

Documentation of Monitored Assignment 1

Description of the algorithm:

The algorithm consists of 3 classes («Main», «Pixel», «RootPane»).

The main idea of the program is to make the stage with a grid and fill the grid with the white squares («fake»). Clicking on some place on the stage we should receive the black pixel, which we made as a black square.

In the class «Main» (extended from JavaFX class called «Application») we set all the parameters of the grid: distances from the top, bottom, right side and left side of the stage; numbers of columns and rows, gaps between them, width and the height of the pixel and colors of the «fake» pixel and «clicked» pixel.

In the method «start» we created the object with the class «RootPane» (extended from the class «GridPane») which accepts all the parameters of grid. In «RootPane» we also added methods: «fillRoot» (in order to make an empty grid in the beginning of the program and clean the grid with right click of the mouse), «paint» (accepts the object «MouseEvent» and adds according to the query), «addNewPixel» (accepts the numbers of the row, column and color) and initialisation of the mouse event in accordance to which button of the mouse was pressed.

The next step was the set of the padding distances (with acceptance of the initial parameters in the beginning of the program) and a creation of the scene (named «scene») with already created object «rootPane». Then we handle a mouse press and drag events on the scene.

Then the scene was set on the stage, there was a correction of the sizes of the scene and stage and making the stage not resizable.

In the class «Pixel» (extended from the class «Rectangle») there is only a constructor in which we set the length, width and color of the pixel).

Group list:
Anton Gorshkow
Rodion Danilenko
Henri Cela