## Refactoring and Design Pattern List

## Refactoring

We did not have much time for refactoring of our project. However we did refactor our Match class by extracting our methods to set Tile piece locations and to set up individual Tile components.

## **Design Patterns**

We used two main design patterns in our project:

- Observer
- Model-View-Controller

We used the Observer pattern in our Client-Server application. Both the client and the server have an observer class (Client.java and Server.java) that listen for and send messages to the other. This is necessary to allow updates to react to user actions on the client.

Model View Controller was used in the Client, where the Model was the match logic and server, the view is what was presented to the user, and the controller connect the two together. The view does not know how the model works, and the model does not know how the view works - the controller (ClientController.java) is responsible for controlling the flow of information and updates between the two components.