

Behavioral Contract

Operation: the user attempts to move a worker

Pre-conditions:

- The game has been setup (both players have specified the initial positions for their two workers, and God power has been chosen if in God mode)
- The game is not ended
- The next action is “moving his/her worker” for that user

Post-conditions:

Two possible outcomes could happen

- The system inspected the move is invalid, this can happen due to:
 - o The position that the user wants to move its worker is out of the board
 - o The position that the user wants to move already has another worker
 - o The position has a tower with a dome
 - o The position has a tower with more than 1 levels higher than the worker's current position

In this scenario, the move will not be performed, and the user will be informed that the intended move operation is not valid. The “Game state” will not change and will not be recorded in the game history.

- The move is valid, and the worker is moved to the new position. As a result, a new state is created with the worker's position updated to the new position, and the old state is stored into the game history.