Fully Dressed Use Case – Take a Turn – Group 12.

Take a Turn

Primary Actors: User/Player

Stakeholders and Interests:

User/Player: The User wants to move the robot, accordingly, must be able to see the first possible move if hint is turned on in the settings, and wants to know the winner by the end of the game.

Preconditions:

1. The game has been set up properly and user has selected all the required options from the menu options during the 'set up a game' use case.

Success Guarantee (Postconditions):

1. The user can make a turn and the target chip is awarded to the user with least number of moves.

Main Success Scenario:

1. The system chooses a random target chip of a particular color and displays it to the user. [Alt1: Target chip is multi-colored]
2. The user's goal is to move the same colored robot as of the target chip to the same target space on the board in minimum number of moves.
3. The user bids the number of moves he/she thinks are required to move the robot from the current position to the target space.
4. The system starts the timer of 1 min.
5. The opponents (other user/computer) must make a bid under 1 min. [Alt2: None of the opponents make a bid]
6. The system stores the bids of the user as well as the opponents.
7. The system requests the lowest bidder to move the robots to the target space on the board. [Alt3: Two or more users have bid the same number]
8. The user clicks on one of the robots.
9. The system displays the hint where the robot can move. [Alt4: Hints are disabled by the user]
10. The user selects one of the valid slots on the board where he/she wants the robot to move.
11. The system keeps tracks of the number of times the user moves the robot.
12. The user lands the robot on the appropriate target space in the said number of bids. [Alt5: The user takes less/more moves than the mentioned bid]

13. The other user/computer clicks on the robot and moves the robot in the valid slot.
14. The system keeps track of the number of moves made by the other users.
15. The system awards the Target Chip to the user that reaches the target space in least number of moves. [Use case ends]

Alternative flows:

Alt1: Target chip is multi-colored

1. The user's goal is to move any colored robot to the same target space on the board in minimum number of moves.
2. Flow resumes at step 3

Alt2: None of the opponents make a bid

1. Flow moves to step 8

Alt3: Two or more users have same bid

1. The system randomly selects one of the lowest bidders to move the robots to the target space on the board.
2. Flow moves to step 8

Alt4: Hints are disabled by the user

1. The system does not show graphics where the robot can move.
2. Flow resumes at step 10

Alt5: The user takes the less/more moves than the mentioned bid

1. The system updates the bid of the user to the new bid.
2. Flow resumes at step 13.

Exceptions:

1. If at any time, the user clicks on the pause button, the system shows the option to save the game, resume the game or quit the game.

Special requirements:

1. If at any time, the game is closed unexpectedly, the system tries to save the game, so the user can continue playing in the next session.

Open Issues:

1. Does the system have enough space on the hard drive to update the changes or save the game?
2. What if the user takes very long time to enter the first bid?