Raport

C#

مكتب التكوين المهني وإنعاش الشغل

Rapport de projet de fin d'étude

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TDI-A

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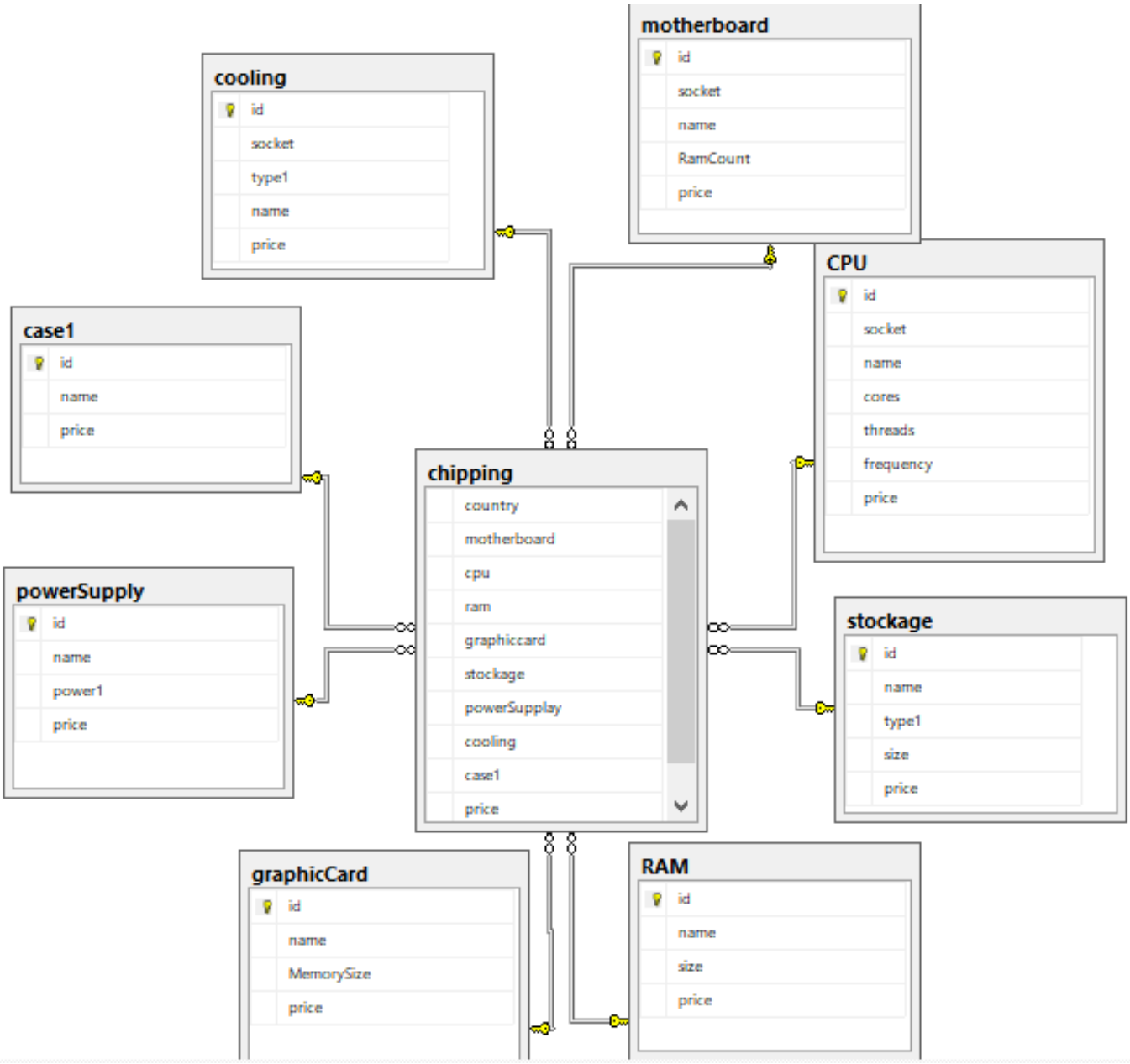
❖ Pc Building

Ce projet est un application C# qui permet d'aider pour assemble un Pc à zéro par choisir les pièces de « Hardware »

❖ Schéma de DataBase :



Le code SQL :

```
create database PC
use PC
--les client qui demander
create table Demand (id int primary key identity(1,1),cpu nvarchar(20),motherboard
nvarchar(20),ram nvarchar(20),graphiccard nvarchar(30),stockage nvarchar(30),
```

```
powerSupplay nvarchar(30),cooling nvarchar(30),case1 nvarchar(30),price money)

--le processeur
create table CPU(id int primary key,socket nvarchar(11), name nvarchar(20), cores
int,threads int, frequency float,price money)
insert into CPU values(1,'AM4','RYZEN3_2200G',4,4,3.5,100)
insert into CPU values(2,'AM4','RYZEN5_1600AF',6,12,3.9,150)
insert into CPU values(3,'AM4','RYZEN5_3600G',6,12,4.5,160)
insert into CPU values(4,'LGA1151V2','I3_8350k',4,4,4.0,140)
insert into CPU values(5,'LGA1151V2','I5-9500',6,6,3.0,260)
insert into CPU values(6,'LGA1151V2','I7-8700k',6,12,4.0,378)

--carte mere
create table motherboard(id int primary key,socket nvarchar(11),name
nvarchar(20),RamCount int,price money)
insert into motherboard values(1,'AM4','MSI_B450M',4,126)
insert into motherboard values(2,'AM4','ASUS_ROG_B450',4,189)
insert into motherboard values(3,'LGA1151V2','ASROCK_B250',4,111)
insert into motherboard values(4,'LGA1151V2','ASUS_MAXIMUS_XI',8,390)

--RAM
create table RAM(id int primary key,name nvarchar(20),size int,price money)
insert into RAM values(1,'SAMSUNG_A90',8,40)
insert into RAM values(2,'HYPER300',4,30)
insert into RAM values(3,'HYPER120',2,10)

--graphicCard
create table graphicCard(id int primary key,name nvarchar(30),MemorySize int,price
money)
insert into graphicCard values(1,'RX550',2,145)
insert into graphicCard values(2,'GTX1050Ti',4,150)
insert into graphicCard values(3,'GTX1080Ti',8,727)

--Stockage
create table stockage(id int primary key,name nvarchar(30),type1 nvarchar(10),size
nvarchar(5),price money)
insert into stockage values(1,'SEGATE_ST','HDD','1TB',58)
insert into stockage values(2,'SAMSUNG_860','SSD','240GB',30)
insert into stockage values(3,'SEGATE_500TY','HDD','3TB',140)
insert into stockage values(4,'HYPER_ST','M.2','1TB',340)

--powerSupplay
create table powerSupply(id int primary key,name nvarchar(30),power1 int,price money)
insert into powerSupply values(1,'AERCOL_VX_700W',700,126)
insert into powerSupply values(2,'ZALMVN_ZM_850W',850,155)
insert into powerSupply values(3,'AERCOL_VXI_1000W',100,200)

--cooling
create table cooling(id int primary key,socket nvarchar(20),type1 nvarchar(20),name
nvarchar(30),price money)
insert into cooling values (1,'AM4','AIR_COOLER','COOLER_MASTER_AIR8',67)
insert into cooling values (2,'LGA1151V2','AIR_COOLER','COOLER_MASTER_RYZEN',57)
insert into cooling values (3,'AM4+LGA1151V2','WATER_COOLER','COOLER_MASTER_AIR8',87)

--case
create table case1(id int primary key,name nvarchar(30),price money)
insert into case1 values(1,'coolerMaster H500M',38)
```

