

UNIVERSIDAD
NACIONAL
DE COLOMBIA

ACTIVIDAD 6

PROGRAMACION ORIENTADA A OBJETOS

GRUPO 3

ESTUDIANTE:

KEVIN ARIAS

DOCENTE:

WALTER ARBOLEDA

MEDELLÍN, COLOMBIA

28 DE JUNIO DE 2023

Link repo: <https://github.com/keariasb/Actividad6Poo>

CLASE GUI.JAVA

```
/*  
  
 * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this  
license  
  
 * Click nbfs://nbhost/SystemFileSystem/Templates/GuiForms/JFrame.java to edit this template  
*/  
  
package Actividad6Kevin;  
  
import java.io.File;  
  
import java.io.IOException;  
  
import java.io.RandomAccessFile;  
  
/**  
  
 *  
  
 * @author Kevin  
*/  
  
public class GUI extends javax.swing.JFrame {  
  
    /**  
  
     * Creates new form GUI  
     */  
  
    public GUI() {  
        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();
    btnCreate = new javax.swing.JButton();
    btnRead = new javax.swing.JButton();
    btnUpdate = new javax.swing.JButton();
    btnDelete = new javax.swing.JButton();
    name = new javax.swing.JLabel();
    number = new javax.swing.JLabel();
    txtName = new javax.swing.JTextField();
    txtNumber = new javax.swing.JTextField();
    answer = new javax.swing.JLabel();
    btnClean = new javax.swing.JButton();
    jLabel1 = new javax.swing.JLabel();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);

    jPanel1.setBackground(new java.awt.Color(102, 255, 204));

    btnCreate.setFont(new java.awt.Font("Dialog", 1, 12)); // NOI18N
    btnCreate.setText("Crear");
    btnCreate.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            btnCreateActionPerformed(evt);
        }
    });
}
```

```
btnRead.setFont(new java.awt.Font("Dialog", 1, 12)); // NOI18N
```

```
btnRead.setText("Leer");
```

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

```
btnUpdate.setFont(new java.awt.Font("Dialog", 1, 12)); // NOI18N
```

```
btnUpdate.setText("Editar");
```

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

```
btnDelete.setFont(new java.awt.Font("Dialog", 1, 12)); // NOI18N
```

```
btnDelete.setText("Borrar");
```

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

```
name.setText("Nombre:");
```

```
number.setText("Numero:");
```

```
txtNumber.addActionListener(new java.awt.event.ActionListener() {
```

```
public void actionPerformed(java.awt.event.ActionEvent evt) {  
    txtNumberActionPerformed(evt);  
}  
});
```

```
answer.setHorizontalAlignment(javax.swing.SwingConstants.CENTER);  
answer.setText(" ");
```

```
btnClean.setFont(new java.awt.Font("Dialog", 1, 12)); // NOI18N  
btnClean.setText("Limpiar");  
btnClean.addActionListener(new java.awt.event.ActionListener() {  
    public void actionPerformed(java.awt.event.ActionEvent evt) {  
        btnCleanActionPerformed(evt);  
    }  
});
```

```
jLabel1.setFont(new java.awt.Font("Segoe UI", 0, 18)); // NOI18N  
jLabel1.setText("Mis contactos");
```

```
javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);  
jPanel1.setLayout(jPanel1Layout);  
jPanel1Layout.setHorizontalGroup(  
    jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
        .addGroup(jPanel1Layout.createSequentialGroup()  
            .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
                .addGroup(jPanel1Layout.createSequentialGroup()  
                    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)  
                        .addGroup(jPanel1Layout.createSequentialGroup()  
                            .addContainerGap()  
                            .addComponent(answer, javax.swing.GroupLayout.DEFAULT_SIZE,  
                                javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
```

```

        .addGroup(jPanel1Layout.createSequentialGroup())

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(34, 34, 34)
                .addComponent(btnCreate)
                .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)
                .addComponent(btnRead)
                .addGap(12, 12, 12)
                .addComponent(btnUpdate)
                .addGap(12, 12, 12)
                .addComponent(btnDelete))
        .addGroup(jPanel1Layout.createSequentialGroup()
                .addGap(56, 56, 56)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(btnClean)
        .addGroup(jPanel1Layout.createSequentialGroup()

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)
        .addComponent(number)
        .addComponent(name))
        .addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING,
false)
        .addComponent(txtName, javax.swing.GroupLayout.DEFAULT_SIZE, 120,
Short.MAX_VALUE)
        .addComponent(txtNumber))))
        .addGap(38, 38, 38)
        .addComponent(jLabel1)))

