Assignment 2: Chess Game

Deadline: Wednesday 23rd 2pm

In this assignment you are asked to implement a game of chess.

The game should include:

- A board (8x8 grid) with 64 squares (32 white and 32 black)
- Two players with names, color of their pieces and eaten pieces
- Chess pieces and their moves
    - Among the other characteristics don't forget their color (white or black)
- and the fact that each piece moves in a different way.
- Chess rules, including promotion, castle and en passant.
- Control for checks and checkmate.
- There is no need to check draws.

You should use the concepts introduced so far, encapsulation (*Material covered in the 08/10 lecture*), hierarchies, types and interfaces when appropriate.
(*Material covered in the 16/10 lecture*)

By the end, you should deliver a working chess game, where the users play in the same computer giving their moves as input each round.
(follow the Algebraic notation - https://en.wikipedia.org/wiki/Algebraic_notation_(chess))

When the game begins, the program should output the board with the pieces in their initial position. The board should be displayed in a fashion similar to the output of the Snakes and Ladders game from assignment 1.

Here is an example of the board at the start of the game:

[BT] [BN] [BB] [BQ] [BK] [BB] [BN] [BT]
[BP] [BP] [BP] [BP] [BP] [BP] [BP] [BP]
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[WP] [WP] [WP] [WP] [WP] [WP] [WP] [WP]
[WT] [WN] [WB] [WQ] [WK] [WB] [WN] [WT]

Where the first letter (B or W) stands for the color or the piece (Black or White)
and the second letter is the name of the piece:

P = Pawn
T = Tower
N = Knight
Q = Queen
K = King

At each turn, after the player inserted his/her move, the program must print and updated version of the board based on the new position of the pieces.