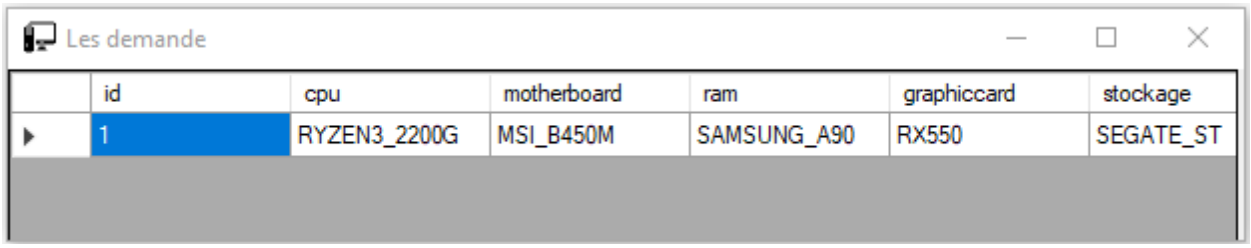
```
insert into case1 values(2,'coolerMaster MB530P',58)
insert into case1 values(3,'APPLE_MAC_PRO',134)

--chpping
create table chipping(country nvarchar(20),
motherboard int references motherboard(id),
cpu int references CPU(id),
ram int references RAM(id),
graphiccard int references graphicCard(id),
stockage int references stockage(id),
powerSupplay int references powerSupply(id),
cooling int references cooling(id),
case1 int references case1(id),
price money)
```

❖ Partie C# :

Form 1 :

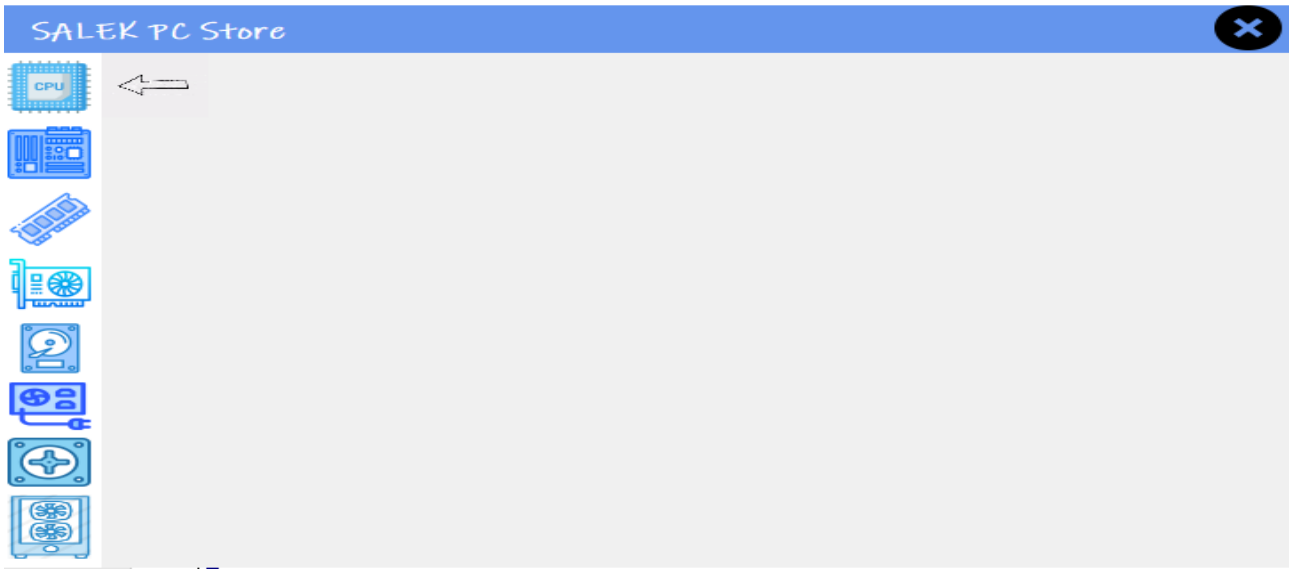

```
private void Form1_Load(object sender, EventArgs e)
{
    label1.BackColor = System.Drawing.Color.Transparent;
}

private void button1_Click(object sender, EventArgs e)
{
    Form4 f = new Form4();
    f.Show();
}

private void button2_Click(object sender, EventArgs e)
{
    Form2 f = new Form2();
    this.Hide();
    f.Show();
}
```

1. Button : les demande déjà fait




```
private void Form2_Load(object sender, EventArgs e)
        {
            var demande = pc.Demands.ToList();
            dataGridView1.DataSource = demande;
        }
```