```

```

        .addGap(0, 11, Short.MAX_VALUE)))

    .addContainerGap()

);

jPanel1Layout.setVerticalGroup(

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

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

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

    .addGroup(jPanel1Layout.createSequentialGroup())

        .addGap(21, 21, 21)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

    .addComponent(name)

        .addComponent(txtName, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE)))

    .addGroup(jPanel1Layout.createSequentialGroup())

        .addContainerGap()

        .addComponent(jLabel1)))

.addGap(18, 18, 18)

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)

    .addComponent(number)

        .addComponent(txtNumber, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, javax.swing.GroupLayout.PREFERRED_SIZE))

    .addGap(15, 15, 15)

    .addComponent(btnClean)

    .addGap(18, 18, 18)

        .addComponent(answer, javax.swing.GroupLayout.PREFERRED_SIZE, 71,
javax.swing.GroupLayout.PREFERRED_SIZE)

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 31,
Short.MAX_VALUE)

```

```

.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
    .addComponent(btnCreate)
    .addComponent(btnRead)
    .addComponent(btnUpdate)
    .addComponent(btnDelete))
.addGap(36, 36, 36)
);

```

```

javax.swing.GroupLayout layout = new javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(
    layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .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(layout.createSequentialGroup()
        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addContainerGap())
);

```

```

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

```

```

private void btnCreateActionPerformed(java.awt.event.ActionEvent evt) {
    try {
        String newName = txtName.getText();
    }
}

```



```

    long newNumber = Long.parseLong(txtNumber.getText());

    String nameNumberString;

    String name;

    long number;

    int index;

    File file = new
File("C:\\Users\\Kevin\\Documents\\Actividad6\\files\\Actividad6friendsContact.txt");

    if (!file.exists()) {

        file.createNewFile();

    }

    RandomAccessFile raf= new RandomAccessFile(file, "rw");

    boolean found = false;

    while (raf.getFilePointer() < raf.length()) {

        nameNumberString = raf.readLine();

        String[] lineSplit= nameNumberString.split("!");

        name = lineSplit[0];

        number = Long.parseLong(lineSplit[1]);

        if ( (name.equals( newName)) || (number == newNumber)) {

            found = true;

            break;

        }

    }

    if (found == false) {

        nameNumberString= newName + "!" + String.valueOf(newNumber);

        raf.writeBytes(nameNumberString);

        raf.writeBytes(System.lineSeparator());

        answer.setText(" CONTACTO AGREGADO ");

        raf.close();

    }

```

```

else {
    raf.close();
    answer.setText(" CONTACTO YA EXISTENTE ");
}
}
catch (IOException ioe) {
    answer.setText(String.valueOf(ioe));
}
catch (NumberFormatException nef) {
    answer.setText(String.valueOf(nef));
}
}

```

```

private void btnReadActionPerformed(java.awt.event.ActionEvent evt) {
    try {
        String nameNumberString;
        String name, newName=txtName.getText();
        long number;
        int index;
        File file = new
File("C:\\Users\\Kevin\\Documents\\Actividad6\\files\\Actividad6friendsContact.txt");
        if (!file.exists()) {
            file.createNewFile();
        }
        RandomAccessFile raf = new RandomAccessFile(file, "rw");
        boolean found = false;
        answer.setText("NO SE ENCONTRO ESE CONTACTO");
        while (raf.getFilePointer() < raf.length()) {
            nameNumberString = raf.readLine();

```

```

        String[] lineSplit = nameNumberString.split("!");
        name = lineSplit[0];
        number = Long.parseLong(lineSplit[1]);
        if (name.equals(newName)){
            txtName.setText(name);
            txtNumber.setText(String.valueOf(number));
            answer.setText(" SE ENCONTRO ESE CONTACTO, MIRAR ARRIBA");
        }
    }
}
catch (IOException ioe)
{
    answer.setText(String.valueOf(ioe));
}
catch (NumberFormatException nef)
{
    answer.setText(String.valueOf(nef));
}
}

