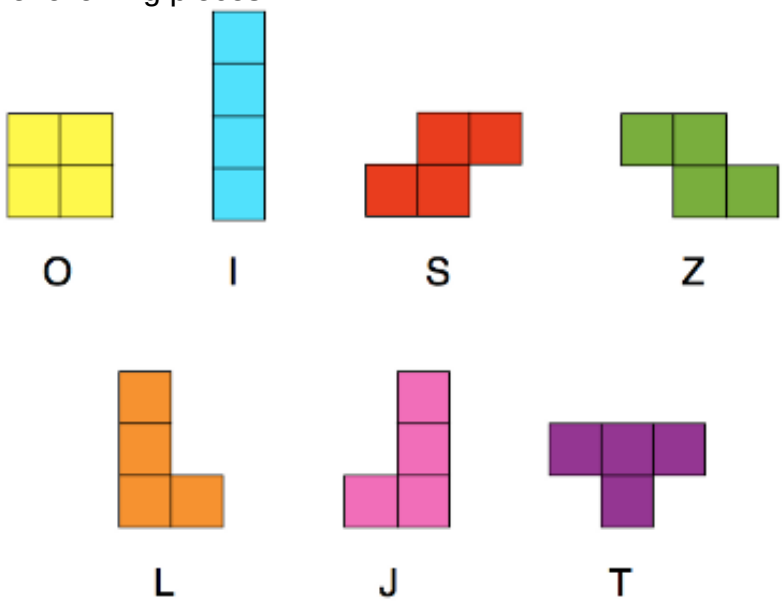
MultiPuzzle

Purpose:

- The goal of this test is to develop a Windows tetris-like puzzle game.
- We are interested in your code writing skills, style and logic. Don't hesitate to comment your code in order to make it as clear as possible.
- Please **avoid** using existing code from other projects found on the web.
- Anyway we encourage the use of the web for research purposes.
- The purpose of this test is purely a skill assessment, and gameplay implementation ability.

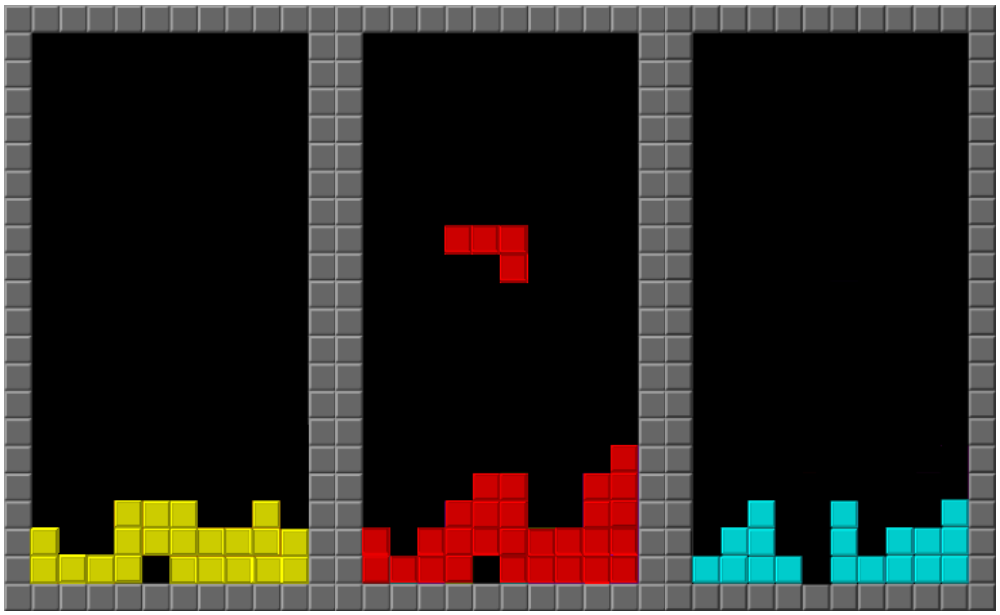
Rules of the game:

1. Have the following pieces:

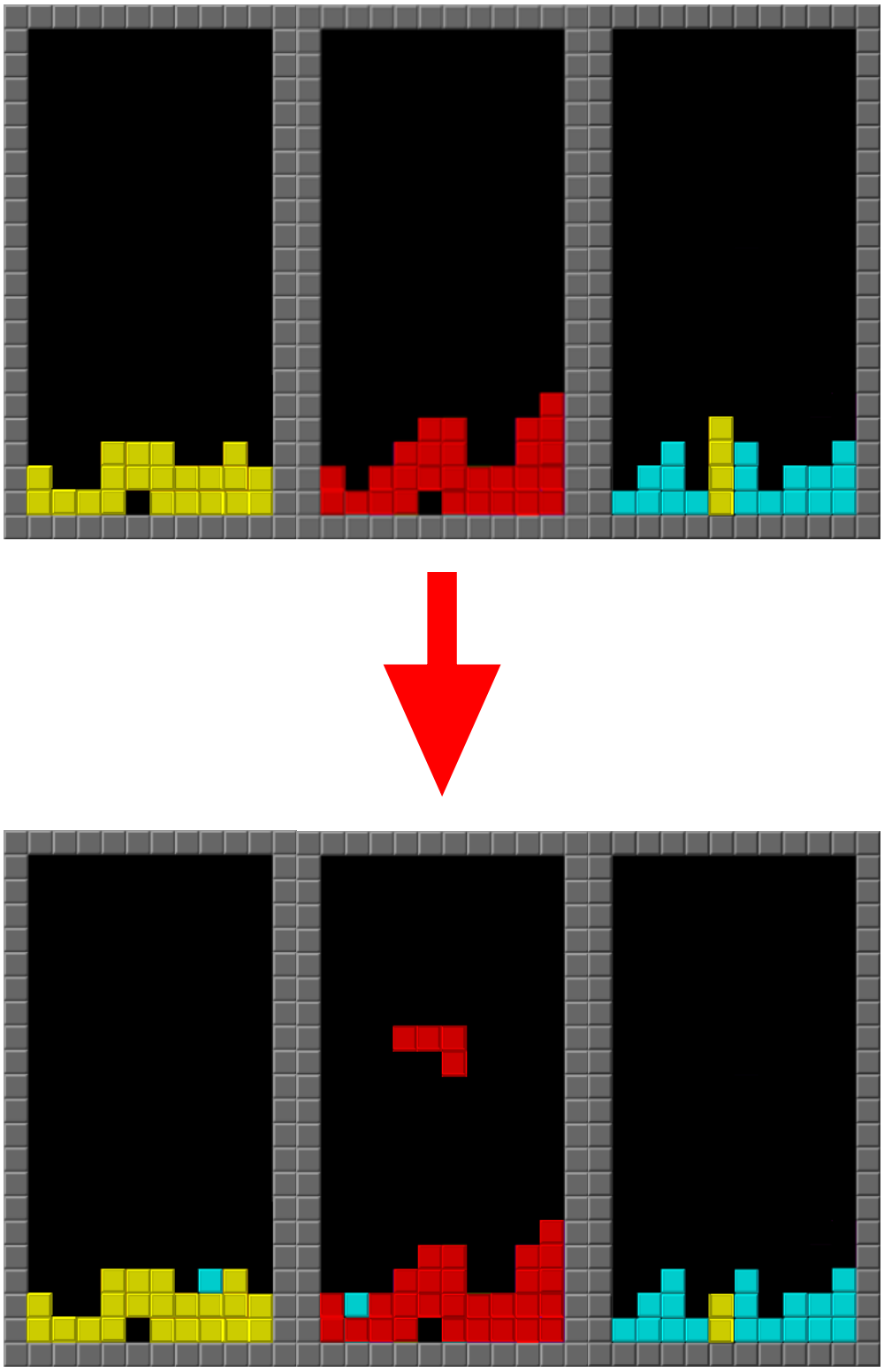


2. Three colors (Yellow, Blue and Red for example).

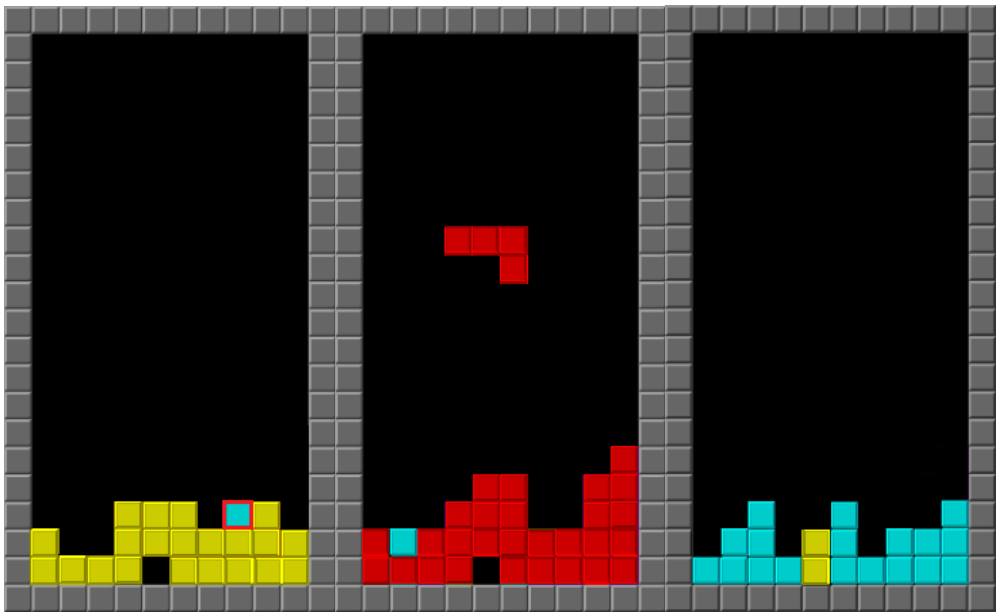
3. And three game areas, like the image below:



4. The score goes up for each line made.
5. The pieces and their color should be generated randomly.
6. The pieces should fall/advance/drop automatically
7. The pieces should appear at the top-center of the screen and the player should stack them in their respective color column, like the image shown before.
8. Feel free to use any mechanic you like to switch columns (but keep in mind the gameplay experience).
9. When a piece is misplaced on a column of different color and completes a line it should not break the line, what should happen when a piece is misplaced is that two pieces of the original piece will stay on the mistaken column and on the other two columns penalty blocks (of the color of the column where the mistake was done) should appear at a random place over the already placed blocks. The following image to pictures the behavior described:



10. In order to remove those penalties, the player should do a line of any color (1 line = 1 penalty removed). If there was something above it it should fall down (note that this is the only way this should happen) and if lines are made apply the same rules as if they where made by the player. Feel free to design any penalty removal dynamic you like. We suggest you to select the penalty with the contour as a cursor of it and press enter to erase it.



11. The game should also display:
    a) Score
    b) Next piece
    c) Instructions

You are free to make any additions you like to the game but focus on the main rules given above.

To Submit:

- A C++ Windows executable application that should start the game.
- Attach a separate text file that documents player controls and any other comments (as gameplay improvements, bugs not corrected, any comment that will help to evaluate your submission)
- Attach your **complete** project along with all the libraries you used for this.

Important:

- C++ only
- Windows Applications Only no Console Applications.
- All the comments and documents attached must be in ENGLISH.

Info links:

http://benryves.com/tutorials/?t=winconsole
http://www.lazyfoo.net/tutorials/SDL/index.php