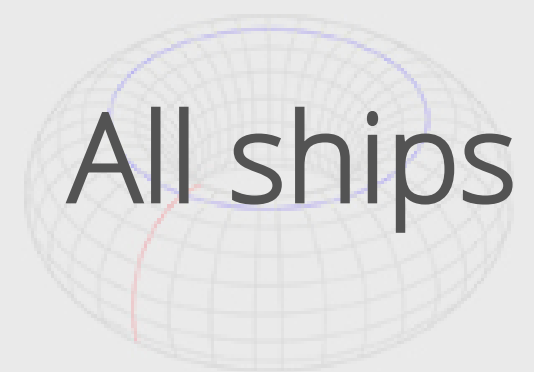
Attack: 3 points



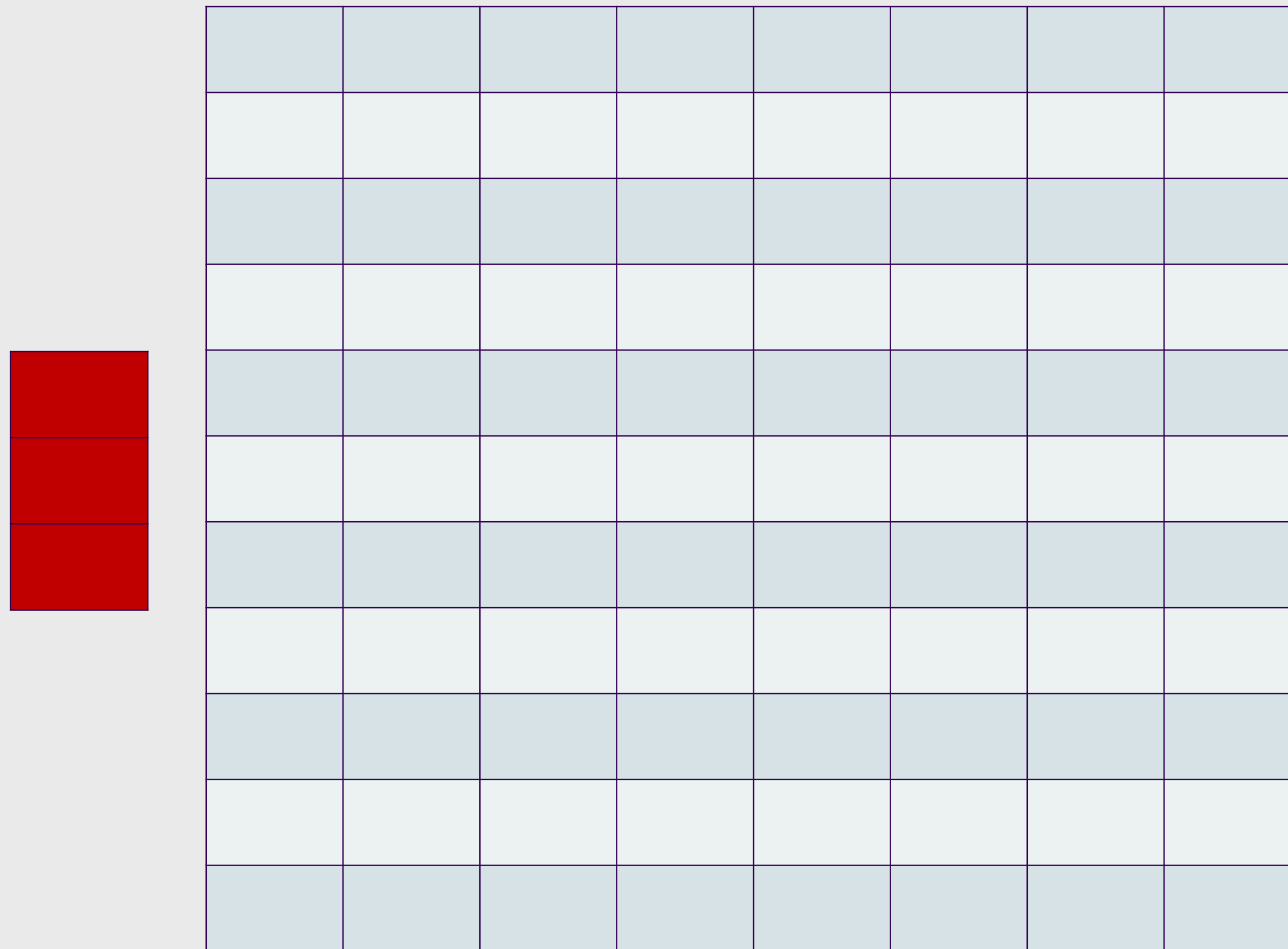
PARTIAL PROJECT 01



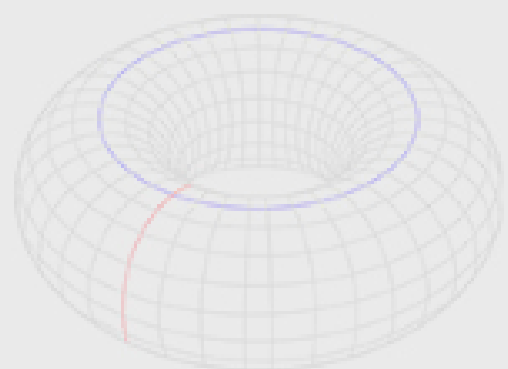
All ships will be placed on the board horizontally or vertically (diagonally is not allowed)



