Курсова работа ООП

Мирослав Димитров, 181217003

Building information

1.Form 1,

1.1.User login;

2.Main Form;

2.1.ClsBuilding, Cls Apartment, Cls Commercial, Cls Home;

3.Maid Form;

3.1.Cls CallMaid, Cls Livingroom, Cls Kitchen, Cls Bedroom, Cls Bathroom;

4.Forms Design;

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using System.Data.SqlClient;

namespace Login

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

private void Form1\_Load(object sender, EventArgs e)

{

}

private void button1\_Click(object sender, EventArgs e)

{

this.Close();

}

private void button2\_Click(object sender, EventArgs e)

{

SqlConnection con = new SqlConnection(@"Data Source=DESKTOP-FBF5QDP\SQLEXPRESS;Initial Catalog=MiroslavJD;Integrated Security=True");

SqlDataAdapter sds = new SqlDataAdapter("Select Count(\*) From [Table] where UserName = '" + textBox1.Text + "' and Password = '" + textBox2.Text + "'", con);

DataTable dt = new DataTable();

sds.Fill(dt);

if(dt.Rows[0][0].ToString() == "1")

{

this.Hide();

Main ss = new Main();

ss.Show();

}

else

{

MessageBox.Show("Check your username and passowrd");

}

}

}

}

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace Login

{

public partial class Main : Form

{

DateTime myTime;

ClsBuilding myBldg;

ClsApartment myApt;

ClsCommercial myComm;

ClsHome myHome;

private string[] whichType = { " ", "Apartment", "Commercial", "Home" };

public Main()

{

InitializeComponent();

}

private void Main\_Load(object sender, EventArgs e)

{

myTime = DateTime.Now;

myBldg = new ClsBuilding();

myApt = new ClsApartment("123 Ann Dotson Dr., Lexington, KY 40502", 550000, 6000, 15000, 3400, myTime, 1);

myComm = new ClsCommercial("4442 Parker Place, York, SC 29745", 1200000, 9000, 22000, 8000, myTime, 2);

myHome = new ClsHome("657 Dallas St, Ringgold, GA 30736", 260000, 1100, 1750, 900, myTime, 3);

}

private void ShowProperty(string[] str)

{

int i;

for (i = 0; i < str.Length; i++)

{

Properties.Items.Add(str[i]);

}

}

private void ShowBtn\_Click(object sender, EventArgs e)

{

string[] desc = new string[3];

myApt.PropertySummary(desc);

ShowProperty(desc);

myComm.PropertySummary(desc);

ShowProperty(desc);

myHome.PropertySummary(desc);

ShowProperty(desc);

}

private void RmvSnow\_Click(object sender, EventArgs e)

{

Properties.Items.Add(myApt.RemoveSnow());

Properties.Items.Add(myComm.RemoveSnow());

Properties.Items.Add(myHome.RemoveSnow());

Properties.Items.Add(" ");

}

private void CloseBtn\_Click(object sender, EventArgs e)

{

Close();

}

private void CallMaid\_Click(object sender, EventArgs e)

{

var frm = new Maid();

frm.Location = this.Location;

frm.StartPosition = FormStartPosition.Manual;

frm.FormClosing += delegate { this.Show(); };

frm.Show();

this.Hide();

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Login

{

class ClsBuilding

{

public const int APARTMENT = 1;

public const int COMMERCIAL = 2;

public const int HOME = 3;

protected string address;

protected decimal purchasePrice;

protected decimal monthlyPayment;

protected decimal taxes;

protected decimal insurance;

protected DateTime datePurchased;

protected int buildingType;

string[] whichType = {" ", "Apartment", "Commercial", "Home"};

public ClsBuilding()

{

address = "Not closed yet";

}

public ClsBuilding(string addr, decimal price, decimal payment, decimal tax, decimal insur, DateTime date, int type) : this()

{

if (addr.Equals(" ") == false)

address = addr;

purchasePrice = price;

monthlyPayment = payment;

taxes = tax;

insurance = insur;

datePurchased = date;

buildingType = type;