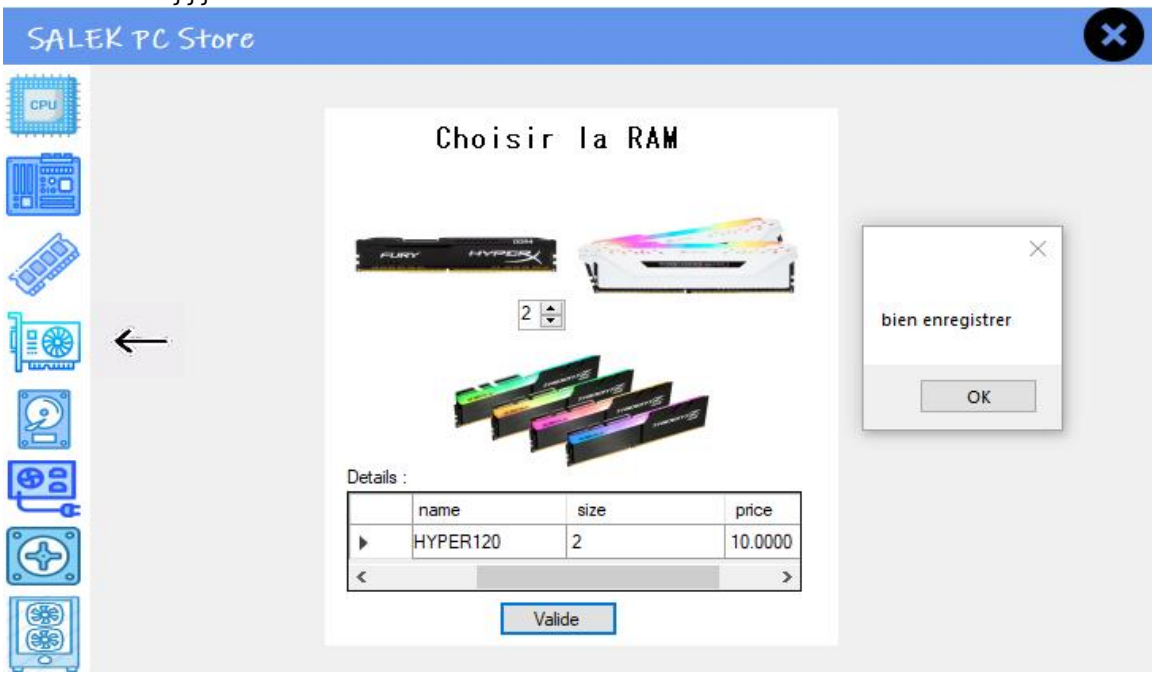
La button: start you‘re own build



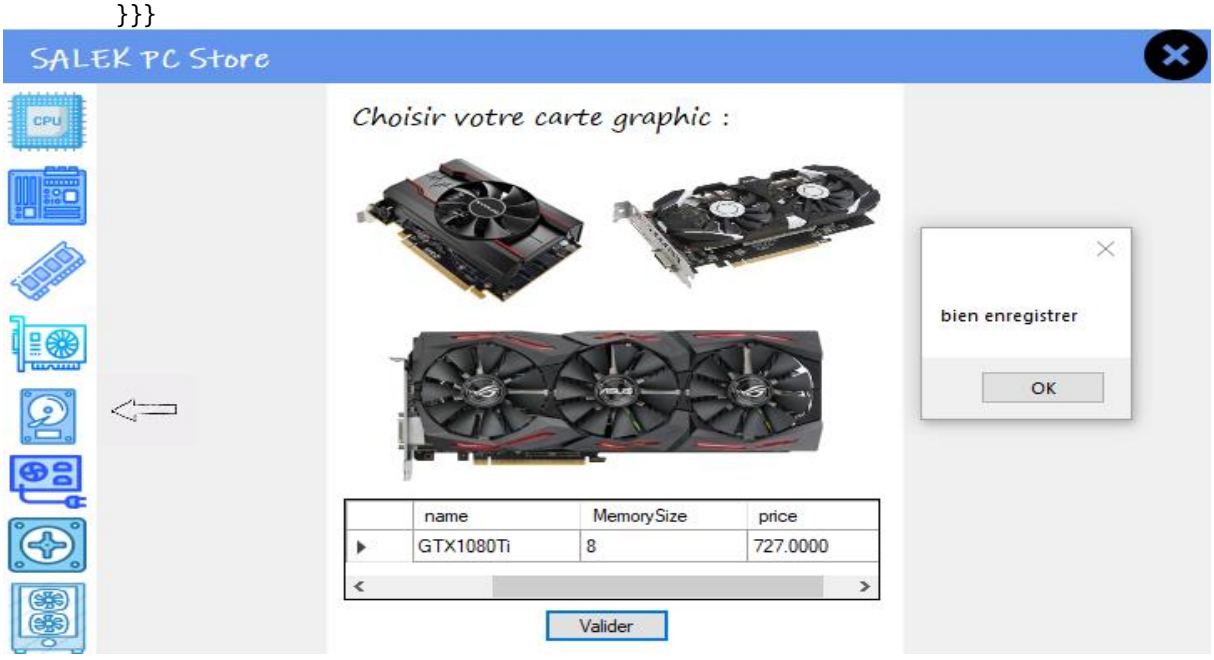
si tu es Click on Picture CPU tu peux choisir votre Processeur par click a ca photo pour afficher aussi les détails de ce processeur :

```
public partial class UserControl1 : UserControl
    {
        public int aaa { get; set; }
        PCEntities pc = new PCEntities();
        private void pictureBox1_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.CPUs.Where(x => x.id == 1).ToList();
            aaa = 1;
        }
        private void pictureBox2_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.CPUs.Where(x => x.id == 2).ToList();
            aaa = 2;
        }
        private void pictureBox3_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.CPUs.Where(x => x.id == 3).ToList();
            aaa = 3;
        }
        private void pictureBox4_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.CPUs.Where(x => x.id == 4).ToList();
            aaa = 4;
        }
        private void pictureBox5_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.CPUs.Where(x => x.id == 5).ToList();
            aaa = 5;
        }
        private void pictureBox6_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.CPUs.Where(x => x.id == 6).ToList();
            aaa = 6;
        }
        private void button_Valider_Click(object sender, EventArgs e)
        {
            if (aaa < 1 || aaa >6 )
            {MessageBox.Show("choix inconnue");}
            else
            {
                MessageBox.Show(" bien enregistre");
                this.Hide();
            }}}
```

