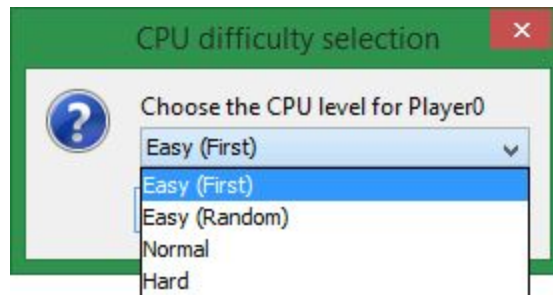


Running the program: Right click QuartoController in the project panel and run it.

Testing CPU option for Player0 or Player1

1. Load the program.
2. A an input prompt asking for Player0 and Player1 to input their names.
3. You can now leave it blank to specify that player to be controlled by an AI.
 - a. Entering CPU0 or CPU1 respectively will also accomplish this.
4. For this test, let only one player be a CPU
5. After the naming prompt, another prompt will appear giving options for the difficulty of the AI.
 - a. I recommend anything other than the HardAI, as it takes longer to run at times.
6. After choosing the difficulty, choose the Game Mode.
7. During a human player's turn, may moves as you normally would
8. During the CPU's turn, simply hit "End Turn" and the board should update with the CPU's move.
 - a. You can try selecting pieces and square during the CPU's turn, but most of the time the CPU will make it's own move, unless your select matches up by some coincidence.

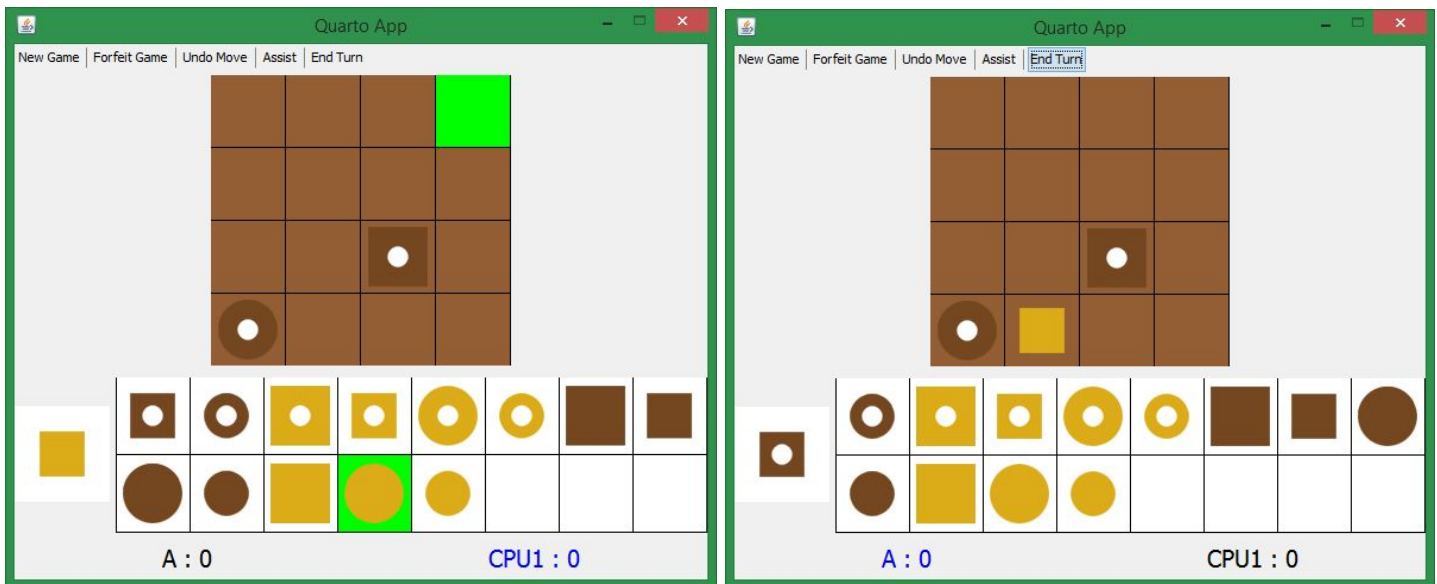


Testing CPU option both Player0 and Player1

1. Load the program.
2. Let both players be CPUs this time.
3. You should get two CPU difficulty prompts.
4. After you select the game mode, click “End Turn” each time you want to advance the game.
5. Each CPU will make their moves without you needing to select them.

