

“AÑO DE LA UNIDAD, LA PAZ Y EL DESARROLLO”

UNIVERSIDAD PERUANA LOS ANDES

FACULTAD DE INGENIERÍA

ESCUELA PROFESIONAL DE SISTEMAS Y COMPUTACIÓN



PROYECTOS DEL CURSO DE ARQUITECTURA DE SOFTWARE

Integrantes:

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Materia: ARQUITECTURA DE SOFTWARE

Sección: B1

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Huancayo-Perú

PROYECTO 04

Enunciado del proyecto

Título del proyecto: Sistema de Registro de Animales para Veterinaria en Perú

Descripción:

La aplicación permite registrar, eliminar y visualizar animales en una veterinaria. Los usuarios pueden ingresar la información de cada animal, como nombre, especie, raza, edad y el nombre del dueño, para gestionar la atención veterinaria.

Requerimientos funcionales

- **Registrar animal:**

Los usuarios pueden agregar nuevos animales al sistema, especificando atributos como nombre del animal, especie, raza, edad, y el nombre del dueño.



The screenshot shows a web browser window with a form titled "VETERINARIA PERU". The form is orange and contains the following fields and buttons:

- DNI del Dueño:** A text input field.
- Nombre de la mascota:** A text input field.
- Nombre del Dueño:** A text input field.
- Enfermedad de la Mascota:** A text input field.
- GUARDAR** and **LEER** buttons.

Below the screenshot, there is a bullet point:

- **Editar información del animal (opcional):**

- **Ver lista de animales:**

Los usuarios pueden visualizar una lista de todos los animales registrados.