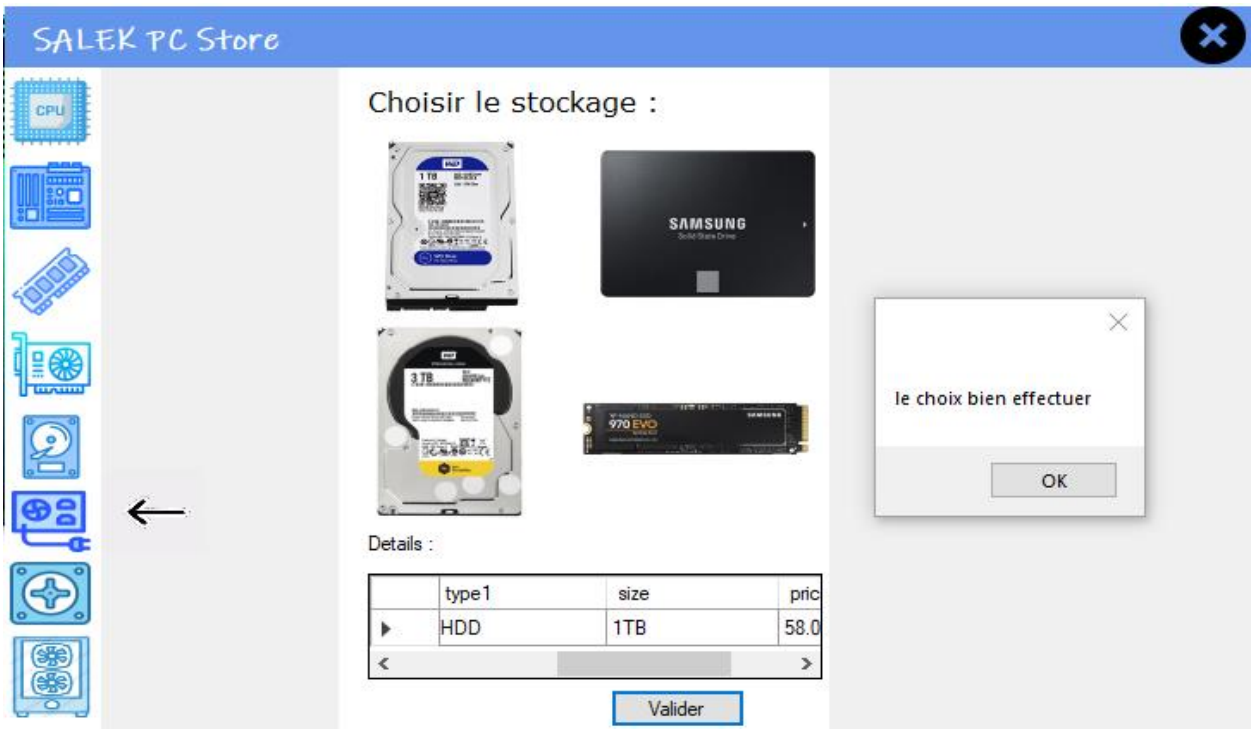
```
public partial class CARTMEREuser : UserControl
    {
        PCEntities pc = new PCEntities();
        public int mmm { get; set; }
        public CARTMEREuser()
        {
            InitializeComponent();
        }
        private void pictureBox1_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.motherboards.Where(x => x.id == 1).ToList();
            mmm = 1;
        }
        private void pictureBox2_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.motherboards.Where(x => x.id == 2).ToList();
            mmm = 2;
        }
        private void pictureBox3_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.motherboards.Where(x => x.id == 3).ToList();
            mmm = 3;
        }
        private void pictureBox4_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.motherboards.Where(x => x.id == 4).ToList();
            mmm = 4;
        }
        private void button1_Click(object sender, EventArgs e)
        {
            if(mmm< 1 || mmm>4)
            {MessageBox.Show("choisir votre cart mere");}
            else
            {
                MessageBox.Show("bien enregistrer");
                this.Hide();
            }}}
```



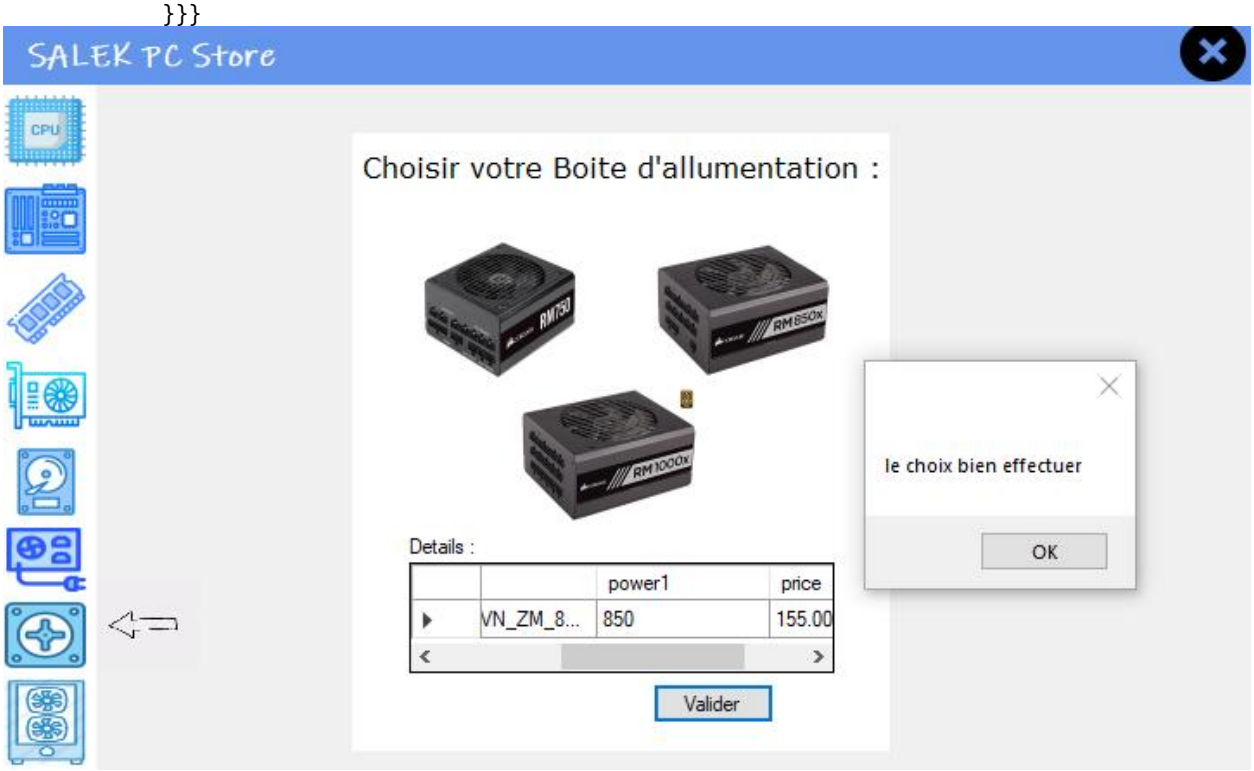
```
public partial class RAMuser : UserControl
    {
        public decimal capacity { get; set; }
        public int rrr { get; set; }
        PCEntities pc = new PCEntities();
        public RAMuser()
        {
            InitializeComponent();
        }
        private void pictureBox1_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.RAMs.Where(x => x.id == 3).ToList();
            rrr = 3;
            numericUpDown1.Visible = true;
        }
        private void RAMuser_Load(object sender, EventArgs e)
        {
            numericUpDown1.Visible = false;
        }
        private void pictureBox2_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.RAMs.Where(x => x.id == 2).ToList();
            rrr = 2;
            numericUpDown1.Visible = false;
        }
        private void pictureBox3_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.RAMs.Where(x => x.id == 1).ToList();
            rrr =1;
            numericUpDown1.Visible = false;
        }
        private void button1_Click(object sender, EventArgs e)
        {
            capacity = numericUpDown1.Value;
            if(rrr<1 || rrr > 3)
            { MessageBox.Show("choisir votre RAM"); }
            else { MessageBox.Show("bien enregistrer");
            this.Hide();
        }}}
```