```

```

private void btnUpdateActionPerformed(java.awt.event.ActionEvent evt) {
    try {
        String newName = txtName.getText();
        long newNumber = Long.parseLong(txtNumber.getText());
        String nameNumberString;
        String name;
        long number;
        int index;
    }
}

```

```

    File file = new
File("C:\\Users\\Kevin\\Documents\\Actividad6\\files\\Actividad6friendsContact.txt");

    if (!file.exists()) {
        file.createNewFile();
    }

    RandomAccessFile raf = new RandomAccessFile(file, "rw");

    boolean found = false;

    while (raf.getFilePointer() < raf.length()) {
        nameNumberString = raf.readLine();
        String[] lineSplit = nameNumberString.split("!");
        name = lineSplit[0];
        number = Long.parseLong(lineSplit[1]);
        if (name.equals( newName ) ) {
            found = true;
            break;
        }
    }

    if (found == true) {
        File tmpFile = new File("temp.txt");
        RandomAccessFile tmpraf = new RandomAccessFile(tmpFile, "rw");
        raf.seek(0);
        while (raf.getFilePointer() < raf.length()) {
            nameNumberString = raf.readLine();
            index = nameNumberString.indexOf('!');
            name = nameNumberString.substring(0, index);
            if (name.equals(newName)) {
                nameNumberString = name + "!" + String.valueOf(newNumber);
            }
            tmpraf.writeBytes(nameNumberString);
        }
    }
}

```

```

        tmpraf.writeBytes(
            System.lineSeparator());
    }
    raf.seek(0);
    tmpraf.seek(0);
    while (tmpraf.getFilePointer() < tmpraf.length()) {
        raf.writeBytes(tmpraf.readLine());
        raf.writeBytes(System.lineSeparator());
    }
    raf.setLength(tmpraf.length());
    tmpraf.close();
    raf.close();
    tmpFile.delete();
    answer.setText(" CONTACTO EDITADO ");
}
else {
    raf.close();
    answer.setText("ESE CONTACTO NO EXISTE ");
}
}
catch (IOException ioe) {
    answer.setText(String.valueOf(ioe));
}
catch (NumberFormatException nef) {
    answer.setText(String.valueOf(nef));
}
}

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

```

```

try {

    String newName = txtName.getText();

    String nameNumberString;

    String name;

    long number;

    int index;

    File file = new
File("C:\\Users\\Kevin\\Documents\\Actividad6\\files\\Actividad6friendsContact.txt");

    if (!file.exists()) {

        file.createNewFile();

    }

    RandomAccessFile raf = new RandomAccessFile(file, "rw");

    boolean found = false;

    while (raf.getFilePointer() < raf.length()) {

        nameNumberString = raf.readLine();

        String[] lineSplit = nameNumberString.split("!");

        name = lineSplit[0];

        number = Long.parseLong(lineSplit[1]);

        if (name.equals(newName)) {

            found = true;

            break;

        }

    }

    if (found == true) {

        File tmpFile = new File("temp.txt");

        RandomAccessFile tmpraf = new RandomAccessFile(tmpFile, "rw");

        raf.seek(0);

        while (raf.getFilePointer() < raf.length()) {

            nameNumberString = raf.readLine();

```

```

        index = nameNumberString.indexOf('!');
        name = nameNumberString.substring( 0, index);
        if (name.equals(newName)) {
            continue;
        }
        tmpraf.writeBytes(nameNumberString);
        tmpraf.writeBytes(System.lineSeparator());
    }
    raf.seek(0);
    tmpraf.seek(0);
    while (tmpraf.getFilePointer()
        < tmpraf.length()) {
        raf.writeBytes(tmpraf.readLine());
        raf.writeBytes(System.lineSeparator());
    }
    raf.setLength(tmpraf.length());
    tmpraf.close();
    raf.close();
    tmpFile.delete();
    answer.setText(" CONTACTO ELIMINADO");
}
else {
    raf.close();
    answer.setText(" ESE CONTACTO NO EXISTE ");
}
}
catch (IOException ioe) {
    answer.setText(String.valueOf(ioe));
}

