Tetris in java – ver. 2.0 xpto 3000 gt2

The Project for now will have two packages. A package controlling the game itself (Game package) and a package containing the different elements of the game (Tetris package).

The cli will have a Tetris.class and will perform actions over it. This class will have two Tetramino.class objects, one Table.class and a Gamestate.

The Tetramino.class has a rotation state and four Cube.class objects. The Cube.class objects will be given the appropriate information upon creation of the Tetramino. To create a Tetramino the program uses one of seven derived classes of Tetramino.class (TETRA\_L, TETRA\_J, TETRA\_O, TETRA\_I, TETRA\_Z, TETRA\_S). The command line interface will randomly generate for the Tetris.class two initial Tetraminos. The derived class that was randomly generated will give specific coordinates for his four Cube.class objects.

This Cube.class will have originaly a x and y position and are frequently updated according to the user movement. In the first version they will have a char but later it can be an image. It will be used to print.

The Table class will have Cube array allocated accordingly with the Width and Height. Will also have an ArrayList of Cubes where all Cubes from the Tetraminos are stored. This array List will have a major importance because it will allow to repaint in the array of cubes and will be used for tests of collisions, for asserts and for line deletion.

The paint method will have originaly the array of cubes at blank. And upon the repaint will paint it according to each cube of the array list. Prints in the screen and leves the array with blanks again. This method will only uses the x and y of the cubes to paint, no erase required.

To delete a line it verifies if there are cubes with the same y for every x position. If positive then those cubes are deleted. And calls another function to dincrement of one unit in the y of all cubes that have that variable bigger than the line deleted.

Within the movement