

```
import java.awt.EventQueue;
```

```
import javax.swing.JFrame;
```

```
import javax.swing.JLabel;
```

```
import javax.swing.JOptionPane;
```

```
import javax.swing.JButton;
```

```
import java.awt.Color;
```

```
import java.awt.event.ActionListener;
```

```
import java.awt.event.ActionEvent;
```

```
import javax.swing.JTextField;
```

```
import java.awt.Font;
```

```
import java.awt.SystemColor;
```

```
import javax.swing.JList;
```

```
import javax.swing.AbstractListModel;
```

```
import javax.swing.JRadioButton;
```

```
import javax.swing.JCheckBox;
```

```
import javax.swing.SwingConstants;
```

```
import javax.swing.ButtonGroup;
```

```
import java.awt.ComponentOrientation;
```

```
import javax.swing.ImageIcon;
```

```
import java.awt.Cursor;
```

```
public class Activity2 {
```

```
    private JFrame frmActividad;
```

```
    private JTextField textField_1;
```

```
    private JTextField textField_2;
```

```
    private final ButtonGroup buttonGroup = new ButtonGroup();
```

```
    private final ButtonGroup buttonGroup_1 = new ButtonGroup();
```

```
    /**
```

```
     * Launch the application.
```

```
    */
```

```
    public static void main(String[] args) {
```

```
        EventQueue.invokeLater(new Runnable() {
```

```
            public void run() {
```

```
                try {
```

```
                    Activity2 window = new Activity2();
```

```
                    window.frmActividad.setVisible(true);
```

```
                } catch (Exception e) {
```

```
                    e.printStackTrace();
```

```
                }
```

```
            }
```

```
        });
```

```
    }
```

```
    /**
```

```
     * Create the application.
```

```
    */
```

```
    public Activity2() {
```

```
        initialize();
```

```
    }
```

```
    public boolean verifyIntegrity(String name, String course, String id, String gender, String shift) {
```

```
        if (name.equals("") || course.equals("") || id.equals("") || gender.equals("") || shift.equals("")) return true;
```

```
        else return false;
```

```
    }
```

```
    public String selectGender(JRadioButton rdbtnHombre, JRadioButton rdbtnMujer) {
```

```
        if (rdbtnHombre.isSelected()) return "Hombre";
```

```
        else if (rdbtnMujer.isSelected()) return "Mujer";
```

```
        else return "";
```

```
    }
```

```

public String selectTurn(JCheckBox chckbxMatutino, JCheckBox chckbxVespertino, JCheckBox chckbxNocturno) {
    if (chckbxMatutino.isSelected()) return "Matutino";
    else if (chckbxVespertino.isSelected()) return "Vespertino";
    else if (chckbxNocturno.isSelected()) return "Nocturno";
    else return "";
}

```

```

/**

```

```

 * Initialize the contents of the frame.

```

```

 */

```

```

@ SuppressWarnings("unchecked")

```

```

private void initialize() {
    frmActividad = new JFrame();
    frmActividad.setResizable(false);
    frmActividad.setTitle("Actividad 2");
    frmActividad.getContentPane().setBackground(Color.WHITE);
    frmActividad.setBounds(100, 100, 450, 606);
    frmActividad.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frmActividad.getContentPane().setLayout(null);

```

```

JLabel lblInstitutoTecnologicoDe = new JLabel("Instituto Tecnológico de Mexicali");
lblInstitutoTecnologicoDe.setForeground(Color.WHITE);
lblInstitutoTecnologicoDe.setBackground(Color.WHITE);
lblInstitutoTecnologicoDe.setHorizontalAlignment(SwingConstants.CENTER);
lblInstitutoTecnologicoDe.setFont(new Font("Arial", Font.BOLD, 16));
lblInstitutoTecnologicoDe.setBounds(-5, 11, 439, 23);
frmActividad.getContentPane().add(lblInstitutoTecnologicoDe);

```

```

JLabel lblNombre = new JLabel("Nombre:");
lblNombre.setForeground(Color.WHITE);
lblNombre.setFont(new Font("Arial", Font.BOLD, 18));
lblNombre.setHorizontalAlignment(SwingConstants.CENTER);
lblNombre.setBounds(21, 87, 91, 14);
frmActividad.getContentPane().add(lblNombre);

