

Minotaur Behavioral Contract: Move

Precondition:

1. The position the worker moves to must be in the 5*5 grid boundary
2. The position the worker moves to must be in the adjacent of the worker's position
3. The position the worker moves to must be unoccupied or the position is occupied by opponent's worker who can be forced one space straight backward to an unoccupied space at any level.
4. The original position must contain a worker
5. The height difference between worker's original position and new position must equal to or less than one
6. It is the player's turn to move worker
7. The worker to be moved must belong to the player
8. If the opponent is Athena, it does not move up last time

Postcondition:

1. The original position the worker in becomes unoccupied
2. The new position the worker moves to become occupied
3. If opponent's worker is forced one space straight backward, the new position the opponent's worker in become occupied.
4. If the worker stand on the third floor, the player win the game and game is over.