**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):**

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**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.**

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| --- | --- | --- |
| **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** | Have not relied on AtFinish( ) or HasPower( ) properties as they always return false when called. Have used RocketFuel property instead to test for end conditions relating to fuel. | |

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| **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 | N |
| 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 until a new game commences * Neither radio button is checked at start of a game | Y  Y  Y |
| Clicking Yes, game plays Single Step Mode | N |
| Clicking No, game plays a round | Y |
| **Comments** | Player data grid view adds or removes rows based on number of players selected.  Added additional labels above group box and Roll Dice button for clarity to new users.  Changes to number of players will only be committed once the user decides on an option from the group box. This was done so that player information isn’t reset everytime a round is played.  If user decides to edit names of players in the data grid view, these names will be reset to the names already specified in the Game Logic Class. | |

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| **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** |  | |

|  |  |  |
| --- | --- | --- |
| **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 |
| For the Play( ) method in the Player Class, have enabled it so that if a player exceeds the final square, their Position is changed to be the final square.  Have commented out the constants used in FindDestSquare( ) method in Board class. | | |