### **CHECKERS PROJECT**

#### PROJECT DESCRIPTION

#### Description:

The Checkers Game project is a multiplayer implementation of the board game Checkers also known as "Draughts." The game is designed to be played between two players, and it follows the standard rules of checkers, including the movement of pieces, captures, and king pieces and it is played on an 8\*8 board.

#### **Game Rules**

#### Objective:

The objective of the game is to capture all of your opponent's pieces or block them in such a way that they cannot make any legal moves.

### Setup:

The game is played on an 8x8 checkerboard, and each player starts with 12 pieces of their color (usually red or black). The pieces are placed on the dark squares of the three rows closest to them.

The pieces are placed on the dark squares, alternating between two squares in each row.

#### Movement:

Players take turns moving their pieces diagonally forward along the dark squares. Regular pieces can only move forward, not backward.

A piece can move one square diagonally forward to an adjacent empty square.

#### Capturing:

If an opponent's piece is located diagonally in front of one of your pieces, and the square immediately beyond it is empty, you can jump over the opponent's piece and capture it. The captured piece is removed from the board.

If there are multiple capture options available on your turn, you must choose the option that captures the most pieces. This rule is called "forced capture."

## Kinging:

When a piece reaches the opponent's back row, it is "kinged" and becomes a king. A king can move and capture diagonally both forwards and backward.

# Winning:

The game is won when a player captures all of the opponent's pieces or when the opponent has no legal moves left.

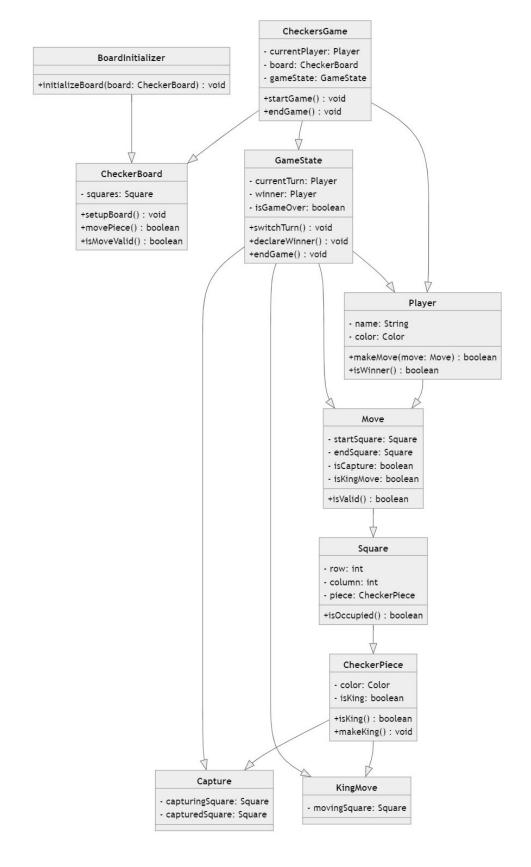
#### Stalemate:

If both players have no legal moves left, the game ends in a draw.

## Github Link:

https://github.com/s-murtaza/CheckersGameOOP.git

#### **CLASS DIAGRAM**



## Use-case Diagram:

