**C# Programming**

**Lab 3:**

**Due date:** as indicated on Moodle

***Could work individually or in groups of 2***

**Objectives:**

* Create a fully functioning C# Project
* Use methods
* Handle the right-click event
* Be an expert in playing tic-tac-toe ☺
* Develop an “amusing” AI engine: It should not be a bullet proof engine nor a stupid one.

**Instructions:**

1. Create a C# tic-tac-toe game. For the rules of the game, please check <http://en.wikipedia.org/wiki/Tic-tac-toe>

**Special requirements:**

1. When the user right click’s on a spot, an image with an ! mark should be displayed on that spot
2. The program should keep track of the number of ties, wins, and losses for both X and O and display them somewhere on the form.
3. When the user closes the games and runs it again, the number of wins, ties and losses are reset to 0’s (i.e. no need to save them on a file).
4. We need to have one button for undo. That button when clicked, it reverts the last move “**ONLY**” and grays out itself.
5. Must have a GUI control to toggle back and force between English and French.
6. The program should support two modes:
   1. Human to human
   2. Human to computer
7. The level of intelligence of the computer engine should be configurable. Beginner, intermediate, expert is one way of implement it. Or maybe a spinner control where 0 is not so smart and 100 is a genius☺
8. The code MUST be divided into methods following the guidelines and principles discussed in class.
9. Make sure to minimize the use of global variables.
10. Project name, control names, variable names must be meaningful.
11. Internal documentation is a must.
12. Once you are done, you need to **zip the whole folder of the project** and upload it to Moodle.

**Have fun ☺**