**Team Incognito**

**Shruti Sharma**

**Vani Gupta**

**Chirag Kinra**

**Ayush Paliwal**

**Mohit Chaudhary**

Checkeers

**Problem Statement**

It’s not every time that you necessarily want to play an online game because you sometimes have your friends come over and a simple, but fun game might just cheer up your mood. That is what’s the purpose of our game, a really lightweight desktop game which contains a 2 player mode.

This game is intended for anyone from a school going children to working individuals to even some game loving elderly-ies. This game is an offline mode game where you can compete with your fellow friend and find out who is really more strategic!

**Functional Specs**

Two friends jimin and suga meet after a long time. They thought to play some game together. Jimin opened his pc and they saw a dektop game, checkers.

Following is the interaction between the game and those two players:-

* When they opened the game, they saw the following options on the first page
* New Game
* Resume Game
* About us
* Contact us
* A question mark sign (that included a tutorial option )
* Since Jimin and Suga were new to the game so they clicked on the tutorial button, and they were taken to the game itself where the arrow button guided them to make a move and had tips and suggestions given inside the cloud sign)
* Now after ending the tutorial ,

They were represented as player 1 and player 2 initially, and they were given an option to rename it.

* The gear button includes the option to pause the game, chose the time each player would get.
* They chose 5 min timer for each and the game was started.
* Jimin clicked on the piece and it was given the possible moves he could take.
* After suga ’s piece came diagonally in front of him, Jimin captured the piece by bypassing it diagonally forward and now was placed diagonally one step forward.
* The objective of the game is to capture every piece of the opponent.
* Suga was able to take its piece on the side of the Jimin, so he was awarded with one more piece at the top of the piece itself and crowned as a “King”

There is no possibility of invalid move as we have a move suggesting feature in our game.

The winner was awarded +10 trophy and the non-winner as +1.

No negatives were given in order to not discourage the morality of the player.

**Rules:**

Checkers is a two-player non-cooperative game where opponents sit on opposite sides of the game-board. One player has the dark pieces; the other has the light pieces. Players alternate turns and may not move an opponent’s piece. A move consists of moving a piece diagonally to an adjacent unoccupied square - if the adjacent square contains an opponent’s piece and the square immediately beyond it is vacant, the piece may be captured (and removed from the game) by jumping over it. Only the dark squares of the board are used. A piece may move only diagonally into an unoccupied square. When presented, capturing is mandatory. A player loses the game when either being out of legal moves or out of pieces

**Scoring**

The player gains points on every capture of opponent’s piece. The player gains more Tokens when it reaches the opponent’s end and it becomes the King.

**Legality check**

If the player tries to click on the invalid square, then a pop up message will be displayed showing an “Invalid move”.

**Intended Audience**

This game is intended for anyone from a school going children to working individuals to even some game loving old age people.

**External Interface Specifications:**

**Communication Protocol**:

As our game is a desktop application and only focusing on two players (i.e., human and computer), so, in this case, system will interact with the user by giving hints for the next move and early response on his/her action. The user will not have to be wait for a long time for the response from the system. The help/support button is there which will clearly state the rules of playing game in case user needs any help.

**File Format:**

By taking in consideration that it is a desktop application, there is no need for database. But still, we are storing the game points in text format only in a single case which is resuming a game. It is because due to some reason, if a user fails to complete the game, then he/she can resume easily from the point where he/she left.

**Hardware** **interface**:

No hardware interface required. User just need to have a laptop/PC in order to play this game.

**GUIs**:

1. The game is based on English draught in which board size is of 8X8. Checkers is played by two persons who oppose each other across a board of 12 light and 12 dark squares. The 24 playing pieces are disk-shaped and of contrasting colours. At the start of the game, each contestant has 12 pieces arranged on the board.

## How the pieces are moved in the checker board:

Whenever user on its turn clicks on its piece and further clicks on the new position if that particular position is valid position then the piece will shown there as its valid movement otherwise the piece will come back to its original position.

## Kill move of the piece:

The kill scenario is shown when the player captures the opponent by taking a jump. So, by taking this move player’s piece is placed at the new position and the opponent piece is removed from its position.

1. When a piece reaches the furthest row from the player who controls that piece, it is crowned and becomes a king.
2. The user can change the theme of board accordingly. The colors of the board squares and the checker pieces are distinguishable. The basic checker pieces resemble a round standard checker piece.
3. The user can change his/her name and can enable **Do not Disturb** option to turn off the notifications.

**Technical Specifications: -**

**Operating System**

Windows 8 or higher

**Hardware details**

2 GB RAM & 2 GB Hard Disk Space

**Processor**

Intel core i3 and more