COM S/SE 319 : Software Construction and User Interfaces
Fall 2018

HW 5

[Total Points: 50]

Assignment Due: **Wednesday, October 17, 2018, 11:59 PM**

[N.B.:5% penalty per day up to maximum of 7 days after **October 17,**, 2018]

Task:

Implement a **Turn Based human vs human tic-tac-toe game** with suitable **GUI**. Typically **Tic-tac-toe** (also known as noughts and crosses or **X**s and **O**s) is a paper-and-pencil game for two players, **X** and **O**, who take turns marking the spaces in a **3×3 grid**. The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row wins the game. The given example of the game is won by the first player, X which has been illustrated in the below figure 1 : (More about Tic-tac-toe:https://en.wikipedia.org/wiki/Tic-tac-toe)

Figure 1: Tic-tac-toe Game

You have to implement this task using **Java** code and **JavaFX** GUI components.

Check list:

1. Use the provided images (included in the zip file) for marking **X** and **O**. [**5 points**]

2. Show which player's turn while playing the game.   [**5 points**]

3. Click on the blank cell to mark **X** or **O** (unmarked cell should be checked and marked cell can not be marked again). **[10 points]**

4. When one player wins, stop the game and show "Congratulations, **X** win the game" or "Congratulations, **O** win the game" in your designed GUI.   [**10 points**]

5. When all cells are filled in and no one wins, stop the game and show "**Draw**". [**10 points**]

6. When the game is over, show the option to restart a new game. [**5 points**]

<u>What to Submit:</u>

Submit via Canvas a **compressed file (.zip)** [rename it with your LAST NAME] containing the following:

- All of your **source code** (e.g., **.java** files).   **[Task 1= 45 Points]**
- **README** file explaining how to compile and run your program & a **Report** (.docx or .pdf) describing your solution approach and **screenshots** of every required output. **[5 points]**.

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