

The Challenge

Create an application to allow one player, to play a one-sided game of Battleships against the computer.

The program should create a game board (figure 1), and place three ships (figure 3) on the board at random positions. The player enters coordinates to specify a square to target and shots result in hits, misses or sinks. The game ends when all ships are sunk.

You can choose to write a console application or any suitable GUI to complete the challenge. You should treat this as an opportunity to show how you would approach any work task, and demonstrate your knowledge of the .Net framework with C#.

The key is to keep it simple and deliver an application that meets the given requirements. Please include a link to the source and instructions on how to build and run it.

Game Board

	A	B	C	D	E	F	G	H	I	J
1										
2				Ship 1						
3										
4										
5										
6		Ship 2								
7										
8										
9										
10							Ship 3			

Figure 1: Game board showing example random ship placements.

Note:

1) The program should interpret the red squares coordinates as "D4"

2) Ships can be placed both horizontally and vertically on the board.

Ships




	<u>Ship 1</u>	<u>Ship 2</u>	<u>Ship 3</u>
Type:	Battleship	Destroyer	Destroyer
Size:	5 squares	4 squares	4 squares
Name:	HMS Queen Elizabeth	HMS Duncan	HMS Defender
			

Figure 3

How to Play the Battleship Board Game

Brown S (2019, How to Play the Battleship Board Game (2019) [Online]. Available at <https://www.scribbr.co.uk/referencing/harvard-website-reference> [Accessed 14 July 2020].

How to play battleships (2015) YouTube video, added by Triple S Games [Online]. Available at <https://www.youtube.com/watch?v=q0qpQ8doUp8> [Accessed 14 July 2020].