

Annexe- Le code de la télécommande

A

```
unit Visuel_Commande;

interface

uses
  Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls,
  Forms, Dialogs, StdCtrls, ExtCtrls, WSocket;

type
  TForm1 = class(TForm)
    // GUI Composants
    box_connection: TGroupBox;
    edit_ip: TEdit;
    lbl_ip: TLabel;
    lbl_port: TLabel;
    edit_port: TEdit;
    box_mouvement: TGroupBox;
    btn_close: TButton;
    pnl_socle: TPanel;
    pnl_epaule: TPanel;
    pnl_coude: TPanel;
    pnl_poignet: TPanel;
    pnl_pince: TPanel;
    lbl_socle: TLabel;
    lbl_epaule: TLabel;
    lbl_coude: TLabel;
    lbl_poignet: TLabel;
    lbl_pince: TLabel;
    btn_socle_gauche: TButton;
    btn_socle_stop: TButton;
    btn_socle_droite: TButton;
    btn_epaule_gauche: TButton;
    btn_epaule_stop: TButton;
    btn_epaule_droite: TButton;
    btn_coude_gauche: TButton;
    btn_coude_stop: TButton;
    btn_coude_droite: TButton;
    btn_poignet_gauche: TButton;
    btn_poignet_stop: TButton;
    btn_poignet_droite: TButton;
    btn_pince_gauche: TButton;
    btn_pince_stop: TButton;
    btn_pince_droite: TButton;
    btn_connect: TButton;
    btn_deconnect: TButton;
    edit_prog: TEdit;
    // TWSocket pour être capable de connecter sur le serveur
    WSocket: TWSocket;
    // Fonctions pour les boutons
    procedure btn_connectClick(Sender: TObject);
    procedure btn_deconnectClick(Sender: TObject);
    procedure btn_socle_gaucheClick(Sender: TObject);
    procedure btn_socle_stopClick(Sender: TObject);
    procedure btn_socle_droiteClick(Sender: TObject);
    procedure btn_epaule_gaucheClick(Sender: TObject);
    procedure btn_epaule_stopClick(Sender: TObject);
    procedure btn_epaule_droiteClick(Sender: TObject);
    procedure btn_coude_gaucheClick(Sender: TObject);
```

```

procedure btn_coude_stopClick(Sender: TObject);
procedure btn_coude_droiteClick(Sender: TObject);
procedure btn_poignet_gaucheClick(Sender: TObject);
procedure btn_poignet_stopClick(Sender: TObject);
procedure btn_poignet_droiteClick(Sender: TObject);
procedure btn_pince_gaucheClick(Sender: TObject);
procedure btn_pince_stopClick(Sender: TObject);
procedure btn_pince_droiteClick(Sender: TObject);
procedure btn_closeClick(Sender: TObject);
// Méthodes du Socket
procedure onErr(Sender: TObject);
procedure onSAvailable(Sender: TObject; Error: Word);
procedure onSClosed(Sender: TObject; Error: Word);
procedure onSConnected(Sender: TObject; Error: Word);
procedure onSError(Sender: TObject; Error: Integer; Msg: String);
procedure WSocketBgException(Sender: TObject; E: Exception;
    var CanClose: Boolean);

private
    ConnectError: Word;
    procedure send_fw(FW : byte);
public

end;

var
    Form1: TForm1;

//-----
// Implémentation des procédures
//-----

implementation

{$R *.dfm}

// quand vous poussez le bouton 'connect'
procedure TForm1.btn_connectClick(Sender: TObject);
begin
    with WSocket do
        begin
            if State <> wsConnected then
                begin
                    Addr := edit_ip.Text;
                    Port := edit_port.Text;
                    Proto := 'tcp';
                    Connect;
                    while State in [WsConnecting] do
                        begin
                            Application.ProcessMessages;
                            if Application.Terminated then
                                Exit;
                        end;
                    if State = WsConnected then
                        begin
                            box_movement.Enabled := True;
                        end;
                    end;
                end;
            end;
        end;
    end;
end;

```

```

// quand vous pousez le bouton 'deconnect'
procedure TForm1.btn_deconnectClick(Sender: TObject);
begin
    Wsocket.Close;
end;

// procedure pour envoyer les flagwords
procedure TForm1.send_fw(FW:byte);
begin
    if WSocket.State = WsConnected then
        begin
            WSocket.SendStr(chr(FW));
        end;
end;

// procedure pour les errors
procedure TForm1.WSocketBgException(Sender: TObject; E: Exception;
    var CanClose: Boolean);
begin
    edit_prog.Text := 'Impossible de connecter avec le Robot';
end;

//-----
// Tous les boutons
//-----
procedure TForm1.btn_socle_gaucheClick(Sender: TObject);
begin
    send_fw($D5);
end;

procedure TForm1.btn_socle_stopClick(Sender: TObject);
begin
    send_fw($C5);
end;

procedure TForm1.btn_socle_droiteClick(Sender: TObject);
begin
    send_fw($E5);
end;

procedure TForm1.btn_epaule_gaucheClick(Sender: TObject);
begin
    send_fw($D4);
end;

procedure TForm1.btn_epaule_stopClick(Sender: TObject);
begin
    send_fw($C4);
end;

procedure TForm1.btn_epaule_droiteClick(Sender: TObject);
begin
    send_fw($E4);
end;

procedure TForm1.btn_coude_gaucheClick(Sender: TObject);
begin
    send_fw($E3);
end;

procedure TForm1.btn_coude_stopClick(Sender: TObject);

```

```

begin
    send_fw($C3);
end;

procedure TForm1.btn_coude_droiteClick(Sender: TObject);
begin
    send_fw($D3);
end;

procedure TForm1.btn_poignet_gaucheClick(Sender: TObject);
begin
    send_fw($D2);
end;

procedure TForm1.btn_poignet_stopClick(Sender: TObject);
begin
    send_fw($C2);
end;

procedure TForm1.btn_poignet_droiteClick(Sender: TObject);
begin
    send_fw($E2);
end;

procedure TForm1.btn_pince_gaucheClick(Sender: TObject);
begin
    send_fw($D1);
end;

procedure TForm1.btn_pince_stopClick(Sender: TObject);
begin
    send_fw($C1);
end;

procedure TForm1.btn_pince_droiteClick(Sender: TObject);
begin
    send_fw($E1);
end;

// fermer le form
procedure TForm1.btn_closeClick(Sender: TObject);
begin
    Form1.Close;
end;

// Capter des erreurs
procedure TForm1.onErr(Sender: TObject);
begin
    edit_prog.Text := 'ERROR';
end;

// On Session Available
procedure TForm1.onSAvailable(Sender: TObject; Error: Word);
begin
    edit_prog.Text := 'Session Available';
end;

// On Session Closed
procedure TForm1.onSClosed(Sender: TObject; Error: Word);
begin
    edit_prog.Text := 'Connection rompus';
end;

```

```

    btn_connect.Enabled := True;
    btn_deconnect.Enabled := False;
    box_movement.Enabled := False;
end;

// On Session Connected
procedure TForm1.onSConnected(Sender: TObject; Error: Word);
begin
    ConnectError := Error;
    if ConnectError <> 0 then
        edit_prog.Text := 'Connection Impossible, ERREUR!'
    else
        begin
            edit_prog.Text := 'Connection réalisé';
            btn_connect.Enabled := False;
            btn_deconnect.Enabled := True;
        end;
    end;
end;

// On Session Error
procedure TForm1.onSError(Sender: TObject; Error: Integer; Msg: String);
begin
    edit_prog.Text := 'Socks Error';
end;

end.

```