

Actividad 6

Programación Orientada A Objetos

Estudiantes:

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Repositorio GitHub Completo: <https://github.com/Leandrocar13/POO>

```

    * Click nbfs:///nbhost/SystemFileSystem/Templates/Licenses/license-defi
    * Click nbfs:///nbhost/SystemFileSystem/Templates/Classes/Main.java to
    */
package friends;

/**
 *
 * @author Leandro
 */
public class Friends {

    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        VentanaPrincipal ventana= new VentanaPrincipal();
        ventana.setVisible(true);
    }

}
```

```

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

private void btnReadActionPerformed(java.awt.event.ActionEvent evt) {
    try {
        String nameNumberString;
        String name;
        long number;
        int index;

        // Using file pointer creating the file.
        File file = new File("friendsContact.txt");

        if (!file.exists() == false) {
            file.createNewFile();
        }
        RandomAccessFile raf = new RandomAccessFile(file, "rw");
        boolean found = false;

        // Traversing the file
        // getFilePointer() give the current offset
        // value from start of the file.
        while (raf.getFilePointer() < raf.length()) {

            // reading line from the file.
            nameNumberString = raf.readLine();

            // splitting the string to get name and
            // number
            String[] lineSplit = nameNumberString.split("!");

            // separating name and number.
            name = lineSplit[0];
            number = Long.parseLong(lineSplit[1]);

            // Print the contact data

            JOptionPane.showMessageDialog(null, "Friend Name: " + name + " " + "Contact Numeber: " + number, "INFOR
            raf.close();
        }

        catch(IOException ioe){
            JOptionPane.showConfirmDialog(null, "ioe", "INFORMATION_MESSAGE", JOptionPane.INFORMATION_MESSAGE);
        }
        catch(NumberFormatException nef){
            JOptionPane.showConfirmDialog(null, "nef", "INFORMATION_MESSAGE", JOptionPane.INFORMATION_MESSAGE);
        }
    }
}

```

```

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

        File file = new File("friendsContact.txt");

        if (!file.exists()==false){
            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());
            JOptionPane.showMessageDialog(null, "Contact added", "INFORMATION_MESSAGE",JOptionPane.INFORMATION_A
            raf.close();

        }
        else {
            raf.close();

            JOptionPane.showConfirmDialog(null,"Contact already exist","INFORMATION_MESSAGE",JOptionPane.INFORMAI

        }

    }
    catch(IOException ioe){
        JOptionPane.showConfirmDialog(null,"ioe","INFORMATION_MESSAGE",JOptionPane.INFORMATION_MESSAGE);
    }
    catch (NumberFormatException nef){
        JOptionPane.showConfirmDialog(null,"nef","INFORMATION_MESSAGE",JOptionPane.INFORMATION_MESSAGE);
    }
}

```

```

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

        File file = new File("friendsContact.txt");

        if (!file.exists()==false){
            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 == true) {

            // Creating a temporary file
            // with file pointer as tmpFile.
            File tmpFile = new File("temp.txt");

            // Opening this temporary file
            // in ReadWrite Mode
            RandomAccessFile tmpraf = new RandomAccessFile(tmpFile, "rw");

            // Set file pointer to start
            tmpraf.seek(0);

            // Traversing the friendsContact.txt file
            while (tmpraf.getFilePointer() < tmpraf.length()) {

                // Reading the contact from the file
                nameNumberString = tmpraf.readLine();

                index = nameNumberString.indexOf('!');
                name = nameNumberString.substring(0, index);

                // Check if the fetched contact
                // is the one to be updated
                if (name.equals(newName)) {
                    nameNumberString= name + "!" + String.valueOf(newNumber);
                }

                // Add this contact in the temporary
                // file
                tmpraf.writeBytes(nameNumberString);
            }
        }
    }
}

```

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

    // Add this contact in the temporary
    // file
    tmpraf.writeBytes(nameNumberString);

    // Add the line separator in the
    // temporary file
    tmpraf.writeBytes(
        System.lineSeparator());
}

// The contact has been updated now
// So copy the updated content from
// the temporary file to original file.