```

```

JLabel lblCarrera = new JLabel("Carrera:");
lblCarrera.setForeground(Color.WHITE);
lblCarrera.setFont(new Font("Arial", Font.BOLD, 18));
lblCarrera.setHorizontalAlignment(SwingConstants.CENTER);
lblCarrera.setBounds(21, 134, 91, 14);
frmActividad.getContentPane().add(lblCarrera);

```

```

JLabel lblCarp = new JLabel("CURP:");
lblCarp.setForeground(Color.WHITE);
lblCarp.setFont(new Font("Arial", Font.BOLD, 18));
lblCarp.setHorizontalAlignment(SwingConstants.CENTER);
lblCarp.setBounds(21, 341, 91, 14);
frmActividad.getContentPane().add(lblCarp);

```

```

JList list = new JList();
list.setCursor(Cursor.getPredefinedCursor(Cursor.HAND_CURSOR));
list.setForeground(Color.DARK_GRAY);
list.setComponentOrientation(ComponentOrientation.LEFT_TO_RIGHT);
list.setFont(new Font("Arial", Font.BOLD, 16));
list.setBackground(Color.WHITE);
list.setModel(new AbstractListModel() {
    String[] values = new String[] {"Sistemas", "Química", "Industrial", "Electrónica", "Gestión",
"Mecatrónica", "Mecánica", "Contaduría"};

    public int getSize() {
        return values.length;
    }

    public Object getElementAt(int index) {
        return values[index];
    }
}