}

public string Address

{

get

{

return address;

}

set

{

if (value.Length != 0)

address = value;

}

}

public decimal PurchasePrice

{

get

{

return purchasePrice;

}

set

{

if (value > 0M)

purchasePrice = value;

}

}

public decimal MonthlyPayment

{

get

{

return monthlyPayment;

}

set

{

if (value > 0M)

monthlyPayment = value;

}

}

public decimal Taxes

{

get

{

return taxes;

}

set

{

if (value > 0M)

taxes = value;

}

}

public decimal Insurance

{

get

{

return insurance;

}

set

{

if (value > 0M)

insurance = value;

}

}

public DateTime DatePurchased

{

get

{

return datePurchased;

}

set

{

if (value.Year > 2008)

datePurchased = value;

}

}

public int BuildingType

{

get

{

return buildingType;

}

set

{

if (value >= APARTMENT && value <= HOME)

buildingType = value;

}

}

public void PropertySummary(string[] desc)

{

desc[0] = "Property type: " + whichType[buildingType] + ", " + address + ", Cost: " + purchasePrice.ToString("C") + ", Monthly payment: " + monthlyPayment.ToString("C");

desc[1] = "Insurance: " + insurance.ToString("C") + " Taxes: " + taxes.ToString("C") + " Date purchased: " + datePurchased.ToShortDateString();

desc[2] = " ";

}

public virtual string RemoveSnow()

{

return whichType[buildingType] + ": No snow removal service available.";

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Login

{

class ClsApartment : ClsBuilding

{

private int units;

private decimal rentPerUnit;

private double occupancyRate;

public ClsApartment() : base()

{

}

public ClsApartment(string addr, decimal price, decimal payment, decimal tax, decimal insur, DateTime date, int type)

: base(addr, price, payment, tax, insur, date, type)

{

buildingType = type;

}

public int Units

{

get

{

return units;

}

set

{

if (value > 0)

units = value;

}

}

public decimal RentPerUnit

{

get

{

return rentPerUnit;

}

set

{

if (value > 0M)

rentPerUnit = value;

}

}

public double OccupancyRate

{

get

{

return occupancyRate;

}

set

{

if (value > 0.0)

occupancyRate = value;

}

}

public override string RemoveSnow()

{

return "Called Rolling Snow Plowing: 804.521.11566";

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Login

{

class ClsCommercial : ClsBuilding

{

private int squareFeet;

private int parkingSpaces;

private decimal rentPerSquareFoot;

public ClsCommercial() : base()

{

}

public ClsCommercial(string addr, decimal price, decimal payment, decimal tax, decimal insur, DateTime date, int type)

: base(addr, price, payment, tax, insur, date, type)

{

buildingType = type;

}

public int SquareFeet

{

get

{

return squareFeet;

}

set

{

if (value > 0)

squareFeet = value;

}

}

public int ParkingSpaces

{

get

{

return parkingSpaces;

}

set

{

parkingSpaces = value;

}

}

public decimal RentPerSquareFoot

{

get

{

return rentPerSquareFoot;

}

set

{

if (value > 0M)

rentPerSquareFoot = value;

}

}

public override string RemoveSnow()

{

return "Called Acme Snow Plowing: 803.234.5566";

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Login

{

class ClsHome : ClsBuilding

{

private int squareFeet;

private int bedrooms;

private double bathrooms;

private decimal rentPerMonth;

public ClsHome() : base()

{

}

public ClsHome(string addr, decimal price, decimal payment, decimal tax, decimal insur, DateTime date, int type)

: base(addr, price, payment, tax, insur, date, type)

{

buildingType = 3;

}

public int SquareFeet

{

get

{

return squareFeet;

}

set

{

if (value > 0)

squareFeet = value;

}

}

public int BedRooms

{

get

{

return bedrooms;

}

set

{

bedrooms = value;

}

}

public double BathRooms

{

get

{

return bathrooms;

