## Battleship Bots

As you know the aim of this assignment is to sink as many of your fellow students battleships as possible

## You are provided with details of the ships that are near you by the server

```
int myX;
                                About your
int myY;
int myHealth;
                                ship
int myFlag;
int number of ships;
                                About all ships
int shipX[MAX_SHIPS];
int shipY[MAX SHIPS];
                                (index 0 is
int shipHealth[MAX SHIPS];
int shipFlag[MAX SHIPS];
                                always your
                                ship)
```

number\_of\_ships tells you how many
ships are visible to you

shipX[] and shipY[] tell you the locations
of the ships within your visible range

shipHealth[] tell you the health of the
ships within your visible range

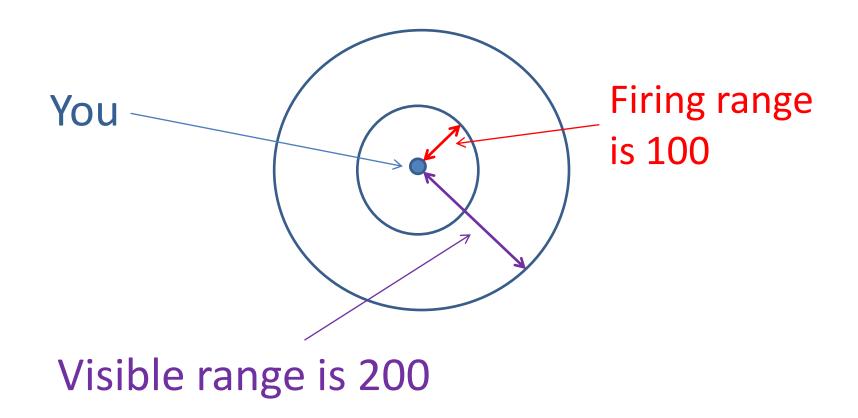
You are always ship 0

There is always at least one ship (yours)

What can you do with shipX[], shipY[] and shipHealth[]?

How can you make best use of this information?

## Some relevant numbers...



You can see ships before you can hit them

The default code in the battleship bot fires at ship[1] which is just the first ship in the list...

...it doesn't even check if ship[1] is in range.

The order in which the other ships are reported to you is random. So ship[1] may be a different ship each clock tick.

You need to think up good tactics to try

You can ask your tutors, PAL leaders and Dave at espressoProgramming for advice on how to program your tactics

## Remember that your enemies tactics are continuously evolving and so your will also need to evolve