## FIT1048 Assignment 3 Mastermind Reflection James Shields - 30755964

I designed my program by putting the majority of the coding into the two classes, player and board, particularly the board class. I mainly put the coding into the board class because I thought most of the functionality of the game comes from drawing up the board, while only the player name comes from the player class. I decided on letting the player input his/her name after selecting the play option from the menu as this allows multiple players to use the program in the same sitting. This reflects the OO design as it separates the functions into their required classes making it easier to read and change incase i want to update or change something. One of the main issues I had in creating the program was getting the game board to look nice into the squares instead of just simply putting the inputted code on each line, to resolve this, i used trial and error, making slight adjustments to the placement of the lines until they all fit evenly. Another problem I had was implementing the score system, I wasn't too sure the best way to calculate a score but eventually I found the best way was to start the player at 1100 points, and for every input take away 100 points. By doing this it made it the faster the player cracked the code the more points they got. They also got a score multiplier for the difficulty chosen. If I could do this project again I would like to change the difficulty so it also increased the length of the code. I would also like to figure out how to get the board and the player class to interact with each other so i could tie in the difficulty and score to the players name.