```

```
});

textField_1 = new JTextField();
textField_1.setFont(new Font("Arial", Font.PLAIN, 14));
textField_1.setBounds(128, 78, 291, 35);
frmActividad.getContentPane().add(textField_1);
textField_1.setColumns(10);
//make the button transparent
textField_1.setOpaque(false);
textField_1.setBorder(null);
```

```
textField_2 = new JTextField();
textField_2.setFont(new Font("Arial", Font.PLAIN, 14));
textField_2.setColumns(10);
textField_2.setBounds(128, 332, 291, 35);
frmActividad.getContentPane().add(textField_2);
//make the button transparent
textField_2.setOpaque(false);
textField_2.setBorder(null);
```

```
JLabel lblGnero = new JLabel("G\u00E9nero:");
lblGnero.setForeground(Color.WHITE);
lblGnero.setFont(new Font("Arial", Font.BOLD, 18));
lblGnero.setBounds(28, 396, 91, 14);
frmActividad.getContentPane().add(lblGnero);
```

```
JRadioButton rdbtnHombre = new JRadioButton(" Hombre");
rdbtnHombre.setForeground(Color.WHITE);
rdbtnHombre.setFont(new Font("Arial", Font.BOLD, 14));
buttonGroup_1.add(rdbtnHombre);
rdbtnHombre.setBounds(125, 389, 97, 31);
frmActividad.getContentPane().add(rdbtnHombre);
//make the button transparent
rdbtnHombre.setOpaque(false);
//remove content area
rdbtnHombre.setContentAreaFilled(false);
//remove the border
rdbtnHombre.setBorderPainted(false);
```

```
JRadioButton rdbtnMujer = new JRadioButton(" Mujer");
rdbtnMujer.setForeground(Color.WHITE);
rdbtnMujer.setFont(new Font("Arial", Font.BOLD, 14));
buttonGroup_1.add(rdbtnMujer);
rdbtnMujer.setBounds(261, 389, 97, 31);
frmActividad.getContentPane().add(rdbtnMujer);
//make the button transparent
rdbtnMujer.setOpaque(false);
//remove content area
rdbtnMujer.setContentAreaFilled(false);
//remove the border
rdbtnMujer.setBorderPainted(false);
```

```
JCheckBox chckbxMatutino = new JCheckBox("Matutino");
chckbxMatutino.setForeground(Color.DARK_GRAY);
chckbxMatutino.setFont(new Font("Arial", Font.BOLD, 12));
buttonGroup.add(chckbxMatutino);
chckbxMatutino.setBounds(125, 445, 89, 23);
frmActividad.getContentPane().add(chckbxMatutino);
//make the button transparent
chckbxMatutino.setOpaque(false);
//remove content area
chckbxMatutino.setContentAreaFilled(false);
//remove the border
chckbxMatutino.setBorderPainted(false);
```

```
JCheckBox chckbxVespertino = new JCheckBox("Vespertino");
chckbxVespertino.setForeground(Color.DARK_GRAY);
chckbxVespertino.setFont(new Font("Arial", Font.BOLD, 12));
buttonGroup.add(chckbxVespertino);
chckbxVespertino.setBounds(217, 445, 89, 23);
frmActividad.getContentPane().add(chckbxVespertino);
//make the button transparent
chckbxVespertino.setOpaque(false);
//remove content area
chckbxVespertino.setContentAreaFilled(false);
//remove the border
chckbxVespertino.setBorderPainted(false);
```

```
JCheckBox chckbxNocturno = new JCheckBox("Nocturno");
chckbxNocturno.setForeground(Color.DARK_GRAY);
chckbxNocturno.setFont(new Font("Arial", Font.BOLD, 12));
buttonGroup.add(chckbxNocturno);
chckbxNocturno.setBounds(323, 445, 89, 23);
frmActividad.getContentPane().add(chckbxNocturno);
//make the button transparent
chckbxNocturno.setOpaque(false);
//remove content area
chckbxNocturno.setContentAreaFilled(false);
//remove the border
chckbxNocturno.setBorderPainted(false);
```

```
JLabel lblTurno = new JLabel("Turno:");
lblTurno.setForeground(Color.WHITE);
lblTurno.setFont(new Font("Arial", Font.BOLD, 18));
lblTurno.setBounds(34, 448, 78, 14);
frmActividad.getContentPane().add(lblTurno);
```

```
list.setBounds(132, 138, 280, 170);
frmActividad.getContentPane().add(list);
```

```
JButton btnAceptar = new JButton("Aceptar");
btnAceptar.setEnabled(false);
btnAceptar.setForeground(Color.DARK_GRAY);
btnAceptar.setFont(new Font("Arial", Font.BOLD, 16));
btnAceptar.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent arg0) {
        String name, course, id, gender = null, shift = null;
        name = textField_1.getText();
        course = (String) list.getSelectedValue();
        id = textField_2.getText();
        gender = selectGender(rdbtnHombre, rdbtnMujer);
        shift = selectTurn(chckbxMatutino, chckbxVespertino, chckbxNocturno);
```

```
        String message = "Nombre: " + name + "\n" + "Carrera: " + course + "\n" + "CURP: " + id + "\n" + "Género: " + gender + "\n"
+ "Turno: " + shift;
```

```
        if (verifyIntegrity(name, course, id, gender, shift) != true) {
            JOptionPane.showMessageDialog(null, message, "Registro", JOptionPane.INFORMATION_MESSAGE);
        } else {
            JOptionPane.showMessageDialog(null, "Rellene todos los campos");
        }
    }
});
```

```
JCheckBox chckbxValidate = new JCheckBox("Acepto las condiciones");
chckbxValidate.setHorizontalAlignment(SwingConstants.CENTER);
chckbxValidate.setForeground(Color.WHITE);
chckbxValidate.setFont(new Font("Arial", Font.BOLD, 12));
chckbxValidate.addActionListener(new ActionListener() {
```

```
public void actionPerformed(ActionEvent arg0) {
    if (chckbxValidate.isSelected()) btnAceptar.setEnabled(true);
    else btnAceptar.setEnabled(false);
}
});
//make the button transparent
chckbxValidate.setOpaque(false);
//remove content area
chckbxValidate.setContentAreaFilled(false);
//remove the border

btnAceptar.setBackground(SystemColor.inactiveCaption);
btnAceptar.setBounds(133, 514, 173, 43);
frmActividad.getContentPane().add(btnAceptar);
//make the button transparent
btnAceptar.setOpaque(false);
//remove content area
btnAceptar.setContentAreaFilled(false);
//remove the border
btnAceptar.setBorderPainted(false);
chckbxValidate.setBounds(133, 484, 173, 23);
frmActividad.getContentPane().add(chckbxValidate);

JLabel label = new JLabel("");
label.setForeground(Color.WHITE);
label.setIcon(new ImageIcon(Activity2.class.getResource("/image/template_activity_2.png")));
label.setBounds(-5, -16, 449, 607);
frmActividad.getContentPane().add(label);
}
}
```