**16343643 SEAN MCCANN NGT ASSIGNMENT 1**

**package** RandBox;

**import** java.awt.\*;

**import** java.util.ArrayList;

**import** javax.swing.\*;

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**public** **class** MyApplication **extends** JFrame {

**private** **static** **final** Dimension ***WindowSize*** = **new** Dimension(600,600);

**private** ArrayList<Color> colors;

**public** MyApplication() {

**this**.setTitle("16343643");

setDefaultCloseOperation(JFrame.***EXIT\_ON\_CLOSE***);

Dimension screensize = java.awt.Toolkit.*getDefaultToolkit*().getScreenSize();

**int** x = screensize.width/2 - ***WindowSize***.width/2;

**int** y = screensize.height/2 - ***WindowSize***.height/2;

setBounds(x, y, ***WindowSize***.width, ***WindowSize***.height);

setVisible(**true**);

}

**public** **void** paint ( Graphics g ) {

//SET VARIABLES

**int** ROWS = 10;

**int** COLS = 10;

**int** i = 0;

**int** k = 0;

**int** SIZE = 55;

**int** arrayLength = 100;

colors = **new** ArrayList<>(arrayLength);

//MAKE AN ARRAY OF COLOURS

**for** (i = 0; i < arrayLength; i++) {

**int** red = (**int**) (Math.*random*() \* 255);

**int** green = (**int**) (Math.*random*() \* 255);

**int** blue = (**int**) (Math.*random*() \* 255);

colors.add(**new** Color(red, green, blue));

}

//DRAW THE SQUARES

**for** (**int** row = 0; row < ROWS; row++) {

**for** (**int** col = 0; col < COLS; col++) {

g.setColor(colors.get(k));

g.fillRect(15 + (col \* SIZE),40 + (row \* SIZE), 50, 50);//SQUARES SHOULD BE SPACED

k++;//CHANGE ARRAY INDEX = DIFFERENT COLOUR

}

}

}

**public** **static** **void** main(String [ ] args) {

MyApplication w = **new** MyApplication();

}

}