Use Case Description 2: Take a Turn

Primary Actors: User.

Stakeholders and Interests:

1-) User: Wants to enter their route selection, alter the position of the robots on the game board.

2-) Computer: Wants to enter its route selection, alter the position of the robots on the game board.

Preconditions: The game is properly set up for the user and computer to play.

Success Guarantee (Postconditions): The user and computer players can perform a legal move on the board. The system updates the score of the player once the turn has ended.

Main Success Scenario:

1- The system reveals a main board with players on the corner of the main frame.

2- The system randomly selects the colour that needs to be reached

3- The system prompts all the players that the game has begun

4- All the computer players will be activated to make moves

5- user rings the bell before any other players.

6- System starts timer, user must have to enter the steps

7- system validates the input of the steps

8- User start moving his robot according to number of steps he mentioned. While this is happening, the system gives other player to ring the bell if they have any lower moves.

9- System validates the move the first player did in the given time. [Alt 1: Player performed an illegal move or exceeded the number of steps.]

10- After the moves have been validated, the system gives the point to the player that had the lowest moves and the turn has been terminated.

Alternative Flows:

Alt 1: Player performed an illegal move or exceeded the number of steps.

1-) The player with the second lowest bid shows the chosen path, and if correct, the system assigns a score to that player.

Alt 2: The players cannot place a bid for a specific token.

1-) The system waits for a period of time, if the time is exceeded, the system changes the location of the token.

Alt 3: No other player submitted a lower number of steps.

1-) After the system validates the move, the player's score is updated.

Exception:

If the user decides to abandon the game, the use case for Take a Turn is finished.

Special Requirements:

1-) The game should consider players with vision deficiency when displaying colors, images, texts.

2-) If the user decides to quit the game, the system should give a confirmation message indicating the user the option of saving or exiting the game.

3-) The agility of the computer AI should vary depending on the difficulty previously selected.

Open Cases:

1-) How to implement different behaviors for different difficulty AI's.

2-) How to determine the score and assign it to the respective player.

3-) How to implement the direction functionalities.