**Muhammad Ahmed Saqib**

**Project Description**

**Checkers**

My project will be a 2D version of a game of checkers. The primary library I will be using for the implementation of my project is Pygames and random. The game will have will have a main screen from where the user will be able to choose between playing with another player offline or playing with a computer that uses Artificial Intelligence. Once the user chooses who to face, there will be a button the user will press to start the game. This will take the user to another window which will have the checkers board along with all the checker pieces placed on the board at their appropriate places. When the user clicks on a certain piece, the program will tell the user of all the moves that can be made with that piece (if any). Also, whenever a certain piece is in a position to kill the opponents piece, all the other pieces the user has will not be able to move and the only move that can be made is to move the piece and kill the opponents piece. There will also be a king piece which is made when one of the pieces reach the other end of the board. This piece will be able to move both forward and backward diagonally. There will be a back option in the window which will take us back to the first window where we choose who to play against. Lastly, whenever all the opponent’s pieces are removed from the board or there are no available moves left for the opponent, then the user wins the game. By November 12, I plan to demonstrate everything except for the Computer opponent (that uses Artificial Intelligence) and the option to move back. Everything else will be ready. By November 23, all the functions will be ready for the demonstration.