Assignment softcopy submission due:

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| --- | --- | --- |
| Section | Date | Time |
| 5 | 2-Dec-2018(Sunday) | 11:59PM |
| 6 | 2-Dec-2018(Sunday) | 11:59PM |

Table 1: Due date and time for Assignment 3

Problem Specification: (Tic-Tac-Toe)

1. Create a turn based 2-player Tic-Tac-Toe game in C#. No AI/Computer player needs to be implemented.
2. Use common controls for creating the game. PictureBox is preferred.
3. The game starts with an X.
4. If the game concludes with a winner show message, e.g., “X wins/O wins”.
5. If it is a “Tie” show message also.
6. After ending the game, initialize the game so that another game can be played. Note: don’t use Application.Restart(). Initialize manually.
7. You must use images for X and O. Load images through resources. Don’t use absolute/relative paths of images in your code.
8. X and O can be placed on an empty cell only. Clicking on a preoccupied cell will not change its image.
9. A video is uploaded as well to give you a better idea.
10. **This specification assumes your project is created as a Windows Forms App. However, if you want you may make a MonoGame Windows Project as well. Please make sure all equivalent requirements are fulfilled. Check the video demo carefully.**

Note: Use your own imagination for designing the user interface. The video is given only to clarify the requirement. You don’t have to make it exactly the same. Just make sure to use images for each of the 9 cells.

Softcopy Submission Requirements

1. Name the project as follows:

*FirstNameInitialLastName*Assignment*Assignmentnumber*

Replace *FirstNameInitial* and *LastName* based on your name. (Example: if the

students’ names are Jason Bourne, for Assignment 3, the name of the project

will be JBourneAssignment3) . Be careful about assignment number.

1. Make a zip file of your Solution
2. Make sure the zip file also fulfills the naming rule mentioned at point 1.
3. Log in to your D2L account.
4. Select the course PROG2370, your section and locate the Assignment’s dropbox.
5. Upload the zip file.

Assignment 3 Marking Sheet

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(please fill your name)**

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| --- | --- |
| **Spec** | **Marks** |
| (Attractive/Colorful) User Interface Design | /20 |
| Game starts with an X | /10 |
| Game shows Winning message (e.g., X wins/O wins) at game end. | /25 |
| Game shows Tie message if there is no winner at game end | /15 |
| When one game completes, it initializes to starting – ready to be played again automatically. | /20 |
| X or O can only be placed in a free slot | /10 |
| **Total** | **\_\_\_\_\_\_\_\_\_\_\_\_/100** |

**Deduction:**

|  |  |
| --- | --- |
| Runtime errors | 15 x \_\_\_\_\_\_\_\_\_\_\_\_ = |
| Assignment Standard | 5 x \_\_\_\_\_\_\_\_\_\_\_\_ =\_\_\_\_\_\_\_\_/20 |
| Programming Standard | 1 x \_\_\_\_\_\_\_\_\_\_\_\_ =\_\_\_\_\_\_\_\_/20 |
| Late Submission | 20 x\_\_\_\_\_\_\_\_\_\_\_\_\_= |
| Image not used | 10 |
| Absolute/Relative paths used instead of loading from resources. | 5 |
| **Total Deduction** |  |

|  |  |
| --- | --- |
| **Total Marks** |  |