

Mini Project Report

Semester	S.E. Semester III – Computer Engineering
Subject	Skill Based Lab Course: OOP with Java (CSL304)
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Name of the Project:
Tic tac toe game

Project Description:

Created a TicTacToe game in Java NetBeans using Methods, call to methods, if statement, JFrame, jButtons, jPanels, jLabels and setting panels properties.

Project Code:

```

*/
public class Tic_tac_toe extends javax.swing.JFrame {

    /**
     * Creates new form Tic_tac_toe
     * We created this program using net NetBeans
     */
    public Tic_tac_toe() {
        initComponents();
    }

```

```

    /**
     * This method is called from within the constructor to initialize the
     form.
     * WARNING: Do NOT modify this code. The content of this method is always
     regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    // <editor-fold defaultstate="collapsed" desc="Generated Code">

    private void initComponents() {

        jPanel1 = new javax.swing.JPanel();
        jLabel1 = new javax.swing.JLabel();
        BTN2 = new javax.swing.JButton();
        BTN1 = new javax.swing.JButton();
        BTN3 = new javax.swing.JButton();
        reset = new javax.swing.JButton();
        BTN6 = new javax.swing.JButton();
        BTN5 = new javax.swing.JButton();
        BTN4 = new javax.swing.JButton();
        BTN9 = new javax.swing.JButton();
        BTN8 = new javax.swing.JButton();
        BTN7 = new javax.swing.JButton();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setBackground(new java.awt.Color(0, 0, 0));

        jPanel1.setBackground(new java.awt.Color(0, 0, 0));

        jLabel1.setBackground(new java.awt.Color(0, 0, 0));
        jLabel1.setFont(new java.awt.Font("Eras Bold ITC", 1, 48)); // NOI
18N
        jLabel1.setForeground(new java.awt.Color(255, 255, 255));
        jLabel1.setText("Tic Tac Toe");

        javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
        jPanel1.setLayout(jPanel1Layout);
        jPanel1Layout.setHorizontalGroup(
            jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)

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        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(135, 135, 135)
            .addComponent(jLabel1)
            .addContainerGap(181, Short.MAX_VALUE))
    );
    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Align
ment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel1L
ayout.createSequentialGroup()
            .addContainerGap(45, Short.MAX_VALUE)
            .addComponent(jLabel1, javax.swing.GroupLayout.PREFERRED_S
IZE, 103, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(14, 14, 14))
    );

    BTN2.setFont(new java.awt.Font("Segoe UI", 1, 48)); // NOI18N
    BTN2.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            BTN2ActionPerformed(evt);
        }
    });

    BTN1.setFont(new java.awt.Font("Segoe UI", 1, 48)); // NOI18N
    BTN1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            BTN1ActionPerformed(evt);
        }
    });

    BTN3.setFont(new java.awt.Font("Segoe UI", 1, 48)); // NOI18N
    BTN3.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            BTN3ActionPerformed(evt);
        }
    });

    reset.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
    reset.setText("Play Again!!!");
    reset.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            resetActionPerformed(evt);
        }
    });

```

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BTN6.setFont(new java.awt.Font("Segoe UI", 1, 48)); // NOI18N
BTN6.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BTN6ActionPerformed(evt);
    }
});

BTN5.setFont(new java.awt.Font("Segoe UI", 1, 48)); // NOI18N
BTN5.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BTN5ActionPerformed(evt);
    }
});

BTN4.setFont(new java.awt.Font("Segoe UI", 1, 48)); // NOI18N
BTN4.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BTN4ActionPerformed(evt);
    }
});

BTN9.setFont(new java.awt.Font("Segoe UI", 1, 48)); // NOI18N
BTN9.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BTN9ActionPerformed(evt);
    }
});

BTN8.setFont(new java.awt.Font("Segoe UI", 1, 48)); // NOI18N
BTN8.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BTN8ActionPerformed(evt);
    }
});

BTN7.setFont(new java.awt.Font("Segoe UI", 1, 48)); // NOI18N
BTN7.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        BTN7ActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);

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        layout.setHorizontalGroup(
            layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .addGroup(layout.createSequentialGroup()
                    .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                        .addGroup(layout.createSequentialGroup()
                            .addContainerGap()
                            .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))
                        .addGroup(layout.createSequentialGroup()
                            .addGap(83, 83, 83)
                            .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                                .addGroup(layout.createSequentialGroup()
                                    .addComponent(BTN1, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addGap(18, 18, 18)
                                    .addComponent(BTN2, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addGap(18, 18, 18)
                                    .addComponent(BTN3, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE))
                                .addGroup(layout.createSequentialGroup()
                                    .addComponent(BTN4, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addGap(18, 18, 18)
                                    .addComponent(BTN5, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addGap(18, 18, 18)
                                    .addComponent(BTN6, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE))
                                .addGroup(layout.createSequentialGroup()
                                    .addComponent(BTN7, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addGap(18, 18, 18)
                                    .addComponent(BTN8, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE)
                                    .addGap(18, 18, 18)
                                    .addComponent(BTN9, javax.swing.GroupLayout.PREFERRED_SIZE, 135, javax.swing.GroupLayout.PREFERRED_SIZE))
                                .addGroup(layout.createSequentialGroup()
                                    .addGap(70, 70, 70)

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        .addComponent(reset, javax.swing.GroupLayout.PREFERRED_SIZE, 302, javax.swing.GroupLayout.PREFERRED_SIZE))))))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 53, Short.MAX_VALUE)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(BTN1, javax.swing.GroupLayout.PREFERRED_SIZE, 140, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(BTN2, javax.swing.GroupLayout.PREFERRED_SIZE, 140, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(BTN3, javax.swing.GroupLayout.PREFERRED_SIZE, 140, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(28, 28, 28)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(BTN4, javax.swing.GroupLayout.PREFERRED_SIZE, 140, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(BTN5, javax.swing.GroupLayout.PREFERRED_SIZE, 140, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(BTN6, javax.swing.GroupLayout.PREFERRED_SIZE, 140, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addGap(26, 26, 26)
                .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                    .addComponent(BTN7, javax.swing.GroupLayout.PREFERRED_SIZE, 140, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(BTN8, javax.swing.GroupLayout.PREFERRED_SIZE, 140, javax.swing.GroupLayout.PREFERRED_SIZE)
                    .addComponent(BTN9, javax.swing.GroupLayout.PREFERRED_SIZE, 140, javax.swing.GroupLayout.PREFERRED_SIZE))
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(reset, javax.swing.GroupLayout.PREFERRED_SIZE, 66, javax.swing.GroupLayout.PREFERRED_SIZE)
            )
    );
}

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        .addGap(23, 23, 23))
    );

    pack();
} // </editor-fold>

private void BTN1ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:
    if(BTN1.getText()!="X"&&BTN1.getText()!="0")
    {
        if(count%2==1)
        {
            BTN1.setText("X");
            count++;

        }
        else
        {
            BTN1.setText("0");
            count++;
        }
    }
}

private void BTN2ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:
    if(BTN2.getText()!="X"&&BTN2.getText()!="0")
    {
        if(count%2==1)
        {
            BTN2.setText("X");
            count++;
            return;

        }
        else
        {
            BTN2.setText("0");
            count++;
        }
    }
}

```

```

    }
}

private void BTN3ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:
    if(BTN3.getText()!="X"&&BTN3.getText()!="0")
    {
        if(count%2==1)
        {
            BTN3.setText("X");
            count++;

        }
        else
        {
            BTN3.setText("0");
            count++;

        }
    }
}

private void BTN4ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:
    if(BTN4.getText()!="X"&&BTN4.getText()!="0")
    {
        if(count%2==1)
        {
            BTN4.setText("X");
            count++;

        }
        else
        {
            BTN4.setText("0");
            count++;

        }
    }
}

private void BTN5ActionPerformed(java.awt.event.ActionEvent evt) {

```



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// TODO add your handling code here:
if(BTN5.getText()!="X"&&BTN5.getText()!="0")
{
    if(count%2==1)
    {
        BTN5.setText("X");
        count++;
    }
    else
    {
        BTN5.setText("0");
        count++;
    }
}

private void BTN6ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:
    if(BTN6.getText()!="X"&&BTN6.getText()!="0")
    {
        if(count%2==1)
        {
            BTN6.setText("X");
            count++;
        }
        else
        {
            BTN6.setText("0");
            count++;
        }
    }
}

private void BTN7ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:
    if(BTN7.getText()!="X"&&BTN7.getText()!="0")
    {
        if(count%2==1)
        {

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```

        BTN7.setText("X");
        count++;

    }
    else
    {
        BTN7.setText("O");
        count++;
    }
}

private void BTN8ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:
    if(BTN8.getText()!="X"&&BTN8.getText()!="O")
    {
        if(count%2==1)
        {
            BTN8.setText("X");
            count++;

        }
        else
        {
            BTN8.setText("O");
            count++;
        }
    }
}

private void BTN9ActionPerformed(java.awt.event.ActionEvent evt) {

    // TODO add your handling code here:
    if(BTN9.getText()!="X"&&BTN9.getText()!="O")
    {
        if(count%2==1)
        {
            BTN9.setText("X");
            count++;

        }
    }
}

```

```

        else
        {
            BTN9.setText("0");
            count++;
        }
    }
}

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

    BTN1.setText(" ");          // TODO add your handling code here:
    BTN2.setText(" ");
    BTN3.setText(" ");
    BTN4.setText(" ");
    BTN5.setText(" ");
    BTN6.setText(" ");
    BTN7.setText(" ");
    BTN8.setText(" ");
    BTN9.setText(" ");
}

/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //

```

```

        java.util.logging.Logger.getLogger(Tic_tac_toe.class.getName())
    ).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
        java.util.logging.Logger.getLogger(Tic_tac_toe.class.getName())
    ).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
        java.util.logging.Logger.getLogger(Tic_tac_toe.class.getName())
    ).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
        java.util.logging.Logger.getLogger(Tic_tac_toe.class.getName())
    ).log(java.util.logging.Level.SEVERE, null, ex);
    }
}
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {

        new Tic_tac_toe().setVisible(true);
    }
});
}
int count=1;
// Variables declaration - do not modify
private javax.swing.JButton BTN1;
private javax.swing.JButton BTN2;
private javax.swing.JButton BTN3;
private javax.swing.JButton BTN4;
private javax.swing.JButton BTN5;
private javax.swing.JButton BTN6;
private javax.swing.JButton BTN7;
private javax.swing.JButton BTN8;
private javax.swing.JButton BTN9;
private javax.swing.JLabel jLabel1;
private javax.swing.JPanel jPanel1;
private javax.swing.JButton reset;
// End of variables declaration
}

```

Output Screenshots:



