

N3_15Frame.java (Пятнашки без проверки окончания игры)

```
package my.n3_15Frame;

import java.awt.Component;
import java.awt.GridLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.util.Random;
import javax.swing.Action;
import javax.swing.JButton;
import javax.swing.JComponent;

public class N3_15Frame extends javax.swing.JFrame {

    JButton buttons, blankButton;
    JButton[][] buttonsA = new JButton[4][4];
    int mode = 0;
    int blankI = 3, blankJ = 3;
    ActionListener al = new ActionListener() {
        @Override
        public void actionPerformed(ActionEvent e) {
            buttonClick(e);
        }
    };

    private void buttonClick(ActionEvent e) {
        JButton source = (JButton) e.getSource();
        change(source);
    }

    private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
        //Заполнить панель кнопками
        jPanel1.setLayout(new GridLayout(4, 4));
        for (int i = 0; i < 4; i++) {
            for (int j = 0; j < 4; j++) {

                if (i * 4 + j + 1 == 16) {
                    jPanel1.add(buttonsA[i][j] = new JButton(""));
                    buttonsA[i][j].setEnabled(false);
                    blankButton = buttonsA[i][j];
                    blankI = i;
                    blankJ = j;
                } else {
                    jPanel1.add(buttonsA[i][j] = new JButton(Integer.toString(i * 4 + j + 1)));
                }
            }
        }
    }
}
```

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    }
    buttonsA[i][j].addActionListener(al);
    //Предпочитаемый размер (Размерность)
    buttonsA[i][j].setPreferredSize(new Dimension(40, 40));
    }
}
jPanel1.validate();
}

```

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private void jButton2ActionPerformed(java.awt.event.ActionEvent evt) {

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    Component[] components = jPanel1.getComponents();
    for (Component component : components) {
        if (component instanceof JButton) {
            jPanel1.remove(component);
        }
    }
    jPanel1.validate();
    repaint();
}

```

```

private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {

```

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    //Перемешивание
    Random rnd = new Random();
    for (int a = 0; a < 550; a++) {
        int i = rnd.nextInt(4);
        int j = rnd.nextInt(4);
        doMyClick(i, j);
    }
}

```

```

private void doMyClick(int i, int j) {

```

```

    JButton source = buttonsA[i][j];
    change(source);
}

```

```

private void change(JButton source) {

```

```

    //Поменять местами с соседней пустой
    int x = source.getX() / 100;
    int y = source.getY() / 100;
    if ((x == blankJ) && (Math.abs(y - blankI) == 1) || (y == blankI) &&
(Math.abs(x - blankJ) == 1)) {
        blankButton.setText(source.getText());
        blankButton.setEnabled(true);
    }
}

```

```
blankButton = source;
blankJ = x;
blankI = y;
source.setText("");
source.setEnabled(false);
}
}
}
```