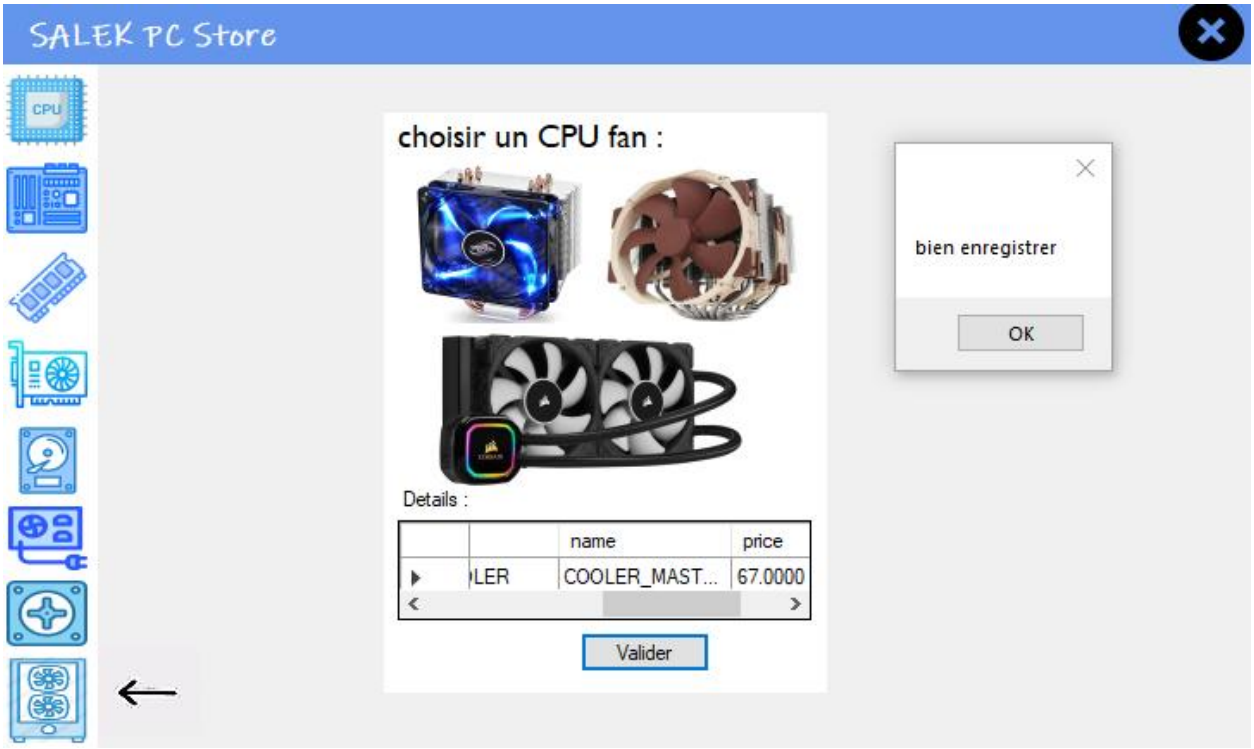
```
public partial class graphiCard : UserControl
    {
        PCEntities pc = new PCEntities();
        public int ggg { get; set; }
        public graphiCard()
        {
            InitializeComponent();
        }
        private void pictureBox1_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.graphicCards.Where(x => x.id == 1).ToList();
            ggg = 1;
        }
        private void pictureBox2_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.graphicCards.Where(x => x.id == 2).ToList();
            ggg = 2;
        }
        private void pictureBox3_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.graphicCards.Where(x => x.id == 3).ToList();
            ggg = 3;
        }
        private void button1_Click(object sender, EventArgs e)
        {
            if (ggg < 1 || ggg > 4)
            {
      MessageBox.Show("alors tu choisir aucun carte graphic pas de problem c'est optionelle");
                MessageBox.Show("bien enregistrer");
                this.Hide();
            }
            else
            {
                MessageBox.Show("bien enregistrer");
                this.Hide();
            }}}
```



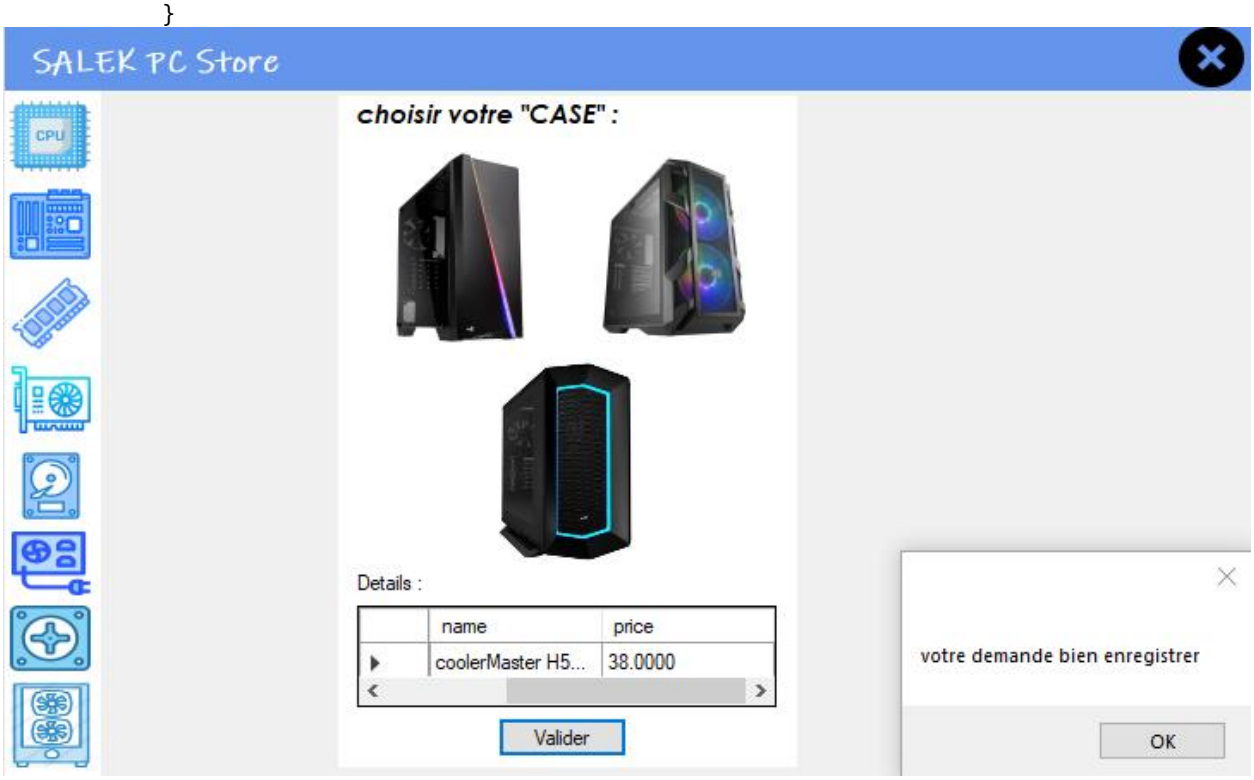
```
public partial class ssdHDD : UserControl
    {
        PCEntities pc = new PCEntities();
        public int stok { get; set; }
        public ssdHDD()
        {
            InitializeComponent();
        }
        private void pictureBox1_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.stockages.Where(x => x.id == 1).ToList();
            stok = 1;
        }
        private void pictureBox2_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.stockages.Where(x => x.id == 2).ToList();
            stok = 2;
        }
        private void pictureBox3_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.stockages.Where(x => x.id == 3).ToList();
            stok = 3;
        }
        private void pictureBox4_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.stockages.Where(x => x.id == 4).ToList();
            stok = 4;
        }
        private void button1_Click(object sender, EventArgs e)
        {
            if(stok<1 || stok>4)
            { MessageBox.Show("choisir le stockage"); }
            else
            {
                MessageBox.Show("le choix bien effectuer");
                this.Hide();
            }}}
```



```
public partial class power : UserControl
    {
        public int pow {get;set;}
        PCEntities pc = new PCEntities();
        public power()
        {
            InitializeComponent();
        }
        private void button1_Click(object sender, EventArgs e)
        {
            if (pow < 1 || pow > 3)
            { MessageBox.Show("choisir la boite d'alumentation "); }
            else
            {
                MessageBox.Show("le choix bien effectuer");
                this.Hide();
            }
        }
        private void pictureBox1_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.powerSupplies.Where(x => x.id == 1).ToList();
            pow = 1;
        }
        private void pictureBox2_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.powerSupplies.Where(x => x.id == 2).ToList();
            pow = 2;
        }
        private void pictureBox3_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.powerSupplies.Where(x => x.id == 3).ToList();
            pow = 3;
        }}}
```



