Our final game is a game where you play as a mobster who must make his ranks and take over the city. Each “room” in the game is a district of the city: so you have the SW, S, and SE districts, the E and W districts, and the NW, N and NE districts, with the central district acting as a trading post. There are 3 other mob boss enemies that own the other districts that you have to “whack”. Once you kill all of the mob bosses, and take over all of the districts, you win the game. The player character has a number of stats that they can increase and decrease in. These stats are: money, respect, and henchmen. “Whacking” a mob boss requires respect and henchmen and taking over a district requires respect. Buying and selling requires money, but you can commit robberies for money. To complete tasks that require henchmen, you must have a gun for every henchman that you need.

Our game features 6 new commands not counting the back command. These commands include: buy, sell, info, whack, rob, and open. After you open districts (700 respect) that a rival mob boss owns, assuming you have the correct amount of respect (800) and henchmen (40), you can whack that mob boss. To gain respect and money, you can use the rob command in a district. But be careful, there’s a chance the robbery can go wrong and you lose henchmen and gain no money or respect. The info command gives you player info, like the districts they own and the amount of money, respect, and henchmen that they have. Buy and sell allow you to sell or buy any number of the items you own for money, but this can only be done in the trading district.

The game features several special features in addition to the core functionality. Our word Parser is extended to 3 words, which was crucial in many of the commands we use. All items contain a weight and once the weight limit is reached the player can not carry any more items. The game also features character growth, allowing you to increase in a number of stats, such as respect, henchmen, and money. All items have a buy/sell value, and there is a trading room where you can buy and sell these items.

The design patterns used were Enumerators, which are found mostly in the Door class. It is the ActionResult enum, consisting of the values UNCHANGED\_DONE, CHANGED\_DONE, and UNCHANGED\_NOTDONE. These Enums are used to open and close doors. Similarly, we used the delegate design pattern in the LockDelegate interface, which is used also in the Door class. We also have a command design pattern that controls every command in the game.

As far as bugs go, we fortunately didn’t find too many. The back command was having some issues where it didn’t set the current room correctly, but it still does print out correctly. There is also a minor bug when selling items that when it hits 0, instead of erasing the item it just prints out “0” of that item. However when you go to try to sell anymore of the item it is removed from the list correctly.