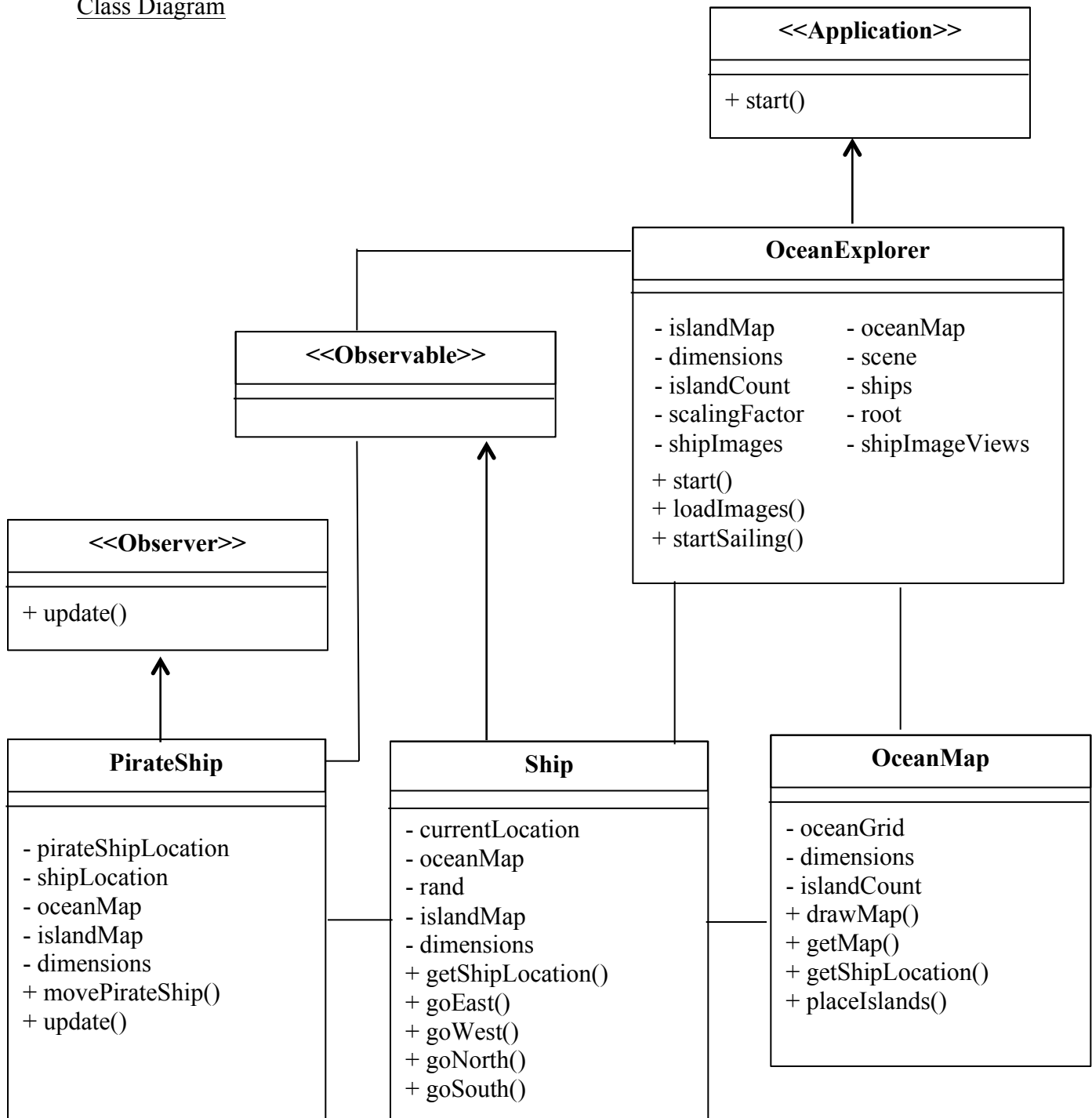


Homework Assignment 4

Class Diagram



Design Rationale

I designed my ocean by following the tutorial which called for four classes: OceanExplorer, OceanMap, Ship, and PirateShip. What I liked about this design was that each part was split up to do its own functionality. For example, Ship would handle the Christopher Columbus Ship and have the specific functions for moving up, down, left, and right. OceanMap created the map and added the initial islands and ocean grid. PirateShip moved the pirate and updated whenever Ship moved. OceanExplorer handled most of the displaying on the screen with respect to the ships and updating them based on their movements.

Something I would have changed would be to move the instantiation of the objects (Ship and PirateShip) into the classes so that the ImageView objects were updated in there. It would allow for more organization of objects based on their types.

In order to extend the design, I would need to add a button and then call start function so that it can recreate the scene, re-instantiate the different objects, and reload them. This would cause the whole game to restart so that the islands can be recreated. This would only occur when the button was pressed so it would require a handler to keep track of when that event happened.