```

```
}
```

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

```
private void btnCleanActionPerformed(java.awt.event.ActionEvent evt) {  
    txtName.setText("");  
    txtNumber.setText("");  
    answer.setText("");  
}
```

```
/**
```

```
 * @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(GUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);

    } catch (InstantiationException ex) {

        java.util.logging.Logger.getLogger(GUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);

    } catch (IllegalAccessException ex) {

        java.util.logging.Logger.getLogger(GUI.class.getName()).log(java.util.logging.Level.SEVERE,
null, ex);

    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

        java.util.logging.Logger.getLogger(GUI.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 GUI().setVisible(true);

    }

});

}

```

```

// Variables declaration - do not modify

private javax.swing.JLabel answer;

private javax.swing.JButton btnClean;

private javax.swing.JButton btnCreate;

private javax.swing.JButton btnDelete;

private javax.swing.JButton btnRead;

private javax.swing.JButton btnUpdate;

```

```
private javax.swing.JLabel jLabel1;
private javax.swing.JPanel jPanel1;
private javax.swing.JLabel name;
private javax.swing.JLabel number;
private javax.swing.JTextField txtName;
private javax.swing.JTextField txtNumber;
// End of variables declaration
}
```

CLASE MAIN.JAVA

```
package Actividad6Kevin;

/**
 *
 * @author Kevin
 */
public class main {
    public static void main(String[] args) {
        GUI interfaz = new GUI();
        interfaz.setVisible(true);
    }

}
```

INTERFAZ GRAFICA



Nombre:

KEVIN ARIAS

Mis contactos

Numero:

3333333333

Limpiar

CONTACTO AGREGADO

Crear

Leer

Editar

Borrar



Nombre: KEVIN ARIAS

Mis contactos

Numero: 3333333333

Limpiar


SE ENCONTRO ESE CONTACTO, MIRAR ARRIBA

Crear

Leer

Editar

Borrar

— □ ×

Nombre:

KEVIN ARIAS

Numero:

8888

Limpiar

CONTACTO EDITADO

Crear

Leer

Editar

Borrar



Nombre:

KEVIN ARIAS

Mis contactos

Numero:

8888

Limpiar

CONTACTO ELIMINADO

Crear

Leer

Editar

Borrar

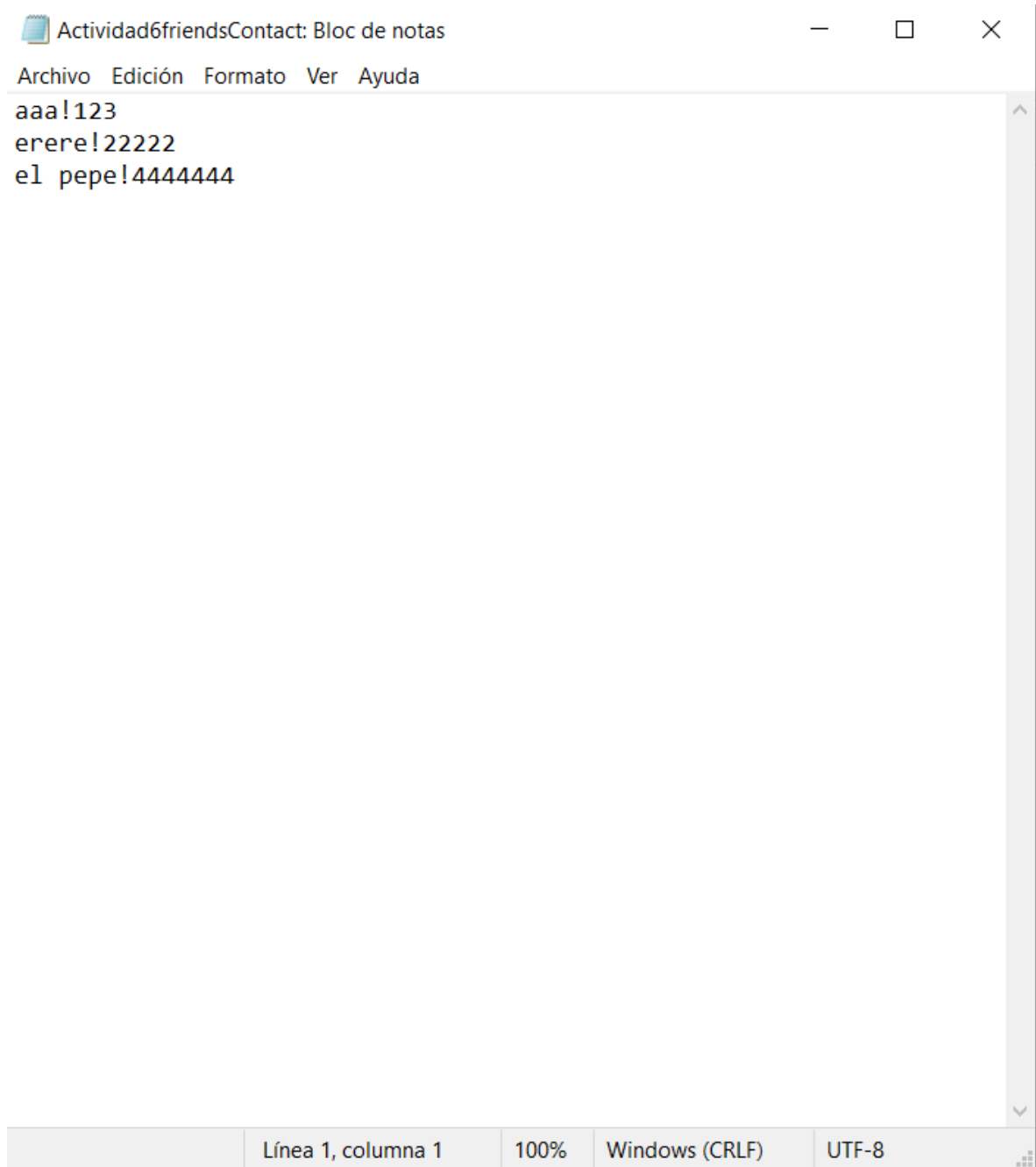


DIAGRAMA DE CASOS DE USO

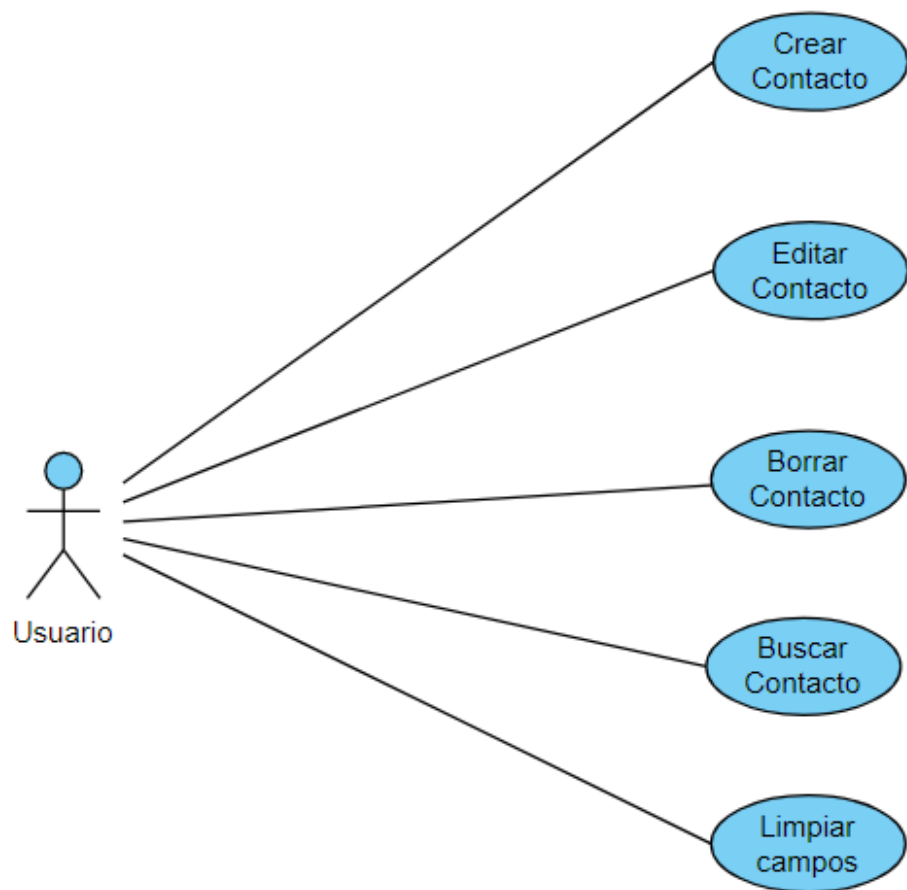


DIAGRAMA DE CLASES

