## Overview of Gomoku

Gomoku, also called Five in a Row, is an abstract strategy board game. It is played with Go pieces (black and white stones) and is typically played on a 15x15 (15 rows & 15 columns) Go board. It is a two-player game. The goal is to be the first player with 5 stones in a row (form an unbroken line; connected) either horizontally, vertically, or diagonally. Players alternate by taking turns placing stones on any empty line intersection. Player 1, Black moves first and players alternate or take turns. Stones are not allowed to be removed once they are placed. In addition, a player cannot place a stone on top of an opposing stone. Whichever player achieves 5 stones in a row first, wins. If the entire board is filled and no player can make a line of 5 stones, then the game ends in a draw, stalemate. The line must consist of exactly 5 stones. Having a line of 6 or more stones in a row does not count as a win; this situation is called an overline.

## **Additional Features to Our Program**

In the past, Gomoku was played on a 19x19 board. In our program, the user will be given a choice if they would like to play with a traditional 15x15 board or the wider 19x19 board. As Gomoku is a two-player game, the user can create names for players 1 and 2 before the start of the game. Player 1 is black and player 2 is white. To prevent stalling, our program will have the option for the user to have a clock or timer. The user can set the amount of time that each player can have (including the option of having time odds) alongside the option to add delay or increment to the clock after each move.