COMP 2005 – Group 2

Use Case Name: "Take a turn"

Primary Actor: User(s)

Stakeholders and Interests:
  -*The user(s)*: player(s) should be presented with a clearly defined board and know what color robot piece belongs to them.
  -*The user(s):* player(s) should be able to easily tell whose turn it is.

Preconditions:
  -Game is setup properly and all 4 players (either user or computer) have been identified.

Success Guarantee(post-conditions):
  -The player who goes first is prompted to start the game.

Main Success Scenario:
  1. Randomly selected player 1 starts to play by selecting by randomly selecting a new target square
  2. Play whose turn it is decides on the path of shortest distance between their robot pieces starting point and the target square.
  3. Step 2 is repeated for each player.
  4. Once every player has chosen a path, the winner is decided based on whichever player chose the shortest path to the target square.
  5. The user who first chose the path then has to demonstrate that their chosen path is valid and can be done in the number of steps they declared.
  5. The winner of each round is awarded 1 point.
  6. Repeat step 1-5 until the first player is awarded 5 points.

Alternate Flows:
  1. *Error in user's path*
      -if the user who chose the path is invalid or took more moves than declared, the next player can then demonstrate their shortest path (return to step 2).
  2. *User chooses to save the game*
      -at any point the user has the ability to save and exit the game. If the user chooses to save the game the use case ends.

Exceptions:
  -If at any time the system is unable to properly determine which player is correct, no point shall be awarded.

Special Requirements:
  -The game should give a hint of where to first move the robot piece. This can be enabled/disabled by the user.
  -The user should be able to save a game and return to it later to complete it.

Open Issues:

- should every player be required to guess each round or should they just challenge if they believe they can beat the player who started the turn?
- should the option of hints be disabled by default in the hard difficulty?