## Final Project Proposal BINGO

At the start of the game, the player is asked to input their name and then press enter to play. The game keeps track of how many rounds of bingo are played.

For each round, there is a ball blower with 100 balls numbered 1 to 100. Two versions can be played. Either the regular version where a ball is chosen at random, or the biased version where a ball is drawn from either the upper or lower half of the balls. The player's bingo board is populated with random numbers (no repeats) and a free space in the center. Then the board is printed.

For each turn, a random ball is drawn, and if that ball is found on the bingo board, it is replaced by an X. The turn counter is increased, and then the bingo board and numbers left in the ball blower are printed. On each turn, the game checks for bingo (by checking the 12 possible winning combinations of X's), and if the player gets bingo, they are congratulated and asked if they would like to play again.

| BINGO Board (2D Array) |  |   |  |  |
|------------------------|--|---|--|--|
|                        |  |   |  |  |
|                        |  |   |  |  |
|                        |  | X |  |  |
|                        |  |   |  |  |
|                        |  |   |  |  |

## **UML** Diagram

| Class Name: Woo  |  |  |  |  |
|--|--|--|--|--|
| nstance Variables: rivate String playername rivate int Gamenum rivate new Game |  |  |  |  |
| oString  |  |  |  |  |