Sea Wars verion 1.0 25/08/2016

HOW TO PLAY

--------------------

Sea Wars is an extended version of the original two players game Battleship.

So what does Sea wars do differently ?

1) Create a game in createTwoplayersGame endpoint

DETAILED DESCRIPTION

--------------------

- The first player decide the size of the board and the set of boats for the two players

Exemple: 10 for the board size will define a standard square board of 10x10, [5,4,3,3,2] for the board setup will create 1 Aircraft Carrier, 1 Battleship, 2 Cruiser and 1 Destroyer

- The first player can potentially set everything he wants but he must be carefull of the amount of money available in his wallet.

- Even if it's not implemented yet the second player could in a future version set his own set of boat, this is why the wallet exists.

- The amount of money available in the wallet at the beginnig of the game is proportionnal to the size of the board (100€ for a 10x10 board, 121€ for 11x11 board and 625€ for a 25x25)

GENERAL USAGE NOTES

-------------------

- For the process of random generation of board, I decided to define a recursive function. The function as I designed it work pretty much the same way than the flood fill algorithm with the difference that the flood fill stops when the condition are reached (straight size of the boat essentially). It does the job for a little amount of boat of short size (less than 25 box).

Given that the first player should be reasonnable during the setting step.

Indeed, I decided to not prevent the creation of a large amount of big boat, assuming it could eventually raise an Exception RuntimeError: 'maximum recursion depth exceeded'. So please be carefull.

- In a future reflexion I'd like to implement a push queue in order to always have a set of board instantly available in order to shorten the setting step. The board won't be generated anymore but just got in the datastore.

- If you decide to execute createTwoplayersGame endpoints without insert any board size or board setup, default values will be token.