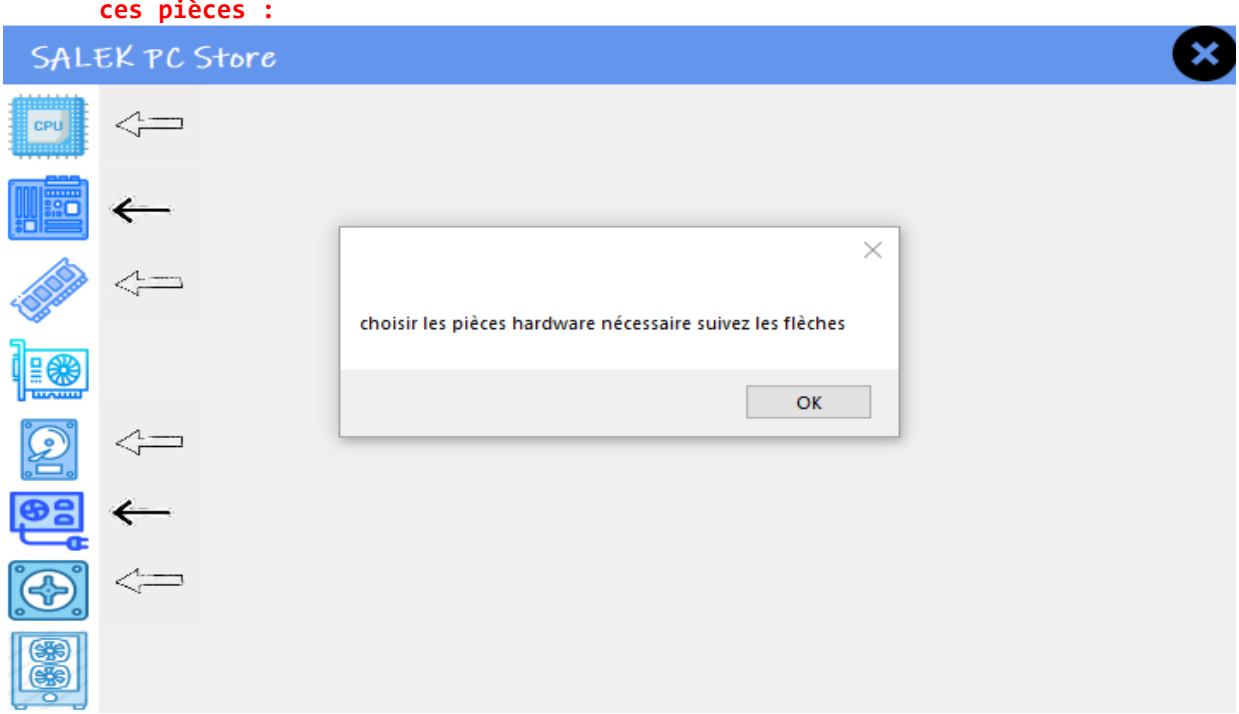
```
public partial class CPUcooling : UserControl
    {
        PCEntities pc = new PCEntities();
        public int cpufan { get; set; }
        public CPUcooling()
        {
            InitializeComponent();
        }
        private void pictureBox1_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource= pc.coolings.Where(x => x.id == 1).ToList();
            cpufan = 1;
        }
        private void pictureBox2_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.coolings.Where(x => x.id == 2).ToList();
            cpufan = 2;
        }
        private void pictureBox3_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.coolings.Where(x => x.id == 3).ToList();
            cpufan = 3;
        }
        private void button1_Click(object sender, EventArgs e)
        {
            if(cpufan == 0)
            {
                MessageBox.Show("choisir un Cooler !!!");

            }
            else
            {
                MessageBox.Show("bien enregistrer");
                this.Hide();
            }
```



```
public partial class casee : UserControl
    {
        PCEntities pc = new PCEntities();
        public int caseID { get; set; }
        public casee()
        {
            InitializeComponent();
        }
        private void pictureBox2_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.case1.Where(x => x.id == 2).ToList();
            caseID = 2;
        }
        private void pictureBox1_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.case1.Where(x => x.id == 1).ToList();
            caseID = 1;
        }
        private void pictureBox3_Click(object sender, EventArgs e)
        {
            dataGridView1.DataSource = pc.case1.Where(x => x.id == 3).ToList();
            caseID = 3;
        }
        private void button1_Click(object sender, EventArgs e)
        {
            if (caseID < 1 || caseID > 3)
            {
                MessageBox.Show("choisir votre case !");
            }
            else
            {
                MessageBox.Show("votre demande bien enregistrer");
                this.Hide();
            }}}
```

==========

- **Si tu choisir pas un ou plusieurs pièces le programme afficher des flèches a ces pièces :**



