

## Grid

*Description:* Create a grid of randomly colored rectangles in JavaFX.

*Purpose:* This challenge ensures that you have a basic understanding of JavaFX UI concepts and can build a simple JavaFX application.

*Requirements:*

Project Name: Grid

**For all challenges in this course you are to use the project naming scheme that was presented in the first challenge, Hello World. The project name is to be preceded by your pawprint with the first letter capitalized. Example if pawprint is abcxyz9 then the project name is to be: Abcxyz9Grid**

IDE: NetBeans

Language: Java

JDK: 8

UI: JavaFX (do not use Scene Builder or FXML for this challenge)

In this challenge you are to develop a JavaFX application that displays a grid of randomly color rectangles. The following image shows an example of what the application should display.



The project is to be a JavaFX application where you create the UI by creating JavaFX objects in code and not using Scene Builder and FXML.

For this challenge you can place all of your code in the main class.

## Grid

Do not hard code values in the code. Use variables defined at the top of the code to specify the parameters that are used to generate the grid of colored rectangles.

The following are parameters that are to be used in generating the grid:

- Number of rows
- Number of columns
- Width of grid in pixels
- Height of grid in pixels
- Array of a minimum of five colors (you can use more if you wish)

The height and width of the Scene are to be the same as the height and width of the grid.

The title set on the stage is to be: Grid

The grid is to be made using a JavaFX GridPane. The colored rectangles placed in the grid are to be made using the JavaFX rectangle.

The available colors you can use are defined on the JavaFX Color class.

The color of each of the rectangles is to be randomly chosen from the array of colors you selected and specified at the top of the code.

Submit a zip file of your NetBeans project.