**CAB201 Programming Principles - Semester 2, 2018**

**Statement of Completeness for Major Project – Space Race Game**

**This statement of completeness will need to *accurately* state the functionality which has been implemented. There will be a penalty of 5 marks (loss of 5 marks) for a non-submitted statement of completeness, and a penalty of 1/2 mark for each inaccurate statement to a maximum of 4 marks.**

**Student Name(s)/Student ID(s):**

*Phuoc Nguyen – N9951733*

**In the following section, you are required to mark which functionality you have implemented. In the column on the right leave ‘Y’ and delete ‘N’ where you have completed this functionality or leave ‘N’ and delete ‘Y’ where you have not. Please fill in any additional text boxes requested, and please note any limitations or bugs in the box at the end of each section. You may expand the table if you need more room for comments.**

|  |  |  |
| --- | --- | --- |
| **Console Interface Functionality** | | |
|  | Input number of players handles out of range values  Also handles non-numeric input including no input | Y  Y |
| Plays one round at a time when prompted | Y |
| Outputs all player’s information at end of each round | Y |
| A player who runs out of fuel does not continue to play in any further rounds | Y |
| Outputs an appropriate message if all players run out of fuel before the game is over | Y |
| Outputs who has finished the game | Y |
| Outputs all player’s information at end of a game | Y |
| Plays multiple games without any logical errors and/or run-time errors | Y |
| User can enter either “Y” or “y” to play another game | Y |
| User enters any other character than “Y” or “y” game is terminated.  Game terminates gracefully with a final message | Y  Y |
| **Comments** | *No limitations, bugs, logical errors, and/or run-time errors when testing was conducted.* | |

|  |  |  |
| --- | --- | --- |
| **GUI Interface Functionality** | | |
|  | At Start of Game – Right Panel has   * ComboBox shows 6 * Names in DataGridView are editable * Other Columns in DataGridView read only * GroupBox contains 2 Radio Buttons all enabled * Exit Button enabled & Other buttons not enabled | Y  Y  Y  Y  Y |
| At Start of Game – Left Panel has   * 6 tokens on Start Square * 8 Wormhole squares * 8 Blackhole squares * Squares numbered alternate direction on each row | Y  Y  Y  Y |
| Single Step Mode implemented correctly | Y |
| Selecting any number of players other than 6, results in correct number of tokens displayed on the Start Square | Y |
| After each round, a token’s position on GUI board agrees with Square number of that token in the DataGridView | Y |
| A player who runs out of fuel does not continue to play in any further rounds | Y |
| Outputs an appropriate message if all players run out of fuel before the game is over | Y |
| At end of a game   * MessageBox lists who finished * Roll Dice button not enabled * Reset Game button enabled | Y  Y  Y |
| Reset Game button   * Enabled at end of every round * When clicked returns game to “Starting” condition | Y  Y |
| Exit button   * always enabled at start and end of any round * when clicked game terminates immediately | Y  Y |
| Click either radio button   * enables Roll Dice button * GroupBox not enabled * Neither radio button is checked | Y  Y  Y |
| Clicking Yes, game plays Single Step Mode | Y |
| Clicking No, game plays a round | Y |
| **Comments** | *No limitations, bugs, logical errors, and/or run-time errors when testing was conducted.* | |

|  |  |  |
| --- | --- | --- |
| **Addendum change to Roll() in Die Class (Die.cs)** | | |
|
|  | Changes to Roll() in Die.cs implemented | Y |
| Console Game plays correctly use supplied datafile  Results are same as provided | Y  Y |
| GUI Game plays correctly use supplied datafile  Results are same as provided | Y  Y |
| **Comments** | *No limitations, bugs, logical errors, and/or run-time errors when testing was conducted.* | |

|  |  |  |
| --- | --- | --- |
| **Changes to Specification of the classes and/or supplied methods** | | |
|
|  | Did you make any changes to the specification of any class | Y |
| Did you make any changes to the specification of any supplied method | N |
| **Changes to specification classes**:  Additional methods, attributes and properties were added to satisfy the ‘each function does one thing’ criteria. All these methods, attributes and properties are marked by ‘[OC]’ and their purpose have been documented via comments.  Examples of these methods, attributes and properties:   * The GUIPlayOneTurn() method found in the class ‘SpaceRaceForm’. * The gameState attribute and GameState property found in the class ‘SpaceRaceGame’.   No changes to the specification supplied methods were made. | | |

Disclaimer: This was done to the best of my knowledge. If inaccuracies are found, then it is simply due to my lack of understanding – I was not intentionally lying.