ACTORS AND THEIR GOALS

Actor: Player

Description: A person who plays the Blokus game through the user interface on a single machine.

Goals:

· Set up a new game with their preferred configuration (number of players, difficulty levels)
· Take turns placing pieces on the board following the game rules
· Rotate and flip pieces to find optimal placements
· View all available pieces and their placement options
· Receive hints on where to place pieces (if hint option is enabled)
· Distinguish between different players' pieces (including accommodation for color vision deficiency)
· Save the current game state to resume later
· Load a previously saved game to continue playing
· Understand when the game ends and view final scores
· Play strategically to maximize their score or minimize remaining pieces
· Compete against computer players of varying difficulty
· Pass their turn when unable to place any pieces
· Enjoy an engaging and fair gaming experience

Actor: Computer Player

Description:
A computer-controlled player that can operate at different difficulty levels, adjusting its strategy to suit beginner or experienced human players.

Goals:
• Take valid turns by placing pieces according to game rules
• Place pieces in legal positions that touch corners of same-color pieces
• Complete turns in reasonable time to maintain game flow
• Adjust decision-making complexity based on selected difficulty level
• At easier levels, make reasonable but non-optimal moves to support learning
• At harder levels, make optimal or near-optimal moves to maximize winning chances
• Strategically place larger pieces early when appropriate
• Block opponents from expanding territory when advantageous
• Maintain flexibility for future moves and avoid unnecessary self-blocking
• Plan several moves ahead at higher difficulty levels to optimize final score
• Aim to place all pieces when possible and achieve bonus conditions
• Provide an appropriate and engaging challenge for both novice and experienced human players