**PROJECT – part 1 / 2022**

## Description

For the first part of this project, you are being asked to implement the basics for an American Checkers game.

We will use a board of 8x8, starting with three lines of pieces. We will represent the board using a simple text representation:

1 2 3 4 5 6 7 8

A [ ] ( ) [ ] ( ) [ ] ( ) [ ] ( )

B ( ) [ ] ( ) [ ] ( ) [ ] ( ) [ ]

C [ ] ( ) [ ] ( ) [ ] ( ) [ ] ( )

D ( ) [ ] ( ) [ ] ( ) [ ] ( ) [ ]

E [ ] ( ) [ ] ( ) [ ] ( ) [ ] ( )

F (x) [ ] (x) [ ] (x) [ ] (x) [ ]

G [ ] (x) [ ] (x) [ ] (x) [ ] (x)

H (x) [ ] (x) [ ] (x) [ ] (x) [ ]

The interface will ask the user which piece the player wants to move, and then the destination. The positions are specified by their line and column coordinates. For example:

PIECE TO MOVE: G2

DESTINATION: E4

The program should verify that source and destination are valid and give an appropriate message if it is not the case. Multiple jumps are allowed. After the move the program must redraw the board with the updated configuration.

If no more moves are possible, the program should indicate so.

## Evaluation

For this assignment, you must use Visual Studio IDE and program in C#.

For the evaluation, the program MUST work as expected; if that is not the case, we will consider whether it is acceptable, depending on the level of malfunction.

You will be evaluated on the use of:

* *Meaningful Names*. Specifically, the following aspects will be taken into consideration:
* Intention-revealing names.
* Avoid disinformation.
* Make meaningfull distinctions.
* Use pronounceable names.
* Use searchable names.
* Avoid encodings.
* Avoid a personal mental mapping.
* Name correctly your classes.
* Name correctly your methods.
* Do not try to be cute.
* Pick one word per concept.
* Do not pun.
* Use solution domain names.
* Use problem domain names.
* Add meaningful context.
* Don’t add gratuitous context.
* *Coding Standard*. The application of the standard for C# provided in in this course. The subcategories being considered are:
  + Naming conventions
  + Coding style
  + Language usage
* *Comments*. The correct use of comments in your code. Neither we are saying you must put comments in your code, nor that it is bad to use them; you must decide when they are useful and necessary.

For each problem encountered in the different categories, points will be deducted from your grade according to the following table:

* 0,5 for first problem
* 0,3 for second problem
* 0,2 for third problem
* 0,1 for fourth problem and followings

A maximum of 1,5 points will be deducted for each category. The minimum grade is, of course, 1,0.

The work is individual. Upload your project with everything necessary for compiling and running it, as well as instructions on how to use/start it.

Deadline: 2022 04 18 23:59