Notes for using the HardAI:

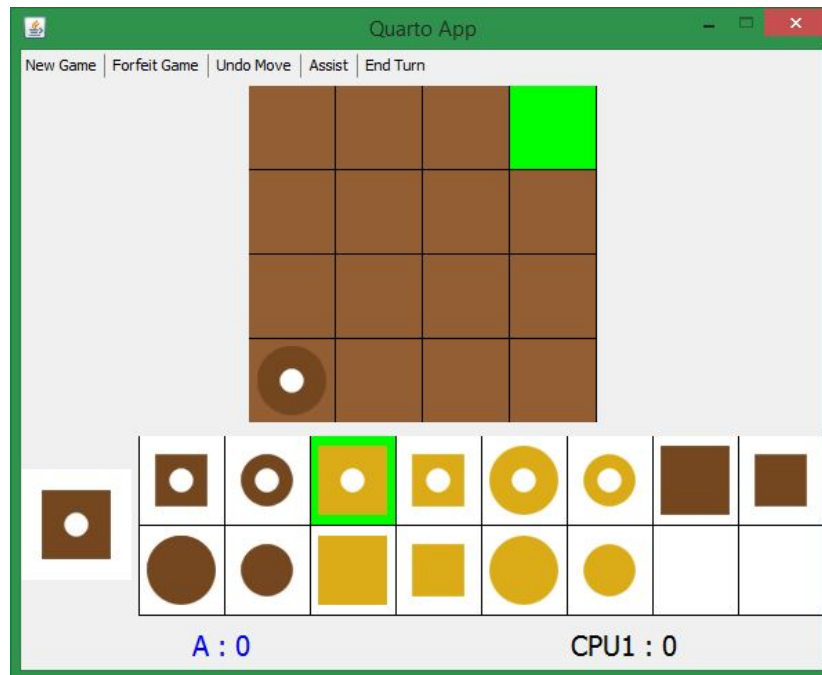
1. The HardAI uses a game tree search to compute a move, thus it takes longer (5-30 seconds) for it to actually think of a move.
2. On the first few moves, the depth of the search is limited due to the large number of possible moves in the beginning, so it may take longer
 - a. The heuristic the HardAI is suited for long-term games, so it is still possible for the NormalAI to beat it early in the game since the search depth is limited during early moves.



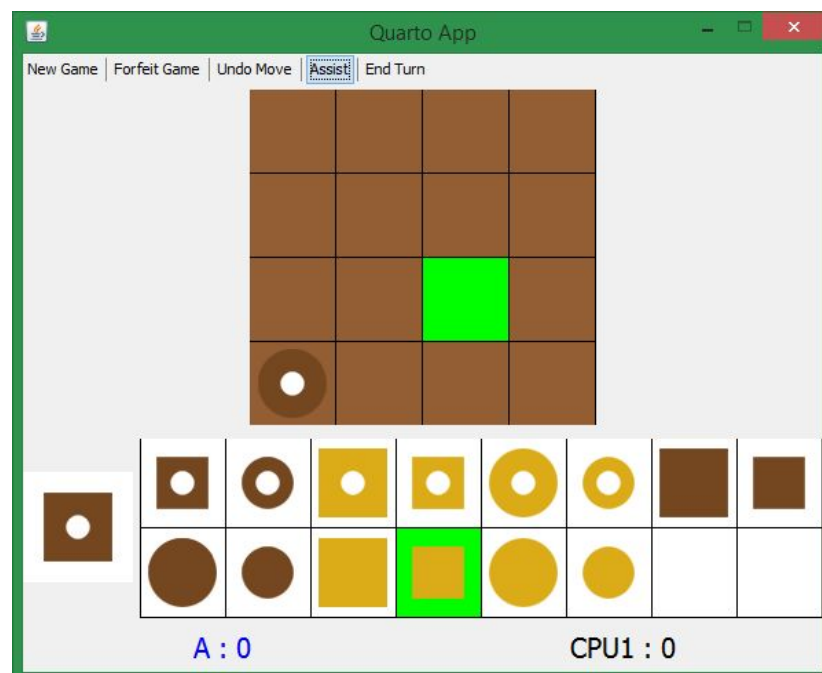
If you try to select moves for the CPU, they'll just be ignored.

Testing CPU Assist

1. Start the game with at least one human player.
2. During the human's turn, click the "Assist" button.
3. Squares and pieces should highlight on their own.
4. If you had click some before hand, they should change on their own.
 - a. It is still possible your selection may coincide with the CPUs
5. During a CPUs turn, the Assist Button should do nothing.



If you select your own moves first



Assist will overwrite them