// Set both files pointers to start
raf.seek(0);
tmpraf.seek(0);

// Copy the contents from
// the temporary file to original file.
while (tmpraf.getFilePointer()
    < tmpraf.length()) {
    raf.writeBytes(tmpraf.readLine());
    raf.writeBytes(System.lineSeparator());
}

// Set the length of the original file
// to that of temporary.
raf.setLength(tmpraf.length());

// Closing the resources.
tmpraf.close();
raf.close();

// Deleting the temporary file
tmpFile.delete();

JOptionPane.showConfirmDialog(null," Friend updated. ", "INFORMATION_MESSAGE",JOptionPane

}

// The contact to be updated
// could not be found
else {

    // Closing the resources.
    raf.close();

    // Print the message
    JOptionPane.showConfirmDialog(null," Input name"+ " does not exists. ", "INFORMATION_MESSI

}

}

catch (IOException ioe) {
    JOptionPane.showConfirmDialog(null,"ioe","INFORMATION_MESSAGE",JOptionPane.INFORMATION_MESSAGE);
}

catch (NumberFormatException nef) {
    JOptionPane.showConfirmDialog(null,"nef","INFORMATION_MESSAGE",JOptionPane.INFORMATION_MESSAGE);
}
}

```

```

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

        File file = new File("friendsContact.txt");

        if (!file.exists()==false){
            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 == true) {

            // Creating a temporary file
            // with file pointer as tmpFile.
            File tmpFile = new File("temp.txt");

            // Opening this temporary file
            // in ReadWrite Mode
            RandomAccessFile tmpraf = new RandomAccessFile(tmpFile, "rw");

            // Set file pointer to start
            tmpraf.seek(0);

            // Traversing the friendsContact.txt file
            while (raf.getFilePointer() < raf.length()) {

                // Reading the contact from the file
                nameNumberString = raf.readLine();

                index = nameNumberString.indexOf('!');
                name = nameNumberString.substring(0, index);

                // Check if the fetched contact
                // is the one to be updated
                if (name.equals(newName)) {
                    continue;
                }
                tmpraf.writeBytes(nameNumberString);

                // Add the line separator in the
                // temporary file
                tmpraf.writeBytes(
                    System.lineSeparator());
            }
        }
    }
}

```

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    }

    // The contact has been deleted now
    // So copy the updated content from
    // the temporary file to original file.

    // Set both files pointers to start
    raf.seek(0);
    tmpraf.seek(0);

    // Copy the contents from
    // the temporary file to original file.
    while (tmpraf.getFilePointer()
        < tmpraf.length()) {
        raf.writeBytes(tmpraf.readLine());
        raf.writeBytes(System.lineSeparator());
    }

    // Set the length of the original file
    // to that of temporary.
    raf.setLength(tmpraf.length());

    // Closing the resources.
    tmpraf.close();
    raf.close();

    // Deleting the temporary file
    tmpFile.delete();

    JOptionPane.showConfirmDialog(null, " Friend Deleted. ", "INFORMATION_MESSAGE", JOptic

    }

    // The contact to be deleted
    // could not be found
    else {

        // Closing the resources.
        raf.close();

        // Print the message
        JOptionPane.showConfirmDialog(null, " Input name"+ " does not exists. ", "INF

    }
}

catch (IOException ice) {
    JOptionPane.showConfirmDialog(null, "ice", "INFORMATION_MESSAGE", JOptionPane.INFORMATION_MESSAGE);
}

catch (NumberFormatException nef) {
    JOptionPane.showConfirmDialog(null, "nef", "INFORMATION_MESSAGE", JOptionPane.INFORMATION_MESSAGE);
}

```



```

private void jButton5ActionPerformed(java.awt.event.ActionEvent evt) {
    txtName.setText("");
    txtNumber.setText("");
}

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

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

// Variables declaration - do not modify
private javax.swing.JButton btnCreate;
private javax.swing.JButton btnDelete;
private javax.swing.JButton btnRead;
private javax.swing.JButton btnUpdate;
private javax.swing.JButton jButton5;
private javax.swing.JLabel jLabel1;
private javax.swing.JLabel jLabel2;
private javax.swing.JTextField txtName;
private javax.swing.JTextField txtNumber;
// End of variables declaration
}

```



