**BOARD GAME CHECKERS**

Team:

Brute Force

Group Members:

VINIT KUNDU

SAHIL SACHDEVA

DEEPAK SAINI

DEV SIROHI

AAYUSH ADHIKARI

PIYUSH SHUKLA

Problem Statement

Deepak, a teenager, is bored and wants to play a brainstorming game and at the same time to chat with his friends online and get rid of boredom. Sahil suggested him to play this web game named Checkers(8x8) where he can develop strategies to win the game and at the same can communicate with his friend.

Purpose

The main objective of this project is to provide a user interface to Deepak so that he can play as well as chat with Sahil. Here Deepak’s time will be invested in brainstorming.

Scope

First of all every type of users of any kind can interact with the game. They can be kids, adults or old people. Their role will be the same in the game.

Overview

Game checkers provides certain facilities (functionalities) to the user, to solve the user requirements (1 player, 2 players).

Product Perspective

In the project of 8x8 checkers, the product perspective is to provide complete interface where user can play single player and multiplayer game in web envoirment. GUI will be supplied to facilitate this purpose.

USP:

* Timer.
* Multiple Themes.
* Chat box.
* Checker Animations.

Single-player and Multi-player option:

The main function of checkers is to provide an interface where user will be able to choose their desired game and play according to their requirements.

User Characteristics

Special features will be provided to the user to fulfil the requirements of the user.

Potentials patterns of use

Regarding game of checkers, some users just play a game just for entertainment while other users might play a game occasionally. This game will facilitate all types of users whether they play just for entertainment or play on regular basis.

Functional Requirements

* Computer shall be able to keep check of the valid moves.
* Computer shall be able to keep check of the invalid moves.
* Computer shall be able to tell at the end that which player has won the match.
* Computer shall be able to keep track that currently which player has turn either player 1 or player 2.
* Computer will keep track of the valid kill moves.
* Computer shall be able not to allow the player to take wrong moves.
* Computer shall be able to tell which player has won the game.

Non-Functional Requirements

Platform:

The game should be implemented in web Environment.

Response:

Players will get instant feedback about the moves and games when interacted, without delays.

Reliability:

The system will be reliable as the user is confirmed that no invalid moves will be performed.

Main Flow

* User pressed a piece.
* User clicked the particular selected piece and then click on the empty box where the user wants to place that particular piece.
* The system will check that position where the user has dropped the piece.
* If at the new position of the piece there is already a piece then the piece which was dropped will come to its original position.
* if at the new position there exist no piece and if the move of the piece is according to the rules of checkers given at the end of the document. Then the piece will be placed at this new position.
* If the move of the piece is invalid then the piece will come to its original position.
* If no piece left then the other player is declared winner.
* If none of player can move then it is a draw.
* If user press “resign” then the other player is declared winner.

GUIs

IMAGE

Features

* Two players will play on screen.
* The state of the game can be saved, and the game can be continued.
* Both versions of the game will be playable on the main screen.
* Players will be able to click and point the pieces.
* Players will be able to change the theme of the app.
* Players will be able to play live over a local network.

References

<https://en.wikipedia.org/wiki/Checkers>