

Birthday Program

```
/**
 *
 * @author Kunwar Nir
 * 23-07-2019
 * Title: Birthday Program
 * Purpose: To get user input for name and birthday and display it
 */
public class U2_A2_Birthday extends javax.swing.JFrame {
    /**
     * Creates new form CapturingDataApp
     */
    public U2_A2_Birthday() {
        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() {

        lblHappyBirthday = new javax.swing.JLabel();
        lblName = new javax.swing.JLabel();
        lblBirthday = new javax.swing.JLabel();
        txtName = new javax.swing.JTextField();
        txtBirthday = new javax.swing.JTextField();
        btnEnter = new javax.swing.JButton();
        lblDisplay = new javax.swing.JLabel();

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
        setForeground(java.awt.Color.gray);

        lblHappyBirthday.setFont(new java.awt.Font("Tahoma", 1, 24)); // NOI18N
        lblHappyBirthday.setText("Happy Birthday!");

        lblName.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
        lblName.setText("Enter Your Name:");

        lblBirthday.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
        lblBirthday.setText("Enter Your Birthday:");

        txtName.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(java.awt.event.ActionEvent evt) {

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        txtNameActionPerformed(evt);
    }
});

txtBirthday.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtBirthdayActionPerformed(evt);
    }
});

btnEnter.setText("Enter");
btnEnter.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnEnterActionPerformed(evt);
    }
});

lblDisplay.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
lblDisplay.setText("Your name and birthday will appear here");

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
            layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(lblName, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
                .addComponent(lblBirthday, javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addContainerGap()
        )
        .addGroup(layout.createSequentialGroup()
            .addGap(39, 39, 39)
            .addComponent(txtName, javax.swing.GroupLayout.PREFERRED_SIZE, 90, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(txtBirthday, javax.swing.GroupLayout.PREFERRED_SIZE, 90, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addContainerGap()
        )
);

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        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
        .addComponent(lblDisplay, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addGap(94, 94, 94)))
        .addGap(59, 59, 59))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
        .addComponent(btnEnter)
        .addGap(75, 75, 75))
        .addGroup(layout.createSequentialGroup()
        .addGap(122, 122, 122)
        .addComponent(lblHappyBirthday)
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
        );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
        .addGap(20, 20, 20)
        .addComponent(lblHappyBirthday)
        .addGap(31, 31, 31)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(lblName, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(txtName, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(30, 30, 30)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(lblBirthday, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(txtBirthday, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(18, 18, 18)
        .addComponent(btnEnter)
        .addGap(15, 15, 15)
        .addComponent(lblDisplay, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addContainerGap(21, Short.MAX_VALUE))
        );

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

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private void txtBirthdayActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void txtNameActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

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

    //Declaring the variable that will store the users name
    String strName = txtName.getText();
    //Assigning the value as the input of the text field

    //Declaring the variable that will store the users birthday
    String strBirthday = txtBirthday.getText();
    //Assigning the value as the input if the text field

    //Formatting for the final label display
    lblDisplay.setText((strName) + "'s birthday is on " + (strBirthday));
}
/**
 * @param args the command line arguments
 */
public static void main(String [] args){
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

        java.util.logging.Logger.getLogger(U2_A2_Birthday.class.getName()).log(java.util.logging.Le
vel.SEVERE, null, ex);
    } catch (InstantiationException ex) {

        java.util.logging.Logger.getLogger(U2_A2_Birthday.class.getName()).log(java.util.logging.Le
vel.SEVERE, null, ex);
    }
}

```

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    } catch (IllegalAccessException ex) {

java.util.logging.Logger.getLogger(U2_A2_Birthday.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

java.util.logging.Logger.getLogger(U2_A2_Birthday.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    }
//</editor-fold>
//</editor-fold>

/* Create and display the form */
java.awt.EventQueue.invokeLater(new Runnable() {
    public void run() {
        new U2_A2_Birthday().setVisible(true);
    }
});
}
// Variables declaration - do not modify
private javax.swing.JButton btnEnter;
private javax.swing.JLabel lblBirthday;
private javax.swing.JLabel lblDisplay;
private javax.swing.JLabel lblHappyBirthday;
private javax.swing.JLabel lblName;
private javax.swing.JTextField txtBirthday;
private javax.swing.JTextField txtName;
// End of variables declaration
}

```

Birthday Program - Dog