Le code qui permettre d'afficher les effets, les photos et d'afficher les message d'erreurs en plus de stockes les informations :

```
public partial class Form1 : System.Windows.Forms.Form
    {
        PCEntities pc = new PCEntities();
        public int CPUID = 0;
        public int cartmere = 0;
        public int GPU = 0;
        public int RAM = 0;
        public decimal ramCapacity = 0;
        public int stockage = 0;
        public int cooling = 0;
        public int powerS = 0;
        public int case1 = 0;
        public Form4( )
        {
            InitializeComponent();

        }
        private void pictureBox2_Click(object sender, EventArgs e)
        {
            cpUcooling1.Visible = false;
            casee1.Visible = false;
            userControl11.Visible = true;
            pictureBox10.Visible = false;
            pictureBox11.Visible = true;
            cartmerEuser1.Visible = false;
            graphiCard1.Visible = false;
            raMuser1.Visible = false;
            ssdHDD1.Visible = false;
            power1.Visible = false;
            cpUcooling1.Visible = false;
               }

private void pictureBox3_Click(object sender, EventArgs e)
        {
            cpUcooling1.Visible = false;
            casee1.Visible = false;
            userControl11.Visible = false;
            graphiCard1.Visible = false;
            raMuser1.Visible = false;
            ssdHDD1.Visible = false;
            power1.Visible = false;
            cartmerEuser1.Visible = true;
            pictureBox11.Visible = false;
            pictureBox12.Visible = true;
            using (UserControl1 uc = new UserControl1())
            {
                this.CPUID = userControl11.aaa;
            }
        }
        private void pictureBox4_Click(object sender, EventArgs e)
        {
            cpUcooling1.Visible = false;
            casee1.Visible = false;
            userControl11.Visible = false;
            graphiCard1.Visible = false;
            ssdHDD1.Visible = false;
            power1.Visible = false;
```

