EE 580 Lab 8
Summer 2017 Nazarian Score:___/100

Student ID: _____ Name: _____

Assigned: Thursday, June 29th

Due: Friday, July 7th, at 11:59pm

Late submissions will be accepted only in the first two days after deadline with a maximum penalty of 15% per day: For each day, submissions between 12 and 1am: 2%, 1 and 2am: 4%, 2 and 3am: 8% and after 3am: 15%.

Notes:

- This lab is based on individual work. No collaboration (no discussions among classmates) is allowed. Please refer to the first lecture for the AI policies of USC and this course and in case of any questions or doubts contact the instructor.

OOP Intermediate: Reversi Game Part2

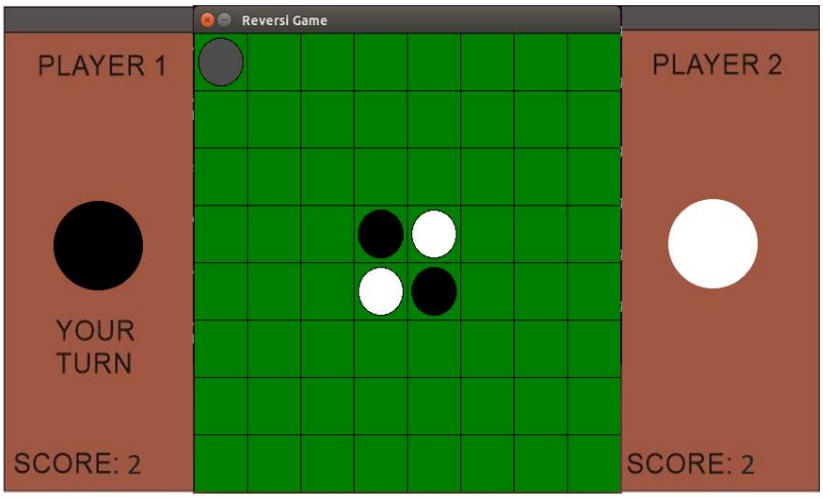
Modify the "reversi_game.py" that you have designed in lab6 to complete reversi game. The code you write in this lab will be used in future labs. Please refer to the following website for the rules of reverse game:

https://en.wikipedia.org/wiki/Reversi

Command format: python reversi_game.py

Requirements:

1. When it is the black side, the color of the movable piece is "gray30".
2. When it is the white side, the color of the movable piece is "gray70".
3. You must design a good "move" function so that you are able to move to any empty square.
4. The moveable piece should never overlap with any fixed piece. When you place the fixed piece, the moveable piece should immediately move to the next empty square.
5. The fixed piece can only be placed following the reversi game rules. E.g. black piece can only be places in such a position that there exists at least one straight (horizontal, vertical, or diagonal) occupied line between the new piece and another black piece, with one or more contiguous white pieces between them. White piece operates under the same rules.
6. You should be able to track scores for both players. Player 1 starts first.
7. Your start situation should match the following figure if player1 choose the black side.



8. You don't need to consider these corner cases, i.e., if one player cannot make a valid move, play passes back to the other player; when neither player can move, the game ends. You don't need to deal with the end-of-game situation. The reason is that it is hard for you to test these cases.
9. Do not install any additional packages except for what you have installed in prelab.

Submissions:

Submit one file "reversi_game.py" on black board.

Submission

1. Zip all the files you need to submit into a zip file named: "firstname_lastname_lab7".zip.
2. Your zip file should include all the coding parts the assignment asks for, and also a Readme.pdf.
3. In your Readme.pdf, include any information that you think the course staff, especially the grader should know while grading your assignment: references, any non-working part, any concerns, etc.
   a. Any non-working part should be clearly stated
   b. The citations should be done carefully and clearly, e.g.: "to write my code, lines 27 to 65, I used the Diijkstra's shortest path algorithm c++ code from the following website: www.SampleWebsite.com/..."
4. Use the provided BB submission link to submit your zip file for this assignment