Initial Requirements

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| **Item** | **Possible Points** | **Comments** | **Score** |
| Issues identified | 5 | Still has a number of issues, and apparently didn’t look for issues beyond those I identified. | 2.5 |
| Requirements fixed | 6 | Generally fixed, but did leave errors. | 4.5 |
| Style, grammar, spelling | 2 |  | 1.5 |
| Group work: time logging, meetings | 2 |  | 2 |
| |  |  |  | | --- | --- | --- | | **Meeting** | **Date** | **Present & Contributing** | | Initial discussion | 2/22/2012 | Zach Gerner, Dillon Hiatt, Harry Schultz | | Final Review | 2/23/2012 | Zach Gerner, Harry Schultz, Dillon Hiatt, Chris Wald | | | | |
| Total | 15 |  | 10.5 |
| |  |  |  | | --- | --- | --- | | **Issue** | **Requirements with Issue** | **Discussion** | | Understandable | G1.2, G1.5 |  | | Nonprescriptive |  |  | | Correct | CP1 |  | | Complete | IO5, G4 |  | | Concise | CP2.2.1 |  | | Precise | IO5, IO5.2, G2 |  | | Clear | IO3 |  | | Unambiguous | G1.2 |  | | Consistent |  |  | | Traceable |  |  | | Modifiable |  |  | | Testable | IO1, IO2 |  | | Feasible | IO1, IO2 |  | | | | |

IO: Input / Output and Interface

G: Gameplay

CP: Computer Player

R: Miscellaneous

IO - 1 : The program shall prompt the user to start the game while displaying a splash screen on start-up.

IO - 2 : The program shall display two one dimensional square grids to the user.

IO - 3.1 : One grid shall display the user’s buildings and the computer’s guesses while the other displays the user’s guesses.

IO - 3.2 : The grids shall be 10 by 10 squares.

IO - 4 : The user shall guess where buildings are by clicking on the top grid.

IO - 5 : On completion of a match, the program shall prompt the user to either play again or quit.

G - 1 : The user shall be prompted to place their buildings on their bottom grid.

G - 1.1 : The buildings cannot overlap each other

G - 1.2 : The user will place one five unit building, one four unit building, two three unit long buildings, and one two unit building.

G - 1.3 : All of the user's buildings must be placed.

G - 1.4 : The user shall be able to orient their buildings either horizontally or vertically.

G - 1.5 : The user shall only be able to place and move their buildings in the placement phase.

G - 2 : The user shall guess where the opponent’s buildings are hidden by selecting a square on the top grid.

G - 2.1 : The program shan’t allow the user to select the same grid tile twice during a game.

G - 2.2 : The program shall mark the selected grid tile with a color corresponding to the location of the opponents buildings.

G - 2.2.1 : If the selected tile corresponds to a building on the opponents grid it shall be marked a color.

G - 2.2.2 : If the selected tile corresponds to open space on the opponents grid it shall be marked with a different color than G - 2.2.1.

G - 2.3 : When all tiles of an opponent’s building are marked, the program shall mark those tiles a different color than used in G – 2.2.

G - 3 : The player's guess shall either be a hit or a miss.

G - 4 : The game shall be played between one human user and one AI computer player.

G - 5 : The players shall be prompted to select a face of a coin and the computer shall randomly generate a coinflip.

G - 6 : The player shall go first if the coin side they selected matches the randomly generated side.

G - 7 : The user and computer shall alternate turns.

G - 8 : The game shall end when all of one player’s buildings have been uncovered.

G - 8.1 : The player who uncovered all of the opponents buildings is victorious.

CP - 1 : The computer player shall semi-randomly guess a tile that is not within two units of an already guessed tile, until a hit is acquired.

CP - 2 : Once a “hit” is acquired the computer player shall begin guessing to the north, east, south, and west of the “hit”

CP - 2.1 : Guessing around the original “hit” shall stop once a second hit is acquired.

CP - 2.2 : If the “hit” is against an edge then the first guesses shall be along that edge (e.g. if the hit is on the northern edge the first two guesses shall be east and west) unless the majority of the found buildings are oriented parallel to the edge.

CP - 3 : Once the orientation of the building can be determined (by two “hits”) the computer player shall continue guessing in that direction.

CP - 3.1 : If a “miss” is acquired before an entire building is found the next guess shall be one off from the original “hit” in the opposite direction of the preceding hits (if possible).

CP - 4 : If an entire building is uncovered the computer player shall begin guessing randomly again.

CP - 5 : If two “misses” are acquired after attempting to uncover a building the computer player shall begin guessing randomly again.