

List of Refactoring's:

- Added Factory Method – Returns a ship of type IShip (Interface)
- Haven't used String.split() – Instead, wrote my own method that checks coordinate format

List of Java Exceptions Handled:

- NullPointerException
- ArrayIndexOutOfBoundsException
- NumberFormatException
- InputMismatchException

Ship Conflict Junit Test

This test requires lots of user input for the Scanner. The test also requires specific coordinates and ship movements to be made. The following screenshots show the test being ran and successfully completing.

Tom, here are your ships...

```

  0 1 2 3 4 5 6 7 8 9
0 D - - - B - - - -
1 S - - - - - - - -
2 M - - - - - - - -
3 - - - - - - - -
4 * - - - - - - - -
5 - - - - - - - -
6 - - - - - - - -
7 - - - - - - - -
8 - - - - - - - -
9 - - - - - - - -

```

Abdul, here are your ships...

```

  0 1 2 3 4 5 6 7 8 9
0 - - - - D - - - S
1 - - - - - - - - M
2 - - - - - - - -
3 - - - - - - - -
4 - - - - - - - - *
5 - - - - - - - - B
6 - - - - - - - -
7 - - - - - - - -
8 - - - - - - - -
9 - - - - - - - -

```

The 2 screenshots above show Player 1's (Tom) Battleship at (4,0) and Player 2's (Abduls) Destroyer at (5,0). After the turn is over Abduls Destroyer should be destroyed.

Abdul, your destroyer has been destroyed!.

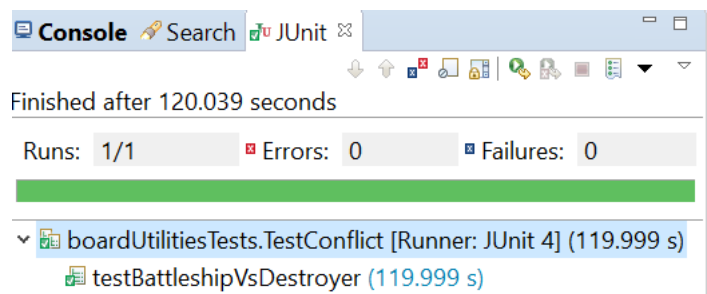
Tom's turn.

Tom, here are your ships...

```

  0 1 2 3 4 5 6 7 8 9
0 D - - - B - - - -
1 S - - - - - - - -
2 M - - - - - - - -
3 - - - - - - - -
4 * - - - - - - - -
5 - - - - - - - -
6 - - - - - - - -
7 - - - - - - - -
8 - - - - - - - -
9 - - - - - - - -

```



The console proceeds to scroll down and it prints 'Abdul, your destroyer has been destroyed!'. The turn then ends and it asks Player 1 (Tom) to start moving his ships again. The final screenshot shows the test completing successfully.