Use case of UpdateGameBoard

Actor: gameMaster

Description: Keep track of every attack, movement, turn, mouse click

Precondition: whenever there is attack action, movement action, turn action, mouse click action happens.

Primary scenario

Before the game starts

1. display the the beginning interface, including the game mode selection, player selection, player color selection, all player’s statics, start and finish button.
2. If the start button is clicked, it goes to populate the screen and load the game according to the number of players. If the finish button is clicked, terminate the game.

1 react to movement action

(1) display the game board and player and the statics of the robot who is playing.

(2) when a movement action succeeds, the robot will spin so that the front of the robot towards the destination and move one space in the direction. And then update the statistics of the player and the the visible fields.

(3) When the movement action failed, it shows a dialogue prompting the player that the player the action failed and give the specific reason.

2 react to attack action

(1) when an attack action succeeds, there will a bullet-similar object appear and starts from the the space of the attacker, move in the direction of the destination and ends in the destination space. When the attack failed, it will prompt that the attack is out of range.

(2) If the attack action causes any damage, it shows a prompts telling the player the action succeeds and update the statics of the attacker and the robot under attack.

3. react to mouse click

(1) when a cell in the game board is clicked, if the cell is in the range of current robot, it will prompt two buttons. One shows move, another shows attack. Otherwise it doesn’t respond.

(2) When the attack button is clicked, it will invoke attack action. When the move action is clicked, it will invoke the movement action. When out side of the the two buttons area is clicked, the two button will disappear and the player can choose again.

4. react to switch button

Whenever the switch button is clicked, the game board will load next robot’s statistics.

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if the esc key is pressed during the game, there will be two buttons appear. One is finish button and another is continue button. When the finish button is clicked, the game terminates, when the continue button is clicked, it goes back the game mode.

After the game

Update the all robot’s statistics. And display the winner and loser.

Postcondition: the screen responds accordingly.

