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#### Homework 04 Design Reflection

Working with the observer pattern was much more enjoyable than working with the strategy pattern I felt. The observer made more sense intuitively, where the strategy pattern had me constantly doubting that I was doing anything the correct way. Essentially, my design followed the recommended design in the homework document; an OceanExplorer and OceanMap class, a Ship class that extends observable, and a PirateShip class that implements observer. In the homework document, there is a line that implies that the Ship's location should be kept in the OceanMap class. This seemed counter-intuitive to me, so I made the Ship and PirateShip classes take care of their own location and update the OceanMap's grid as needed. I think that resetting the game would be fairly straightforward with my implementation: I would clear the board, regenerate 10 islands, and create 2 new pirates. Changing the tiles to be water images and island images would be a bit trickier, but I think that I should just be able to set the images up in the OceanMap class instead of painting the tile blue, similarly for any time that is an island. I would need to be sure to draw the board after I set the islands and pirates, however.

I do want to note that I asked (kind of late) if pirate ships should be able to occupy the same square as the player. In terms of the code, there would be little difference, but I made mine so that pirate ships could only get as close as adjacent to the player, not on top of them.