

Fully Dressed Use Case – Move A Robot – Group 12

Primary Actors:	User/Player
Stakeholders and Interests:	User/Player – The user wants to be able to select a piece and then choose a direction in which to move it and have to move to the correct location. Player also wants to be able to deselect piece in case where they change their mind
Preconditions:	The game has been properly installed, a game has been started and the board is loaded.
Success Guarantee:	The correct robot moves to the correct spot.

Main Success Scenario:

- 1) The game displays the board with the current positions of the robots and the goal tile marked with their symbols.
- 2) The user selects a tile with a robot
 - a. Alt 1: Tile without robot is selected
- 3) The Game gives indication that the selected tile is selected
 - a. Alt 2: User has Hints Enabled
- 4) The User selects a tile in whichever direction they want the robot to move
 - a. Alt 3: Tile with a robot is selected
 - b. Alt 4: Tile that is not on the same row or column is selected
- 5) The game moves the robot in the selected direction until it hits a barrier, robot, or the edge of the board
 - a. Alt5: Robot hit a diagonal piece
 - b. Alt 6: Robot is moved onto goal tile

Alternative Flows:

Alt 1: Tile Without a Robot is Selected

- 1) The game does not indicate that the tile is selected nor selects a tile or robot
- 2) Flow Resumes at Main Success Scenario Step 1

Alt 2: User has Hints Enabled

- 1) The Game figures out a desired path from robots' current position
- 2) The Game indicates which direction the user should move their robot
- 3) Flow Resumes at Main Success Scenario Step 4

Alt 3: Tile with a Robot is Selected

- 1) The Game deselects the already selected robot
- 2) The Game removes the indication that the previous selected robot is selected
- 3) The Game selects the robot on the newly selected tile

- 4) The Game gives indication that the newly selected robot is selected
- 5) Flow Resumes at Main Success Scenario Step 1

Alt 4: Tile is Not on the Same Row or Column is Selected

- 1) The Game deselects the already selected robot
- 2) The Game removes the indication that the previous selected robot is selected
- 3) Flow Resumes at Main Success Scenario Step 1

Alt 5: Robot Hit a Diagonal Piece

- 1) The Game continues to move the robot in the new direction (as indicated by the diagonal piece).
- 2) The Game stops the piece when at the appropriate spot (when it hits a barrier, robot, or the edge of the board)
- 3) End Use Case

Alt 6: Robot is Moved onto Goal Tile

- 1) The Game congratulates player
- 2) The Game indicates how many moves it took for player to reach the goal tile
- 3) The Game resets the Robots positions
- 4) End Use Case

Exceptions:

If system can't move piece given valid selection, will inform user of the issue and place the robot back at where it was before it was moved.

Special Requirements:

When indicating tiles, must follow colour palette selection

Open Issues:

- 1) If the user selects and deselects their robot so many times, are they struggling to make a move or are they thinking about possible moves? Should we give a help box popup indicating how to move the robot?
- 2) The physical board has pieces to indicate where the robots were originally. Should we have similar pieces/indicators so that other players can keep thinking about their solution?
- 3) Should we provide an undo button for undoing mistakes?