```
/**
 *
 * @author Kunwar Nir
 * 23-07-2019
 * Title: Birthday Program - Dog
 * Purpose: To get user input for dog name and display the name and the dogs age in
human years
 */
public class U2_A2_BirthdayDog extends javax.swing.JFrame {
    /**
     * Creates new form U2_A2_BirthdayDog
     */
    public U2_A2_BirthdayDog() {
        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() {

        jLabel4 = new javax.swing.JLabel();
        lblTitle = new javax.swing.JLabel();
        lblDogName = new javax.swing.JLabel();
        lblDogAge = new javax.swing.JLabel();
        txtDogName = new javax.swing.JTextField();
        txtDogAge = new javax.swing.JTextField();
        lblDisplay = new javax.swing.JLabel();
        btnEnter = new javax.swing.JButton();

        jLabel4.setText("jLabel4");

        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

        lblTitle.setFont(new java.awt.Font("Tahoma", 0, 22)); // NOI18N
        lblTitle.setText("Dog Age in Human Years");

        lblDogName.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
        lblDogName.setText("Enter Your Dog's Name:");

        lblDogAge.setFont(new java.awt.Font("Tahoma", 0, 18)); // NOI18N
        lblDogAge.setText("Enter Your Dogs Age:");
```

```
txtDogName.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtDogNameActionPerformed(evt);
    }
});

txtDogAge.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        txtDogAgeActionPerformed(evt);
    }
});

lblDisplay.setFont(new java.awt.Font("Tahoma", 0, 14)); // NOI18N
lblDisplay.setText("Your dog's name and age in human years will appear here");

btnEnter.setText("Enter");
btnEnter.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnEnterActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(layout.createSequentialGroup()
            .add(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
                .add(lblDisplay)
                .add(btnEnter)
            )
            .addGap(25, 25, 25)
        )
        .addGroup(layout.createSequentialGroup()
            .add(lblDisplay)
            .addGap(73, 73, 73)
            .add(btnEnter)
        )
        .addGroup(layout.createSequentialGroup()
            .add(lblDogName)
            .addGap(93, 93, 93)
            .add(txtDogName)
        )
);

```

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        .addComponent(lblDogAge, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
            .addComponent(txtDogAge,
javax.swing.GroupLayout.PREFERRED_SIZE, 90,
javax.swing.GroupLayout.PREFERRED_SIZE)))
            .addGap(32, 32, 32))))
        .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
            .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addComponent(btnEnter)
                .addGap(47, 47, 47))
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addComponent(lblTitle)
                .addGap(100, 100, 100))))
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(layout.createSequentialGroup()
                .addContainerGap()
                .addComponent(lblTitle, javax.swing.GroupLayout.PREFERRED_SIZE, 60,
javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(18, 18, 18)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(txtDogName, javax.swing.GroupLayout.PREFERRED_SIZE,
30, javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(lblDogName, javax.swing.GroupLayout.PREFERRED_SIZE,
30, javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(31, 31, 31)

        .addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(lblDogAge, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(txtDogAge, javax.swing.GroupLayout.PREFERRED_SIZE, 30,
javax.swing.GroupLayout.PREFERRED_SIZE))
            .addGap(18, 18, 18)
            .addComponent(btnEnter)
            .addGap(18, 18, 18)
            .addComponent(lblDisplay, javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)

```



```

        .addContainerGap(40, Short.MAX_VALUE))
    );

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

private void txtDogNameActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

private void txtDogAgeActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
}

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

    //Declaring Variable for the Dog's Name
    String strDogName = txtDogName.getText();
    //Assigning the value as the input for the text field

    //Declaring the variable for the Dog age
    int intDogAge = Integer.parseInt(txtDogAge.getText());
    //Assigning the value at the input value for the text field and type casting it to integer

    //Displaying the final message
    lblDisplay.setText("Your dog " + strDogName + " is " + (intDogAge * 7)
        + " years old in human years");
}
/**
 * @param args the command line arguments
 */
public static void main(String args[]) {
    /* Set the Nimbus look and feel */
    //<editor-fold defaultstate="collapsed" desc="Look and feel setting code (optional) ">
    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default look and
feel.
    * For details see
http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    }
    catch (ClassNotFoundException ex) {

```

```
java.util.logging.Logger.getLogger(U2_A2_BirthdayDog.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {
```

```
java.util.logging.Logger.getLogger(U2_A2_BirthdayDog.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {
```

```
java.util.logging.Logger.getLogger(U2_A2_BirthdayDog.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {
```

```
java.util.logging.Logger.getLogger(U2_A2_BirthdayDog.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 U2_A2_BirthdayDog().setVisible(true);
    }
});
}
// Variables declaration - do not modify
private javax.swing.JButton btnEnter;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel lblDisplay;
private javax.swing.JLabel lblDogAge;
private javax.swing.JLabel lblDogName;
private javax.swing.JLabel lblTitle;
private javax.swing.JTextField txtDogAge;
private javax.swing.JTextField txtDogName;
// End of variables declaration
}
```