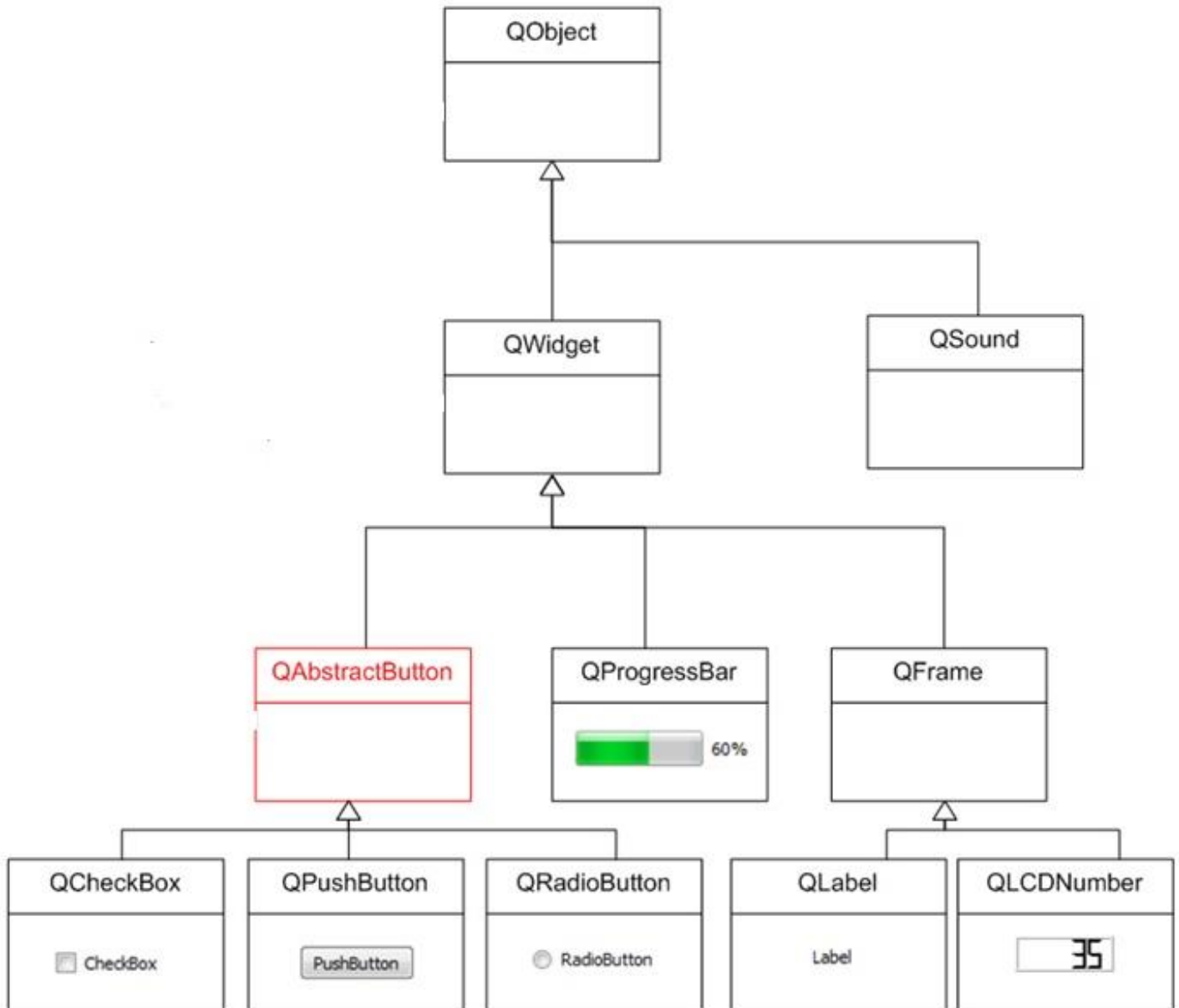# Babel : Object-Oriented Design

Client Side

To write the client, we used the Qt Inheritance principle.

QObject is the base class, and almost all the classes derive from it.

All the elements in a window are called « widgets ». This class contains base attributes that are common to all the widgets (width, height …).

QAbstractButton, for example, is an abstract class (you cannot create objects from it). Its properties are shared between all button types.

From this, we implemented :

- **Startup Dialog Class,** a QDialog to get informations about the user at logging in
- **Main Window Class,** to initalize the graphical window and call all the crucial functions.
- **IpWidget Class,** a QTabWidget that in the widget displayed in the main window.
- **Client Class,** public QObject that implements the networking part of the client. **Client UDP Class** derives from this class, its used to connect a client to another.
- **Table Model Class,** a QAbstractTableModel that is used to store all the informations about the users
- **Audio Class**, used to get the user audio input
- **Cmd Handler Class,** to parse the requests.