Programming Test: Battle ships

The purpose of this test is primarily to examine your problem-solving skills, it will not be analysed using automated tools, and you should not spend any more than the bare minimum amount of time developing a user interface.

Whilst you should not spend any time creating a beautiful user interface to make your code elegant / beautiful and easy for humans to understand. Anyone can write code a computer can understand. You should write you code so that it can evolve and be change easily. Thinking about possible future requirements.

You must write the console application in C# ideally at least dotnet 8. Comment your code as you see fit. Write the test coverage you feel is necessary.

## The Problem

Implement a game of battle ships. If you’ve never played the game, you can get a feel for it from this online [game](https://www.battleshiponline.org/).

You should create a console application to allow a single human player to play a one­sided game of battleships against the computer.

The program should create a 10x10 grid, and place a number of ships on the grid at

random with the following sizes:

* 1x Battleship (5 squares)
* 2x Destroyers (4 squares)

The console application should accept input from the user in the format “A5” to signify a square to target, and feedback to the user whether the shot was success, and additionally report on the sinking of any vessels.

Please share your submission as a public github repo on your own github profile. Share how long you spent on the assignment.