

Behavioral Contract for Moving a Worker

- Operation: `playerMove(int x, int y)`
- Cross References: Use case is when player tries to move a worker.
- Preconditions:
 - Game Initialized: The game must be initialized with two players, each having two workers placed on the grid.
 - Valid Turn: It must be the turn of the player attempting the move. Only the current player can move a worker.
 - Worker Selection: A worker belonging to the current player must have been selected based on its coordinates on the grid.
 - Target Cell Validity: The target cell for the worker's move must be within the grid bounds (0 to 4 for both x and y in a 5x5 grid).
 - Unoccupied Cell: The target cell must not be occupied by another worker.
 - Adjacent Move to no Dome Tower: The target cell must be adjacent to the worker's current cell and the move should not involve climbing more than one level, the cell should now have a dome.
- Postconditions:
 - Worker's New Position: If the move is valid, the worker's position is updated to the target cell.
 - Cell Occupancy Update: The target cell is now occupied by the worker, and the worker's previous cell is vacated.
 - Game State Update: Depending on the game's rules, the move might trigger a change in the game state, such as checking for a win condition or changing the turn to the next player if the move ends the current player's turn.