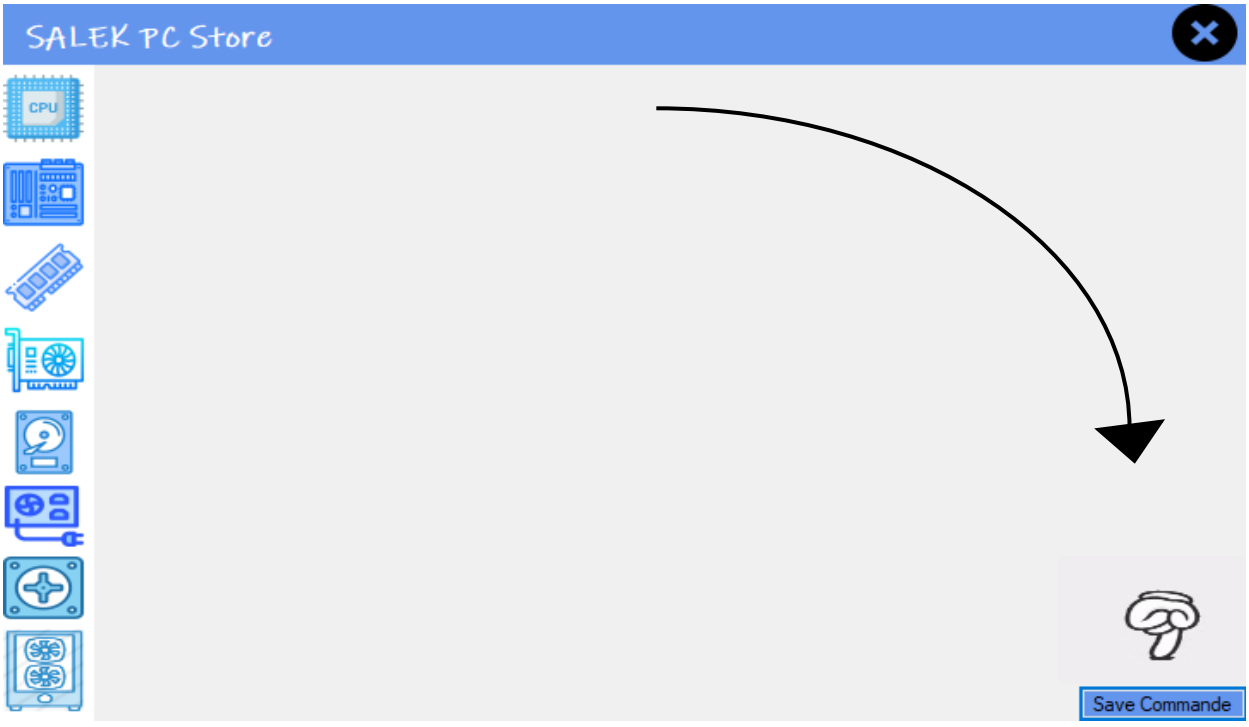
```
            pictureBox12.Visible = false;
            pictureBox13.Visible = true;
            raMuser1.Visible = true;
            cartmerEuser1.Visible = false;
            using (CARTMEREuser cv = new CARTMEREuser())
            {
                this.cartmere = cartmerEuser1.mmm;
            }
        }
        private void pictureBox5_Click(object sender, EventArgs e)
        {
            cpUcooling1.Visible = false;
            casee1.Visible = false;
            userControl11.Visible = false;
            raMuser1.Visible = false;
            ssdHDD1.Visible = false;
            power1.Visible = false;

            pictureBox13.Visible = false;
            pictureBox14.Visible = true;
            using (RAMuser ra = new RAMuser())
            {
                this.ramCapacity = raMuser1.capacity;
                this.RAM = raMuser1.rrr;
            }
            graphiCard1.Visible = true;
            cartmerEuser1.Visible = false;
               }

private void pictureBox6_Click(object sender, EventArgs e)
        {
            cpUcooling1.Visible = false;
            casee1.Visible = false;
            cartmerEuser1.Visible = false;
            userControl11.Visible = false;
            raMuser1.Visible = false;
            power1.Visible = false;
            pictureBox14.Visible = false;
            graphiCard1.Visible = false;
            pictureBox15.Visible = true;
            ssdHDD1.Visible = true;
            using (graphiCard gf = new graphiCard())
            {
                this.GPU = graphiCard1.ggg;
            }
        }
        private void pictureBox7_Click(object sender, EventArgs e)
        {
            cpUcooling1.Visible = false;
            casee1.Visible = false;
            cartmerEuser1.Visible = false;
            userControl11.Visible = false;
            graphiCard1.Visible = false;
            raMuser1.Visible = false;
            ssdHDD1.Visible = false;
            power1.Visible = true;
            pictureBox15.Visible = false;
            pictureBox16.Visible = true;
            using (ssdHDD st = new ssdHDD())
            {
```

```
                this.stockage = ssdHDD1.stok;
            }
        }
        private void pictureBox8_Click(object sender, EventArgs e)
        {
            casee1.Visible = false;
            cpUcooling1.Visible = true;
            cartmerEuser1.Visible = false;
            userControl11.Visible = false;
            graphiCard1.Visible = false;
            raMuser1.Visible = false;
            ssdHDD1.Visible = false;
            power1.Visible = false;
            pictureBox16.Visible = false;
            pictureBox17.Visible = true;
            using (power st = new power())
            {
                this.powerS = power1.pow;
            }
        }
        private void pictureBox9_Click(object sender, EventArgs e)
        {
            cpUcooling1.Visible = false;
            cartmerEuser1.Visible = false;
            userControl11.Visible = false;
            graphiCard1.Visible = false;
            raMuser1.Visible = false;
            ssdHDD1.Visible = false;
            power1.Visible = false;
            pictureBox17.Visible = false;
            using (CPUcooling cc = new CPUcooling())
            {
                this.cooling = cpUcooling1.cpufan;
            }
                if (CPUID != 0 && cartmere != 0 && RAM != 0 && stockage != 0 && cooling
!= 0 && powerS != 0)
                {
                casee1.Visible = true;
                button1.Visible = true;
                    pictureBox18.Visible = true;
                    pictureBox17.Visible = false;

                }//GPU optionnell
             if (CPUID == 0){ pictureBox10.Visible = true; MessageBox.Show("choisir les
pièces hardware nécessaire suivez les flèches");
            }
            if (cartmere == 0) { pictureBox11.Visible = true; MessageBox.Show("choisir
les pièces hardware nécessaire suivez les flèches");
            }
            if (RAM == 0) { pictureBox12.Visible = true; MessageBox.Show("choisir les
pièces hardware nécessaire suivez les flèches");
            }
            if (stockage == 0) { pictureBox14.Visible = true; MessageBox.Show("choisir
les pièces hardware nécessaire suivez les flèches");
            }
            if (cooling == 0) { pictureBox16.Visible = true; MessageBox.Show("choisir les
pièces hardware nécessaire suivez les flèches");
            }
            if (powerS == 0) { pictureBox15.Visible = true; MessageBox.Show("choisir les
pièces hardware nécessaire suivez les flèches");
```

```
                }
private void toolTip1_Draw(object sender, DrawToolTipEventArgs e)
        {
            e.DrawBackground();
            e.DrawBorder();
            e.DrawText();
        }
        private void pictureBox1_Click(object sender, EventArgs e)
        {
            this.Hide();
        }
        private void pictureBox2_MouseHover(object sender, EventArgs e)
        {
            toolTip1.Show("le Processeur", pictureBox2);
            toolTip1.OwnerDraw = true;
            toolTip1.ForeColor = Color.Red;
            toolTip1.BackColor = Color.Yellow;
        }
        private void pictureBox3_MouseHover(object sender, EventArgs e)
        {
            toolTip1.Show("la cart mere", pictureBox3);
            toolTip1.OwnerDraw = true;
            toolTip1.ForeColor = Color.Red;
            toolTip1.BackColor = Color.Yellow;
        }

        private void pictureBox4_MouseHover(object sender, EventArgs e)
        {
            toolTip1.Show("la Ram", pictureBox4);
            toolTip1.OwnerDraw = true;
            toolTip1.ForeColor = Color.Red;
            toolTip1.BackColor = Color.Yellow;
        }

private void pictureBox5_MouseHover(object sender, EventArgs e)
        {
            toolTip1.Show("la cart graphic", pictureBox5);
            toolTip1.OwnerDraw = true;
            toolTip1.ForeColor = Color.Red;
            toolTip1.BackColor = Color.Yellow;
        }
        private void pictureBox6_MouseHover(object sender, EventArgs e)
        {
            toolTip1.Show("le Stockage/SSD_HDD", pictureBox6);
            toolTip1.OwnerDraw = true;
            toolTip1.ForeColor = Color.Red;
            toolTip1.BackColor = Color.Yellow;
        }
        private void pictureBox7_MouseHover(object sender, EventArgs e)
        {
            toolTip1.Show("la boit d'allumentation", pictureBox7);
            toolTip1.OwnerDraw = true;
            toolTip1.ForeColor = Color.Red;
            toolTip1.BackColor = Color.Yellow;
        }
        private void pictureBox8_MouseHover(object sender, EventArgs e)
        {
            toolTip1.Show("CPU FAN/Cooler", pictureBox8);
            toolTip1.OwnerDraw = true;
```

```
        toolTip1.ForeColor = Color.Red;
        toolTip1.BackColor = Color.Yellow;
    }
    private void pictureBox9_MouseHover(object sender, EventArgs e)
    {
        toolTip1.Show("Case", pictureBox9);
        toolTip1.OwnerDraw = true;
        toolTip1.ForeColor = Color.Red;
        toolTip1.BackColor = Color.Yellow;
    }
    private void Form4_Load(object sender, EventArgs e)
    {
        button1.Visible = false;
        cartmerEuser1.Visible = false;
        userControl11.Visible = false;
        graphiCard1.Visible = false;
        raMuser1.Visible = false;
        ssdHDD1.Visible = false;
        power1.Visible = false;
        casee1.Visible = false;
        cpUcooling1.Visible = false;
        pictureBox11.Visible = false;
        pictureBox12.Visible = false;
        pictureBox13.Visible = false;
        pictureBox14.Visible = false;
        pictureBox15.Visible = false;
        pictureBox16.Visible = false;
        pictureBox17.Visible = false;
        pictureBox18.Visible = false;
     }
```

- ✓ **Après choisir tous les pièces hardware nécessaires le programme affiche un Button enregistrer qui permit de sauvegarder les informations dans la database :**



```
private void button1_Click(object sender, EventArgs e)
  {
     using (casee ca = new casee())
     {
          this.case1 = casee1.caseID;
     }
     try
     {
        var CPU = pc.CPUs.Where(x => x.id == CPUID).Select(x => new { x.name }).ToList();
        var ram = pc.RAMs.Where(x => x.id ==RAM).Select(x => new { x.name }).ToList();
        var MB = pc.motherboards.Where(x => x.id == cartmere).Select(x => new { x.name
}).ToList();
        var GC = pc.graphicCards.Where(x => x.id == GPU).Select(x => new { x.name
}).ToList();
        var SSD = pc.stockages.Where(x => x.id == stockage).Select(x => new { x.name
}).ToList();
       var PS = pc.powerSupplies.Where(x => x.id == powerS).Select(x => new { x.name
}).ToList();
       var Fan = pc.coolings.Where(x => x.id == cooling).Select(x => new { x.name
}).ToList();
       var Case = pc.case1.Where(x => x.id == case1).Select(x => new { x.name
}).ToList();
pc.Database.ExecuteSqlCommand("insert into Demand
values({1},{2},{3},{4},{5},{6},{7},{8},{9})",CPU, MB,ram,GC,SSD,PS,Fan,Case,99);
            }
            catch { MessageBox.Show("error"); }
        }
    }
```

J'ai créé des user control dans ce projet voilà :