

## **Guessing Game System Description**

This game is a multi-player game where players take turns trying to guess “hot spots” on a 2-dimensional board. The board will consist of a 2 dimensional grid of 0’s and 1’s where every 1 is a hot spot. Players will take turns guessing until all the hot spots have been found. When a hot spot is found that position of the grid should become a 0 so multiple players cannot find the same hot spot. When the game is started the system will prompt for the number of players, the dimensions of the grid and the number of hot spots. The system will then create the players (prompting for the name of each player) and create the game board with the grid. Players will then take turns making guesses. For each guess the player will enter a row and column for their guess. They will then be told if that position of the grid is a hot spot or not. If it is not a hot spot, they will also be told how many steps it is to the nearest hot spot (on a straight line going north/south or east/west, no diagonals). Note that they would not be told which direction the hot spot is. Before they make their guess the player will have the option of seeing what guesses they have already made. For each guess it would show them the position they guessed (row and column), if it was successful or not, and how far it was from a hot spot. After each round, the system will show how many hot spots each player has found. When all the hot spots have been found, the system will check all players to see who has found the most hot spots and will tell the players who the winner is.