

UNIVERSIDAD TÉCNICA DEL NORTE

Resolución No. 001-073 CEAACES-2013-13

FACULTAD DE INGENIERÍA EN CIENCIAS APLICADAS
CARRERA DE SOFTWARE

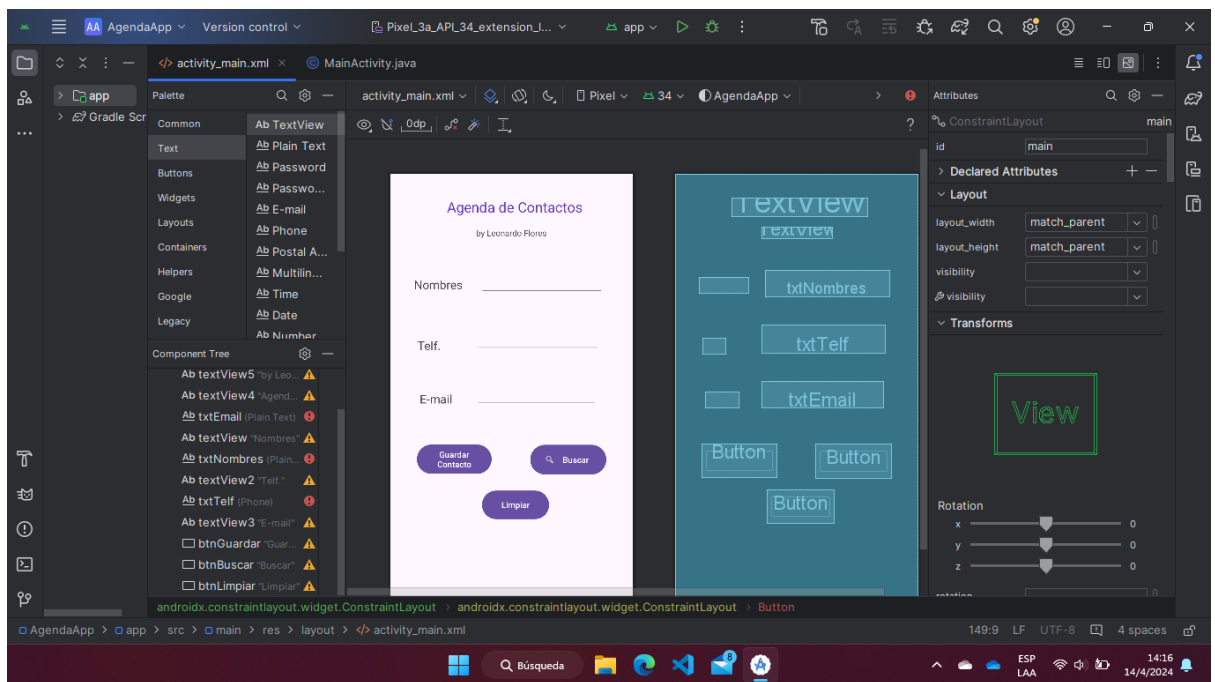
APLICACIONES MÓVILES

NOMBRES Y APELLIDOS: Brandon Leonardo Flores Alcucer

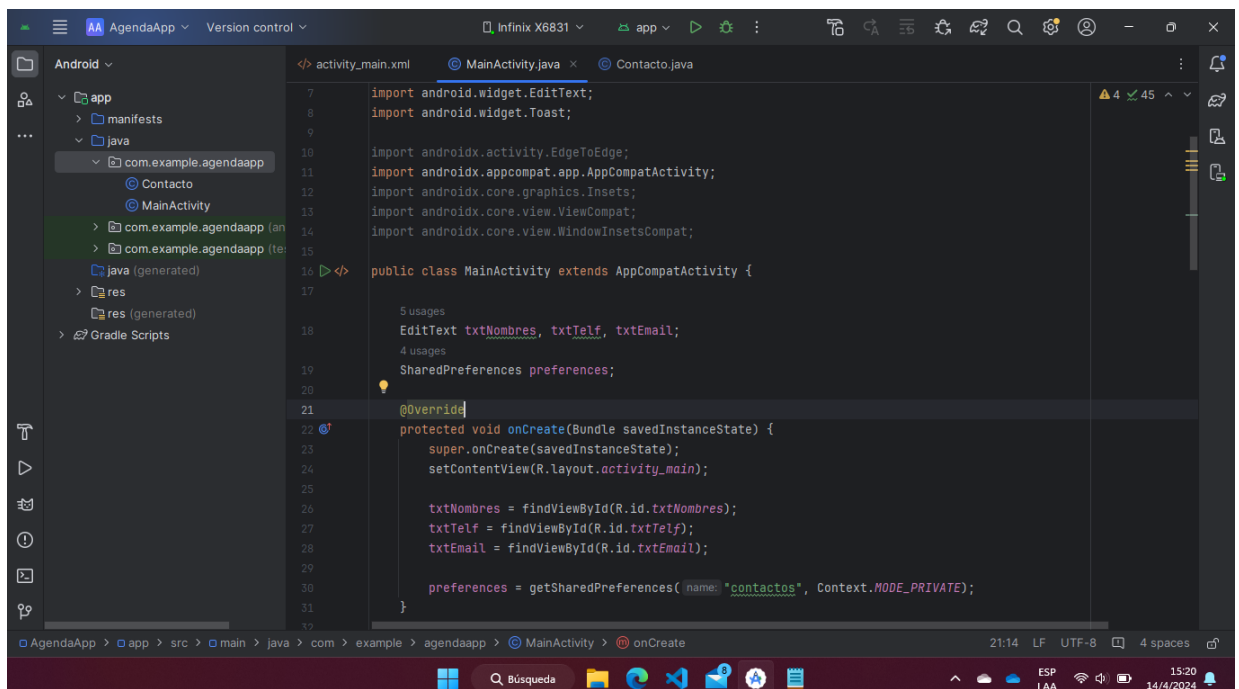
FECHA: 15/04/2024

Desarrollo Aplicación Agenda de Contactos

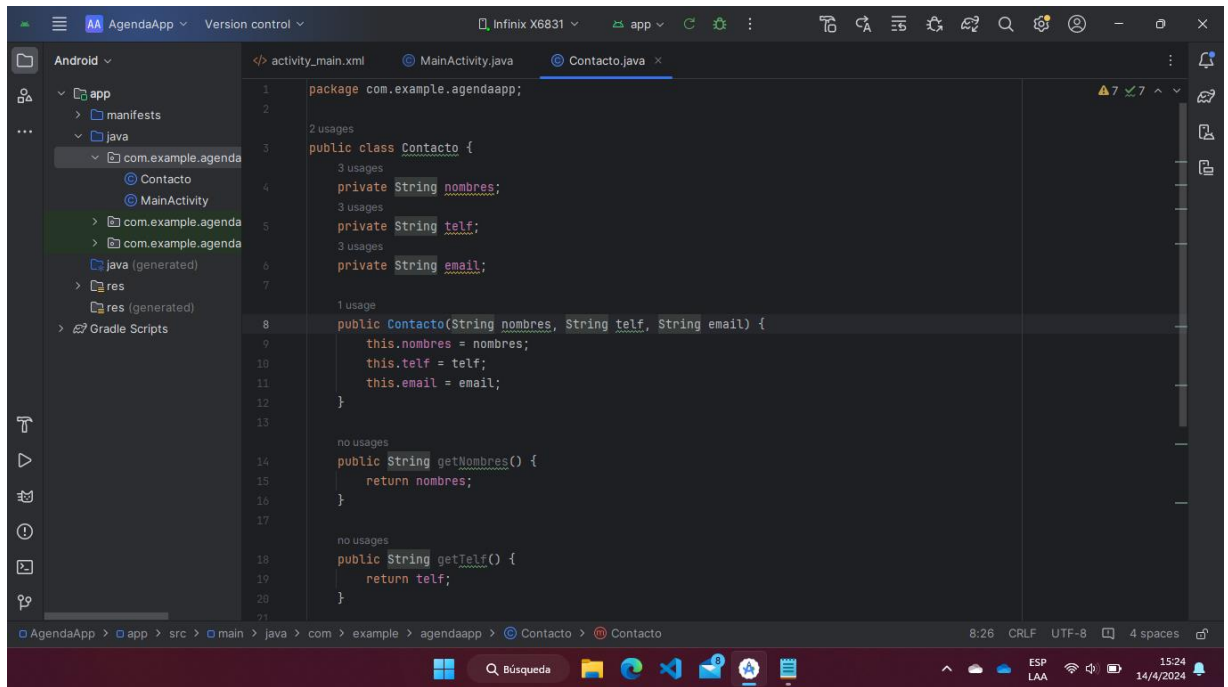
1. Desarrollo de interfaz gráfica