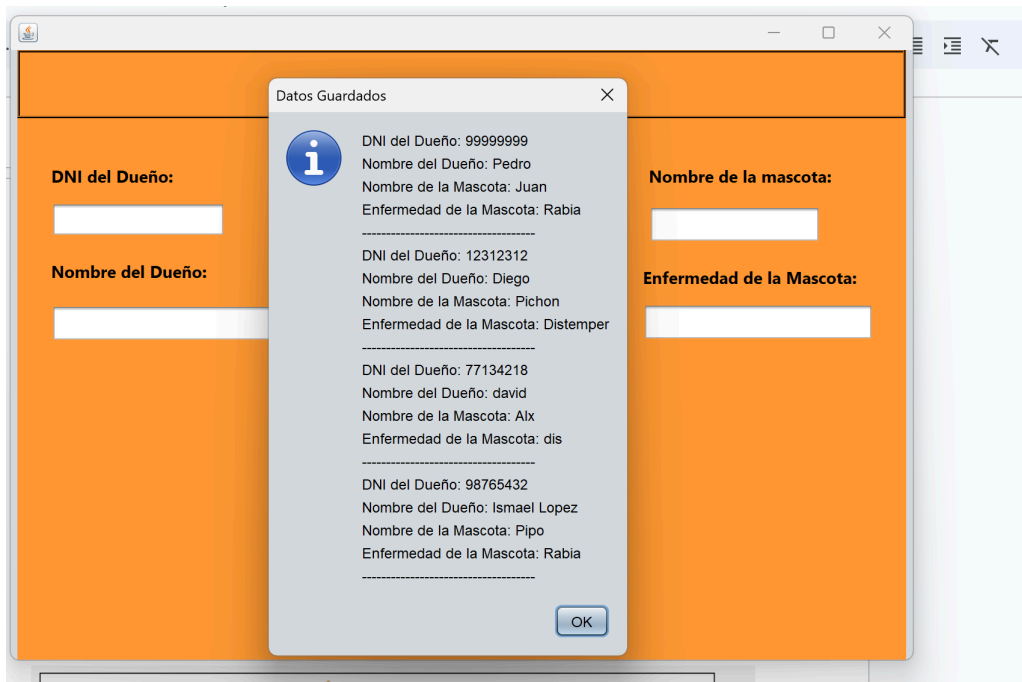


Diagrama de clases



Código de la aplicación

```
import java.awt.Toolkit;
import java.awt.event.KeyAdapter;
import java.awt.event.KeyEvent;
import java.io.BufferedReader;
import java.io.File;
import java.io.FileNotFoundException;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;
import javax.swing.JFileChooser;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

public class FormlariodeMascotas extends javax.swing.JFrame {

    private DefaultTableModel tableModel;

    /**
     * Creates new form FormlariodeMascotas
     */
    public FormlariodeMascotas() {
        initComponents();
        setLocationRelativeTo(null);
        addInputValidators();
        // Inicializa el modelo de la tabla
    }

    private void addInputValidators() {

        jTextField1.addKeyListener(new KeyAdapter() {
            public void keyTyped(KeyEvent e) {
                char c = e.getKeyChar();
                if (!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE || c ==
                KeyEvent.VK_DELETE)) {
                    e.consume();
                    Toolkit.getDefaultToolkit().beep();
                    JOptionPane.showMessageDialog(null, "Por favor, ingrese solo números.");
                }
                if(jTextField1.getText().length() == 8) {
                    e.consume();
                    Toolkit.getDefaultToolkit().beep();
                    JOptionPane.showMessageDialog(null, "El DNI debe tener exactamente 8
                    dígitos.");
                }
            }
        });
    }
}
```

```

    }
}
});

jTextField2.addKeyListener(new KeyAdapter() {
    public void keyTyped(KeyEvent e) {
        char c = e.getKeyChar();
        if (!(Character.isLetter(c) || c == KeyEvent.VK_BACK_SPACE || c ==
KeyEvent.VK_DELETE || c == KeyEvent.VK_SPACE)) {
            e.consume();
            Toolkit.getDefaultToolkit().beep();
            JOptionPane.showMessageDialog(null, "Por favor, ingrese solo letras.");
        }
    }
});

jTextField3.addKeyListener(new KeyAdapter() {
    public void keyTyped(KeyEvent e) {
        char c = e.getKeyChar();
        if (!(Character.isLetter(c) || c == KeyEvent.VK_BACK_SPACE || c ==
KeyEvent.VK_DELETE || c == KeyEvent.VK_SPACE)) {
            e.consume();
            Toolkit.getDefaultToolkit().beep();
            JOptionPane.showMessageDialog(null, "Por favor, ingrese solo letras.");
        }
    }
});

}

/**
 * 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();
    jLabel5 = new javax.swing.JLabel();
    jTextField1 = new javax.swing.JTextField();
    jTextField2 = new javax.swing.JTextField();
    jTextField3 = new javax.swing.JTextField();
    jTextField4 = new javax.swing.JTextField();
    jButton1 = new javax.swing.JButton();
    jLabel1 = new javax.swing.JLabel();
    jButton3 = new javax.swing.JButton();

```

```

jLabel3 = new javax.swing.JLabel();
jLabel4 = new javax.swing.JLabel();
jLabel6 = new javax.swing.JLabel();
jPanel2 = new javax.swing.JPanel();
jLabel2 = new javax.swing.JLabel();

setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
setBackground(new java.awt.Color(255, 255, 255));

jPanel1.setBackground(new java.awt.Color(255, 153, 51));

jLabel5.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel5.setText("Enfermedad de la Mascota:");

jTextField1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextField1ActionPerformed(evt);
    }
});

jTextField2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jTextField2ActionPerformed(evt);
    }
});

jButton1.setBackground(new java.awt.Color(224, 186, 165));
jButton1.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jButton1.setText("GUARDAR");
jButton1.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton1ActionPerformed(evt);
    }
});

jLabel1.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel1.setText("Nombre del Dueño:");

jButton3.setBackground(new java.awt.Color(226, 185, 162));
jButton3.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jButton3.setText("LEER");
jButton3.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jButton3ActionPerformed(evt);
    }
});

jLabel3.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N

```



```

jLabel3.setText("DNI del Dueño:");

jLabel4.setFont(new java.awt.Font("Segoe UI", 1, 14)); // NOI18N
jLabel4.setText("Nombre de la mascota:");

jLabel6.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);
jLabel6.setIcon(new javax.swing.ImageIcon("C:\\Users\\thepa\\Downloads\\PERU
ORIGEN.png")); // NOI18N
jLabel6.setVerticalAlignment(javax.swing.SwingConstants.TOP);
jLabel6.setCursor(new java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
jLabel6.setFocusable(false);
jLabel6.setHorizontalTextPosition(javax.swing.SwingConstants.LEADING);

jPanel2.setBackground(new java.awt.Color(255, 153, 51));
jPanel2.setBorder(javax.swing.BorderFactory.createEtchedBorder(new
java.awt.Color(0, 0, 0), null));

jLabel2.setBackground(new java.awt.Color(222, 172, 151));
jLabel2.setFont(new java.awt.Font("Segoe UI", 1, 24)); // NOI18N
jLabel2.setText("VETERINARIA PERU");

javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);
jPanel2.setLayout(jPanel2Layout);
jPanel2Layout.setHorizontalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(252, 252, 252)
            .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 290,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addGap(1, 1, 1))
        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 290,
Short.MAX_VALUE))
);
jPanel2Layout.setVerticalGroup(
    jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel2Layout.createSequentialGroup()
            .addGap(15, 15, 15)
            .addComponent(jLabel2)
            .addGap(1, 1, 1))
        .addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel2, javax.swing.GroupLayout.PREFERRED_SIZE, 290,
Short.MAX_VALUE))
);

javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);
jPanel1.setLayout(jPanel1Layout);
jPanel1Layout.setHorizontalGroup(
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
            .addGap(1, 1, 1))
);

```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel1Layout.createSequentialGroup())
```

```
        .addGap(28, 28, 28)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(jLabel3)
```

```
    .addComponent(jTextField1,
```

```
    javax.swing.GroupLayout.PREFERRED_SIZE, 145,
```

```
    javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
    .addComponent(jLabel1))
```

```
    .addGap(70, 70, 70))
```

```
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
```

```
jPanel1Layout.createSequentialGroup()
```

```
    .addContainerGap()
```

```
    .addComponent(jTextField2, javax.swing.GroupLayout.PREFERRED_SIZE,
```

```
    197, javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
    .addGap(18, 18, 18)))
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addGroup(jPanel1Layout.createSequentialGroup()
```

```
        .addComponent(jButton1)
```

```
        .addGap(33, 33, 33)
```

```
        .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 94,  
        javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,  
        53, Short.MAX_VALUE))
```

```
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
```

```
jPanel1Layout.createSequentialGroup()
```

```
    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED,  
    javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
```

```
    .addComponent(jLabel6)
```

```
    .addGap(152, 152, 152)))
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(jLabel5, javax.swing.GroupLayout.Alignment.TRAILING,  
    javax.swing.GroupLayout.PREFERRED_SIZE, 192,  
    javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,  
jPanel1Layout.createSequentialGroup()
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
```

```
    .addComponent(jLabel4)
```

```

        .addComponent(jTextField3,
javax.swing.GroupLayout.PREFERRED_SIZE, 143,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGap(35, 35, 35))
        .addComponent(jTextField4, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.PREFERRED_SIZE, 192,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap(27, Short.MAX_VALUE))
        .addComponent(jPanel2, javax.swing.GroupLayout.Alignment.TRAILING,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE)
    );
    jPanel1Layout.setVerticalGroup(
        jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup())
        .addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(37, 37, 37)

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(jLabel3)
        .addComponent(jLabel4))

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup())
        .addGap(15, 15, 15)
        .addComponent(jTextField3, javax.swing.GroupLayout.PREFERRED_SIZE,
31, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)
        .addComponent(jLabel5)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
        .addComponent(jTextField4, javax.swing.GroupLayout.PREFERRED_SIZE,
31, javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(jPanel1Layout.createSequentialGroup())
        .addGap(12, 12, 12)
        .addComponent(jTextField1, javax.swing.GroupLayout.PREFERRED_SIZE,
29, javax.swing.GroupLayout.PREFERRED_SIZE)
        .addGap(18, 18, 18)

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup())
        .addComponent(jLabel1)
        .addGap(18, 18, 18)

```

```

        .addComponent(jTextField2,
javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addComponent(jLabel6))))
        .addGap(107, 107, 107)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
        .addComponent(jButton1, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addComponent(jButton3, javax.swing.GroupLayout.PREFERRED_SIZE, 31,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addContainerGap(126, Short.MAX_VALUE)
    );

    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(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
                .addContainerGap())
    );
    layout.setVerticalGroup(
        layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
layout.createSequentialGroup()
                .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)
                .addGap(0, 0, Short.MAX_VALUE))
    );

    pack();
} // </editor-fold>
//bonton LEER
private void jButton3ActionPerformed(java.awt.event.ActionEvent evt) {
    StringBuilder datos = new StringBuilder();

    try (BufferedReader reader = new BufferedReader(new
FileReader("datos_mascotas.txt"))) {
        String line;

        while ((line = reader.readLine()) != null) {
            datos.append(line).append("\n");
        }
    }
}

```

```

        // Mostrar los datos en un mensaje emergente
        JOptionPane.showMessageDialog(null, datos.toString(), "Datos Guardados",
JOptionPane.INFORMATION_MESSAGE);

    } catch (IOException e) {
        // Mostrar un mensaje en caso de error al leer el archivo
        System.out.println("Error al leer el archivo: " + e.getMessage());
    }

}

//BOTON GUARDAR
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    String dniDueno = jTextField1.getText();
    String nombreDueno = jTextField2.getText();
    String nombreMascota = jTextField3.getText();
    String enfermedadMascota = jTextField4.getText();

    try {
        // Crear o abrir el archivo de texto en modo de adición
        FileWriter writer = new FileWriter("datos_mascotas.txt", true);

        // Escribir los datos en el archivo
        writer.write("DNI del Dueño: " + dniDueno + "\n");
        writer.write("Nombre del Dueño: " + nombreDueno + "\n");
        writer.write("Nombre de la Mascota: " + nombreMascota + "\n");
        writer.write("Enfermedad de la Mascota: " + enfermedadMascota + "\n");
        writer.write("-----\n"); // Separador entre registros

        writer.close();
        System.out.println("Datos guardados en el archivo 'datos_mascotas.txt'.");

        // Mostrar mensaje de confirmación
        JOptionPane.showMessageDialog(null, "Los datos se han guardado correctamente",
"Guardado", JOptionPane.INFORMATION_MESSAGE);

        // Limpiar los campos de texto
        jTextField1.setText("");
        jTextField2.setText("");
        jTextField3.setText("");
        jTextField4.setText("");
    } catch (IOException e) {
        System.out.println("Ha ocurrido un error al guardar los datos: " + e.getMessage());
    }

}

private void jTextField2ActionPerformed(java.awt.event.ActionEvent evt) {

```

```

        // TODO add your handling code here:
    }

    private void jTextField1ActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    /**
     * @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(FormlariodeMascotas.class.getName()).log(java.util.loggi
ng.Level.SEVERE, null, ex);
        } catch (InstantiationException ex) {

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

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

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

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

```

```
        new FormlariodeMascotas().setVisible(true);
    }
    });
}

// Variables declaration - do not modify
private javax.swing.JButton jButton1;
private javax.swing.JButton jButton3;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JPanel jPanel1;
private javax.swing.JPanel jPanel2;
private javax.swing.JTextField jTextField1;
private javax.swing.JTextField jTextField2;
private javax.swing.JTextField jTextField3;
private javax.swing.JTextField jTextField4;
// End of variables declaration
}
```