Course Project – Battleship

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Following is a high-level description of the battleship game. I have highlighted most of the nouns in yellow, and most of the verbs in blue. Nouns make good candidates for classes or attributes/properties of classes. Verbs are good candidates for methods. But don't do it blindly; use your judgement.

Battleship is a game played between two users: the human player and the computer.

Battleship consists of two square boards, each owned by one user.

A board is nothing but a square with equal number of rows and columns of cells. Each user also owns 5 vessels: a aircraft carrier, a cruiser, a destroyer, a patrol ship and a submarine. In the beginning of the game, each user places his/her vessels at appropriate positions on their board. A user can't see his opponent's board. As the game starts, each user takes turn in launching an attack on the opponent's boards. In that, he is required to select a coordinate which wishes to attack. If a vessel happens to be there, it gets damaged, and the same gets known by the user. If a user attacks all the coordinates of an opponent vessel, that vessel sinks. The user to sink all the vessels of the opponent wins the game.

On starting the battleship application, the player gets an option to choose between various levels of difficulty at which he can play. With increasing difficulty levels, the user has to play with a more and more sophisticated opponent (machine). Currently, we have implemented basic and advanced, but this should be extensible.