2. Definición de variables



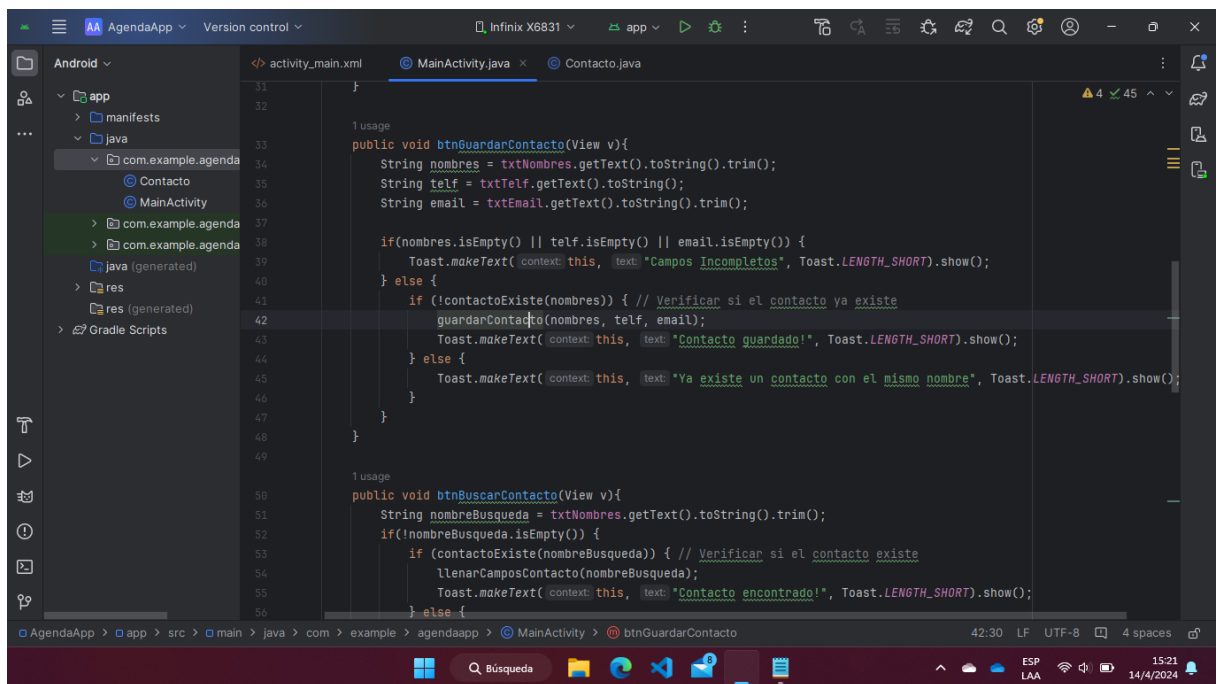
3. Clase Contacto



The screenshot shows an IDE window for 'AgendaApp'. The file explorer on the left shows the project structure: 'app' > 'java' > 'com.example.agenda'. The 'Contacto.java' file is open in the editor. The code defines a 'Contacto' class with three private attributes: 'nombres', 'telf', and 'email'. It includes a constructor and two getter methods.

```
1 package com.example.agendaapp;
2
3 public class Contacto {
4     private String nombres;
5     private String telf;
6     private String email;
7
8     public Contacto(String nombres, String telf, String email) {
9         this.nombres = nombres;
10        this.telf = telf;
11        this.email = email;
12    }
13
14    public String getNombres() {
15        return nombres;
16    }
17
18    public String getTelf() {
19        return telf;
20    }
21 }
```

4. Métodos de búsqueda y guardado de contactos



The screenshot shows the 'MainActivity.java' file in the same IDE. It contains two methods: 'btnGuardarContacto' and 'btnBuscarContacto'. The 'btnGuardarContacto' method handles saving a contact, including validation for empty fields and duplicate names. The 'btnBuscarContacto' method handles searching for a contact by name.

```
31 }
32
33 public void btnGuardarContacto(View v){
34     String nombres = txtNombres.getText().toString().trim();
35     String telf = txtTelf.getText().toString();
36     String email = txtEmail.getText().toString().trim();
37
38     if(nombres.isEmpty() || telf.isEmpty() || email.isEmpty()) {
39         Toast.makeText(this, "Campos Incompletos", Toast.LENGTH_SHORT).show();
40     } else {
41         if (!contactoExiste(nombres)) { // Verificar si el contacto ya existe
42             guardarContacto(nombres, telf, email);
43             Toast.makeText(this, "Contacto guardado!", Toast.LENGTH_SHORT).show();
44         } else {
45             Toast.makeText(this, "Ya existe un contacto con el mismo nombre", Toast.LENGTH_SHORT).show();
46         }
47     }
48 }
49
50 public void btnBuscarContacto(View v){
51     String nombreBusqueda = txtNombres.getText().toString().trim();
52     if(!nombreBusqueda.isEmpty()) {
53         if (contactoExiste(nombreBusqueda)) { // Verificar si el contacto existe
54             llenarCamposContacto(nombreBusqueda);
55             Toast.makeText(this, "Contacto encontrado!", Toast.LENGTH_SHORT).show();
56         } else {
57             Toast.makeText(this, "No se encontró el contacto", Toast.LENGTH_SHORT).show();
58         }
59     }
60 }
```

This screenshot shows the Android Studio IDE with the `MainActivity.java` file open. The left sidebar displays the project structure, including `com.example.agenda` with sub-packages `Contacto` and `MainActivity`. The main editor area shows the following Java code:

```
48 }
49
50 1 usage
51 public void btnBuscarContacto(View v){
52     String nombreBusqueda = txtNombres.getText().toString().trim();
53     if(!nombreBusqueda.isEmpty()) {
54         if (contactoExiste(nombreBusqueda)) { // Verifican si el contacto existe
55             llenarCamposContacto(nombreBusqueda);
56             Toast.makeText(context, this, text: "Contacto encontrado!", Toast.LENGTH_SHORT).show();
57         } else {
58             Toast.makeText(context, this, text: "Contacto no encontrado!", Toast.LENGTH_SHORT).show();
59         }
60     } else {
61         Toast.makeText(context, this, text: "Campo Nombres incompleto", Toast.LENGTH_SHORT).show();
62     }
63 }
64
65 1 usage
66 public void btnLimpiarCampos(View v){
67     txtNombres.setText("");
68     txtEmail.setText("");
69     txtTelf.setText("");
70
71     Toast.makeText(context, this, text: "Campos limpiados!", Toast.LENGTH_SHORT).show();
72 }
73
74 2 usages
75 private boolean contactoExiste(String nombre) {
```

