

## Client:

In the client master, we register the clients who come to the library to request a loan. **The clients we register are not the same as users.**

DNI	Nombre	Apellido	Correo	Dirección	Teléfono
40000001	Juan	Pérez	yDiUrXJfwQeMePF1ZHkTXA==	Helguera 4157	011 2233-4455
40000002	María	López	A6w4lghgp7Cq9HqbA5Pot9fYGiQT8Yks...	Av. Siempreviva 742	011 9876-5432
40000003	Carlos	Gómez	jq1soQNW0NC64alod4JAe2zpTfE/Rq8op...	San Martín 300	11 4455-6677
40000004	Ana	Martínez	7VzV7P36Tofep4HftAqw==	Belgrano 500	011 7778-8899
44111222	David	García	MYc-v8foa52b7PvFWlv3zB2gUVxvmix4x...	Calle del Sol 1	11 5555-1111
45823327	Lucas	Gallardo	Z4jhhUw3e2Th1lrhS2FPITiERn/4FNt8/kc...	Pedro moran 2981	11 3061-3554
55222333	Sofía	Rodríguez	QNDcVgAVZkp4QZZvxoWd4GnBYgeDSJ...	Rivadavia 450	11 5555-2222

## Register, Delete, Modify:

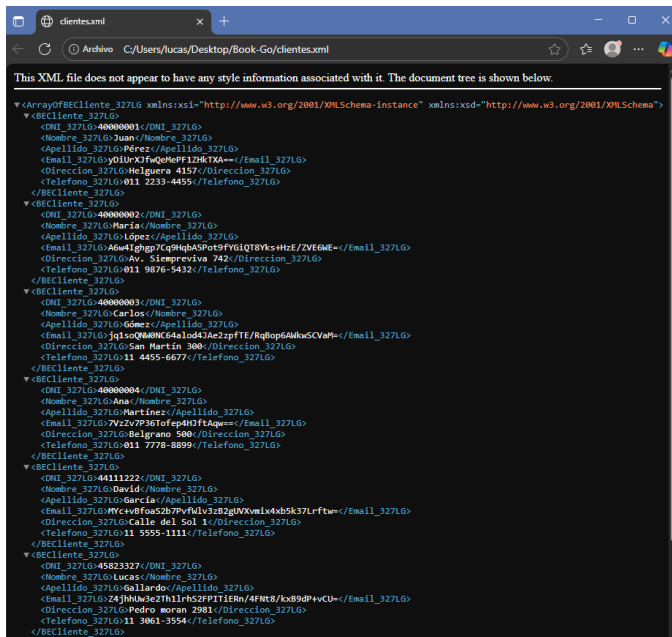
In the form, we will have the Register button, to enter new clients, Delete to deactivate existing ones that we select in the grid, and Modify to change the data of the selected client. To carry out these options, we will have fields that we must fill in:

- DNI: 8 numerical identification characters for the client.
- Name: Client's first name.
- Last Name: Client's last name.
- Email: Client's email address in the format "`<nombreApellido@ejemplo.com>`"
- Address: Client's home address.
- Phone: Client's phone number in the format "`011 1234-5678`"

**note: The emails are stored encrypted in the database; we can see the unencrypted content by checking the "decrypt" box.**

## Serialize, Deserialize:

In addition to the creation, deletion, and modification functions, we can serialize the loaded clients into an XML file and deserialize them to display them on the grid. The **"Update Grid"** button will serve to reload the clients that are in the database.



The screenshot shows a web browser window with the address bar displaying 'C:/Users/lucas/Desktop/Book-Go/clientes.xml'. The main content area shows an XML document tree. At the top, a message states: 'This XML file does not appear to have any style information associated with it. The document tree is shown below.' The XML tree is rooted at 'ArrayOfBECliente\_327LG' and contains five 'BECliente\_327LG' elements. Each element represents a client with attributes for DNI, Name, Surname, Email, Address, and Phone Number. The clients are: Juan Perez, Maria Lopez, Carlos Gomez, Ana Martinez, and David Garcia. The XML is displayed in a dark-themed editor.

```
<ArrayOfBECliente_327LG xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <BECliente_327LG>
    <DNI_327LG>40000001</DNI_327LG>
    <Nombre_327LG>Juan</Nombre_327LG>
    <Apellido_327LG>Perez</Apellido_327LG>
    <Email_327LG>XUwX2fwQoHPF1ZkTXa==</Email_327LG>
    <Direccion_327LG>Helguera 4157</Direccion_327LG>
    <Telefono_327LG>011 2233-4455</Telefono_327LG>
  </BECliente_327LG>
  <BECliente_327LG>
    <DNI_327LG>40000002</DNI_327LG>
    <Nombre_327LG>Maria</Nombre_327LG>
    <Apellido_327LG>Lopez</Apellido_327LG>
    <Email_327LG>A6w4Ighg7CqHqBASPot9fYgiQI8YksHtE/ZVE6ME</Email_327LG>
    <Direccion_327LG>Av. Siempreviva 742</Direccion_327LG>
    <Telefono_327LG>011 9876-5432</Telefono_327LG>
  </BECliente_327LG>
  <BECliente_327LG>
    <DNI_327LG>40000003</DNI_327LG>
    <Nombre_327LG>Carlos</Nombre_327LG>
    <Apellido_327LG>Gomez</Apellido_327LG>
    <Email_327LG>q1soQMMNC6alod4JAezpFFE/Rqlopd4kka5CVaW</Email_327LG>
    <Direccion_327LG>San Martin 300</Direccion_327LG>
    <Telefono_327LG>11 4455-6677</Telefono_327LG>
  </BECliente_327LG>
  <BECliente_327LG>
    <DNI_327LG>40000004</DNI_327LG>
    <Nombre_327LG>Ana</Nombre_327LG>
    <Apellido_327LG>Martinez</Apellido_327LG>
    <Email_327LG>7Vz2v7P36Toep4tOfAq==</Email_327LG>
    <Direccion_327LG>Belgrano 500</Direccion_327LG>
    <Telefono_327LG>011 7778-8899</Telefono_327LG>
  </BECliente_327LG>
  <BECliente_327LG>
    <DNI_327LG>44112222</DNI_327LG>
    <Nombre_327LG>David</Nombre_327LG>
    <Apellido_327LG>Garcia</Apellido_327LG>
    <Email_327LG>MYcvvBFoa52b7PvMlV3:82gUWxm14x5k37Lrftw</Email_327LG>
    <Direccion_327LG>Calle del Sol 1</Direccion_327LG>
    <Telefono_327LG>11 5555-1111</Telefono_327LG>
  </BECliente_327LG>
  <BECliente_327LG>
    <DNI_327LG>45823227</DNI_327LG>
    <Nombre_327LG>Lucas</Nombre_327LG>
    <Apellido_327LG>Gallardo</Apellido_327LG>
    <Email_327LG>24jNNU3e2Th1lrSzPPTIERn/4FwN8/kw89dP+vcU</Email_327LG>
    <Direccion_327LG>Pedro Moran 2981</Direccion_327LG>
    <Telefono_327LG>11 3861-3554</Telefono_327LG>
  </BECliente_327LG>
</ArrayOfBECliente_327LG>
```

This is what the file will look like once serialized.