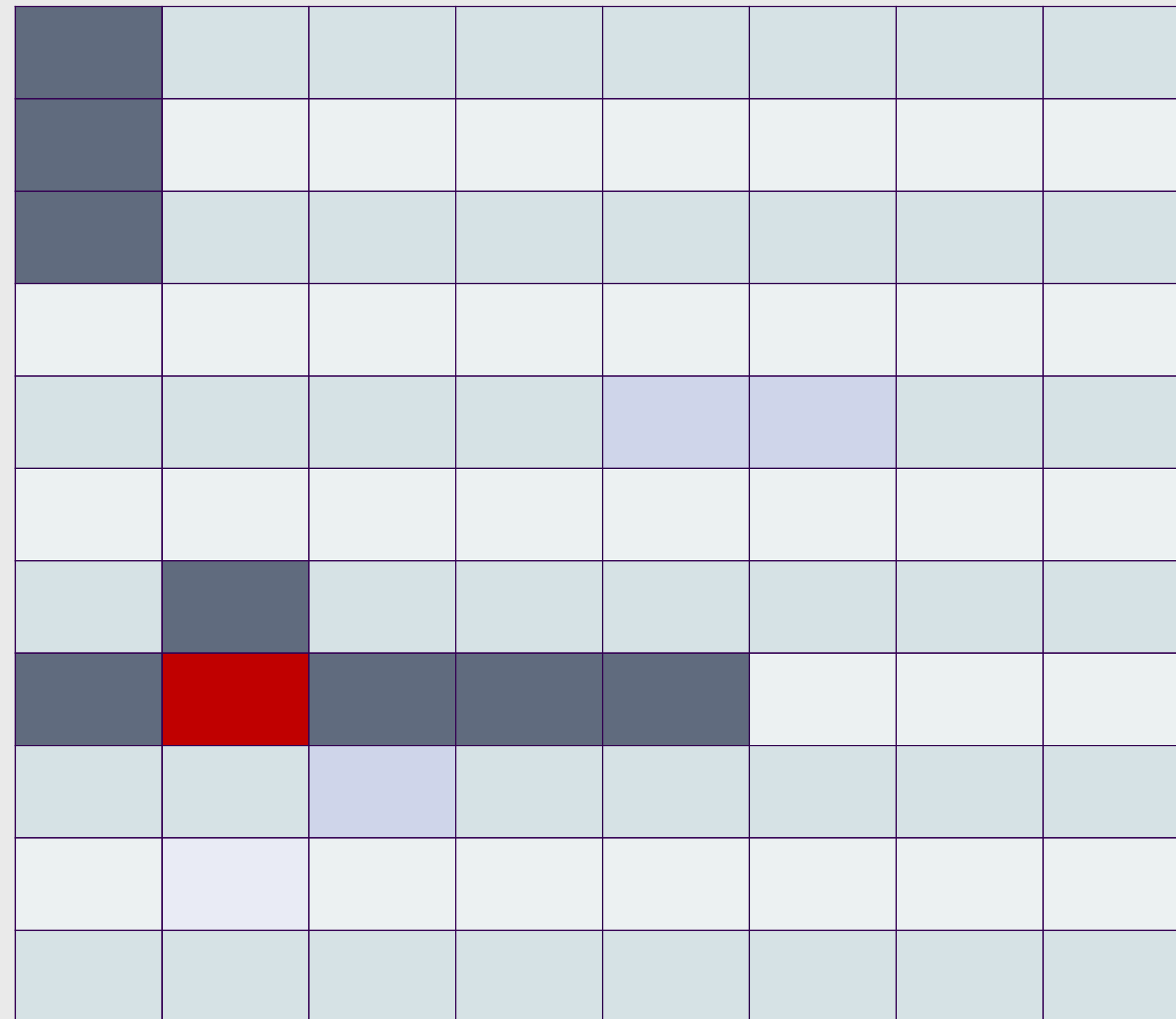
PARTIAL PROJECT 01



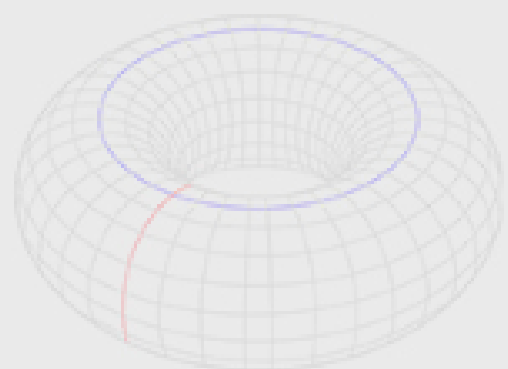
Ships cannot be placed outside the board



PARTIAL PROJECT 01



Ships can be together but they cannot be over placed



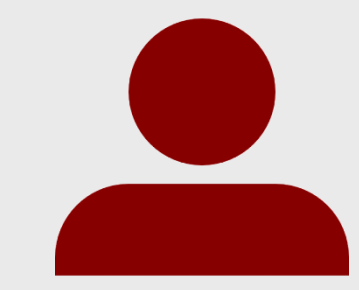
PARTIAL PROJECT 01

Players take turns firing a shot to attack enemy ships

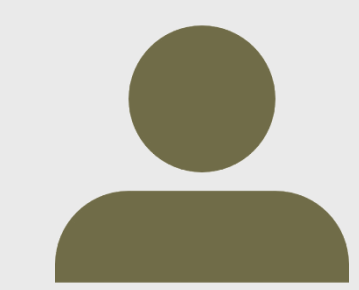
At the beginning of the turn, the player must select the ship will be used to attack

After that, the program should show the grid with the current state of the player's game (missed spaces, hit spaces, partial damage and unvisited spaces)

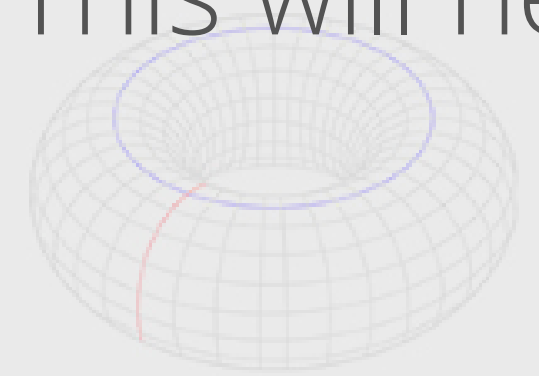
This will help the player to track its guess shots



					X		
	X						
	X						
			P	P	X		
					X		



	D					X	
	D						
							P
	X	X			X		

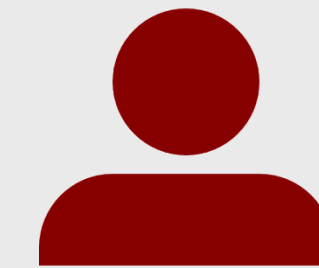


PARTIAL PROJECT 01

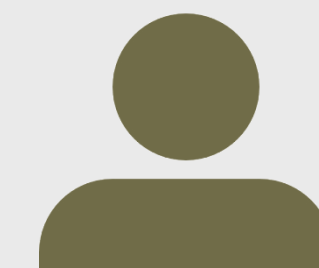
Then, the program will ask for the new position where the next shot will be fired. The program needs to provide feedback regarding the guess shot. For instance, you can send messages like: "Spot with partial damage" "Destroyed spot" "You have missed ha!!" etc

When one of the player's ship has been destroyed, the player won't be able to use that specific ship anymore to attack

The winner will be the first player who destroys all the enemy's ships



					X		
	X						
	X						
			P	P	X		
					X		



	D					X	
	D						
							P
	X	X			X		

PARTIAL PROJECT 01

EXTRA POINTS

The game flow will remain the same but the behavior of the ships will be changed:

Patrol boat. - This ship does not need to have any turn out for recovery before it shoots again

Destroyer. - After each shot of this ship, the gun is out of ammo; therefore, it needs to wait 1 turn to reload the ammo.

Aircraft Carrier. - After each shot of this ship, the gun is out of ammo; therefore, it needs to wait 2 turns to reload the ammo.

This new behavior will need to be validated. For example, if you shot with the Aircraft Carrier ship, you won't be able to use it during the next 2 turns.