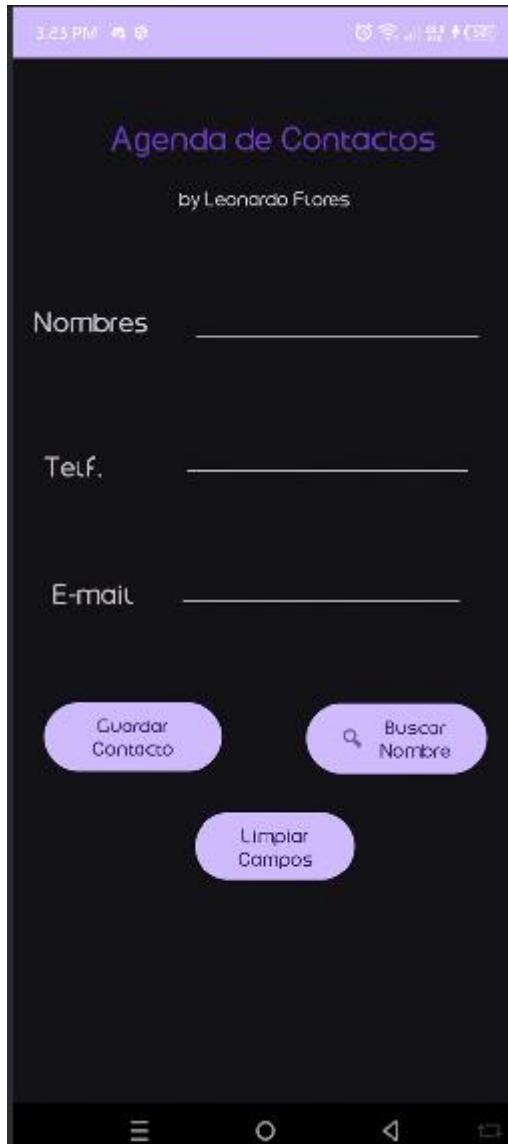
The bottom status bar indicates the file path: `AgendaApp > app > src > main > java > com > example > agendaapp > @ MainActivity > @ btnGuardarContacto`. The system tray at the bottom shows the time as 15:22 on 14/4/2024.

This screenshot shows the same Android Studio IDE with the `MainActivity.java` file open, displaying the implementation of the `contactoExiste`, `guardarContacto`, and `llenarCamposContacto` methods. The left sidebar shows the project structure, including `com.example.agenda` with sub-packages `Contacto` and `MainActivity`. The main editor area shows the following Java code:

```
76 }
77
78 2 usages
79 private boolean contactoExiste(String nombre) {
80     return preferences.contains(nombre);
81 }
82
83 1 usage
84 private void guardarContacto(String nombres, String telf, String email) {
85     Contacto contacto = new Contacto(nombres, telf, email);
86     SharedPreferences.Editor editor = preferences.edit();
87     editor.putString(nombres, contacto.toString());
88     editor.apply();
89 }
90
91 1 usage
92 private void llenarCamposContacto(String nombre) {
93     String contactoString = preferences.getString(nombre, defValue: null);
94     if (contactoString != null) {
95         String[] contactoInfo = contactoString.split(regex: "|");
96         txtNombres.setText(contactoInfo[0]);
97         txtTelf.setText(contactoInfo[1]);
98         txtEmail.setText(contactoInfo[2]);
99     }
100 }
101 }
```

The bottom status bar indicates the file path: `AgendaApp > app > src > main > java > com > example > agendaapp > @ MainActivity > @ contactoExiste`. The system tray at the bottom shows the time as 15:22 on 14/4/2024.

5. Resultado



The screenshot shows a mobile application titled "Agenda de Contactos" by Leonardo Flores. The interface is dark-themed with white text. It features three input fields for "Nombres", "Telf.", and "E-mail". Below these fields are three buttons: "Guardar Contacto" (Save Contact), "Buscar Nombre" (Search Name), and "Limpiar Campos" (Clear Fields). The status bar at the top shows the time as 3:25 PM and various system icons. The bottom navigation bar includes standard Android icons for menu, home, back, and recent apps.

3:25 PM

Agenda de Contactos

by Leonardo Flores

Nombres

Telf.

E-mail

Guardar Contacto

Buscar Nombre

Limpiar Campos