## **SYSC3110 Monopoly Project Design Decisions By Group 22**

## **Data Structures:**

For the Monopoly class we decided to use an ArrayList to keep track of the Player objects. The reasoning for an ArrayList was it would be easy to add and remove players as needed throughout the game, it would also allow us to get Players using an index system. An ArrayList was also used in the Player class to keep track of Properties they own as well as in the Board class to contain all of the Property objects. The reasoning for using an ArrayList in both of these cases was similar to that of the Monopoly class. In Milestone 2 none of these structures changed as they were all sufficient with the new GUI feature we implemented.

## **Class Structuring/UML changes:**

The classes from milestone 1 remained mostly the same with some methods being added and removed from the MonopolyModel class. The main changes in this milestone were the addition of the MonopolyView class as well as the three new controller classes. We decided to implement a controller class for each type of button in our GUI, so we created DiceController, MonopolyBoardController, and InfoController classes. These classes interacted with the MonopolyView class to give it input which then interacted with the MonopolyModel class to keep track of all the logic behind the game.