Blokus Vision Document

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Contents

Introduction:

In this project, we're plan to create a computerized version of the Blokus boad game. The game will allow 2, 3 or 4 players to play at various difficulties, and it will allow players to save their progress.

Problem Statement

At the time, there isn't a way for people to play Blokus without having the physical game. The proposed game will let people to enjoy the game of Blokus while only needing a computer. It will play just like the real game, allowing 2 player, 3 player, and 4 player games, playing versus the computer, checking that the rules are followed, and saving the game. This will allow players to enjoy the game as if they physically had it, playing versus the computer will make it possible for a single person to play, and saving the game let players continue their game at a later session.

Stakeholders & Key Interests

Stakeholders	Key Interests
Players	Play the game of Blokus
Computer Player	Goes against the human player/s
Group 10 Members	Maintenance of the system, instructing players
Spectator	Observes the gameplay, views scores
Customers	Can purchase the game
Advertising companies	Market the game to people
Potential Buyers	May potentially want to buy rights to the game

User & User Level Goals

Users	Goals
Player	Start the game, choose a difficulty, choose a color, choose number of players, choose the number of human players, , choose aid for visual deficiency, make a move, rotate a piece, view a hint, ability to disable hints, open the instructions file, save the game session, load a game session, reset the game, pause the game, view the available pieces, view the scores,
Computer Player	Chooses a random color, waits for turn, makes legal move, pick up from previously saved session, stop making moves when game is finished
Group 10 Members	Modify the source code, provide instructions to run the game, provide gameplay instructions, provide tutorial,
Spectator	View the current game, view the score

Summary of System Features

- The system shall allow players to play a computerized version of the Blokus game.
- The system shall allow the first player to choose the number of players.
- The system shall allow the first player to choose the number of human players.
- The system shall allow the player to choose a difficulty.
- The system shall allow players to choose their color.
- The system shall allow the players to use aid for visual deficiency.
- The system shall allow the players to make legal moves.
- The system shall allow the players to rotate a piece.
- The system shall allow the player to view a hint for legal moves.
- The system shall allow the player to disable hints.
- The system shall allow the players to open the Blockus game instruction files.
- The system shall allow the player/s to save the current game session.
- The system shall allow the player/s to load a saved game session and resume playing.
- The system shall allow the player to pause the game.
- The system shall allow the player to reset the game.
- The system shall allow all players to view the available pieces.
- The system shall allow the players to view the scores.
- The system shall do rule checks to ensure game is being played correctly.
- The system shall allow the computer player to randomly choose a color.
- The system shall allow the computer player to wait for its turn.
- The system shall allow the computer player to make a legal move.
- The system shall allow the computer to keep playing from a previously saved game session.
- The system shall allow the computer to stop making moves after the game is finished.
- The system shall allow the developers to modify the source code.
- The system shall allow players to view a tutorial.
- The system shall allow players to view the score.

Project Risks

Creating a sufficiently competent computer player might prove to be difficult in the available time because of the number of pieces, their orientation. As well, the logic that will control the game will have to be carefully analyzed.

Glossary

Term	Definition & Information	Aliases
Visual aid	Visual aid for colorblind players that will allow them to fully enjoy the game	
Legal move	A move that will is within the bounds of the game rules	
Computer Player	A player that is controlled by the computer and plays against the human players	CPU
Hint	Provides a potential move that is legal to the player	
Score	The number of points a player has obtained throughout the game	Points
Difficulty	The level at which the computer player will play at	
Rotate	A piece will be rotated 90 degrees	
Game session	The current game that is being played	
Previously saved game session	Game that was saved on a previous game session and is resumed	