Things to know and remember

1. Workspace is folder. Create the Workspace on the Desktop or your H: drive
2. Project is a subfolder inside a Workspace
3. Inside every PROJECT folder, you should have src and bin subfolders
4. No partial points will be given unless mentioned.

**Workspace: PA1**

**Project name: ProgAssignment1**

Problem 1 (35 marks)

Deductions

Descriptive variable names: -1 for each variable (if not followed)

Proper indentation: -3 (if not followed)

Wrong classname: -1

Class name: Checkers

Start date: March 5, 2020

Deadline: March 16 (11:59 pm)

# of developers: 1 - 2 students (max)

Application: Write a two-player **console-based** checker game.

INSTRUCTIONS

“The goal of Checkers, or "Draughts", is to remove all your opponent's pieces from the board. Use coordinates (row and column) to move your pieces around the board. Your pieces can only move forward one tile diagonally.

To capture an opponent's piece and remove it from the board, you need to "jump" over their piece with one of yours. **Jumping is mandatory**, which means you have to jump with one of your pieces if you are able to.

If one of your pieces gets to the opposite side of the board (your opponent's back row), it will turn into a King. **Kings** can move and jump diagonally in any direction (remember, your regular pieces can only move forward). **Kings** can even combine jumps forward and backward on the same turn!

You win by removing all your opponent's pieces from the board, or if your opponent can't make a move. “ - Reference site: <https://www.coolmathgames.com/0-checkers>

Additional requirements

1. User friendly and intuitive 5 marks
2. Able to determine and display the winner 5 marks
3. Program design 5 marks
   1. Don’t put all your codes in one method
   2. Create several methods to support the different functionalities such as but not limited to displaying the board, player move, determining the winner, etc…
   3. Much as possible, limit the method to one purpose
4. Display start and end time 3 marks
5. How to Play the Game instructions 2 marks
   1. Clear and concise
6. Able to save the following data into a text file 5 marks
   1. Names of the players
   2. Who won
   3. Date and time
   4. format: March 1, 2020 – Jack (won) vs Debra – 6:20 to 6:50
      1. AM/PM or 24hr (your choice)
7. Able to show previous winners 3 marks
   1. Reads the data from a file (related to #6)
8. Working Menu 2 marks
9. Developer(s)
10. Instruction on how to play
11. Play
12. Show Winners (related to #7)
13. Exit
14. Presentation 5 marks

You might be asked to explain and show your work during your lab hours (March 17 or 19).

If you are absent, you would get 0/5 for presentation.

If you did not submit, then there’s nothing to present (0/5 presentation).

Submission

1. Zip and upload
2. If there are two developers, only one needs to submit. Do not forget to indicate the name of the developers in your code.