}

set

{

bathrooms = value;

}

}

public decimal RentPerMonth

{

get

{

return rentPerMonth;

}

set

{

if (value > 0M)

rentPerMonth = value;

}

}

public override string RemoveSnow()

{

return "Home: No snow removal service available";

}

}

}

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace Login

{

public partial class Maid : Form

{

Bedroom bedroom;

Kitchen myKitchen;

Livingroom livroom;

Bathroom bathroom;

CallMaid maid;

public Maid()

{

InitializeComponent();

}

private void Maid\_Load(object sender, EventArgs e)

{

maid = new CallMaid();

bedroom = new Bedroom("Bedroom",190,1.9,10,1);

myKitchen = new Kitchen("Kitchen",140,1.1,5,1);

livroom = new Livingroom("Livingroom",200,1.5,10,1);

bathroom = new Bathroom("Bathroom",200,1.9,9,2);

}

private void ShowLocation(string[] strloc)

{

int i;

for (i = 0; i < strloc.Length; i++)

{

Cleaning.Items.Add(strloc[i]);

}

}

private void ShowCleaning(object sender, EventArgs e)

{

string[] show = new string[4];

bedroom.LocationSummary(show);

ShowLocation(show);

myKitchen.LocationSummary(show);

ShowLocation(show);

livroom.LocationSummary(show);

ShowLocation(show);

bathroom.LocationSummary(show);

ShowLocation(show);

}

private void Clean(object sender, EventArgs e)

{

Cleaning.Items.Add(myKitchen.CleaningApartament());

Cleaning.Items.Add(livroom.CleaningApartament());

Cleaning.Items.Add(bathroom.CleaningApartament());

Cleaning.Items.Add(bedroom.CleaningApartament());

Cleaning.Items.Add(" ");

}

private void SelecdMaid(object sender, EventArgs e)

{

MessageBox.Show(listBox1.SelectedItem.ToString());

}

private void Check(object sender, EventArgs e)

{

Cleaning.Items.Add(maid.CleaningApartament());

}

private void Close(object sender, EventArgs e)

{

this.Close();

}

private void MaidMove(object sender, MouseEventArgs e)

{

textBox1.Text = e.X + ", " + e.Y;

button.Location = new Point(e.X, e.Y);

button.Text = e.X + "," + e.Y;

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Login

{

class CallMaid : ClsApartment

{

public const int Bathroom = 2;

public const int Bedroom = 1;

public const int Livingroom = 1;

public const int Kitchen = 1;

protected string location;

protected int salary;

protected int workScale;

protected double worktime;

protected int roomType;

string[] ApartmentZone = {" ","Bathroom", "Bedroom", "Livingroom", "Kitchen"};

public CallMaid()

{

location = "Apartment";

}

public CallMaid(string loc, int slry, double wrktime, int wrkScale, int rmtype) : this()

{

if (loc.Equals(" ") == false)

location = loc;

salary = slry;

worktime = wrktime;

workScale = wrkScale;

roomType = rmtype;

}

public int Salary

{

get { return salary; }

set

{

if (value >= 100M && value <= 200M)

salary = value;

}

}

public double Worktime

{

get { return worktime; }

set

{

if (value >= 1 && value <= 2)

worktime = value;

}

}

public int WorkScale

{

get { return workScale; }

set

{

if (value >= 1M && value <= 10M)

workScale = value;

}

}

public string Location

{

get

{

return location;

}

set

{

if (value.Length != 0)

location = value;

}

}

public int RoomType

{

get { return roomType; }

set {

if (value >= Livingroom && value <= Kitchen)

roomType = value;

}

}

public void LocationSummary(string[] show)

{

show[0] = "Location type: " + location + ", Salary: " + salary.ToString("C") + ", Work Scale: " + workScale.ToString();

show[1] = "Work time: " + worktime.ToString();

show[2] = " ";

show[3] = "---";

}

public virtual string CleaningApartament()

{

return " The maid is cleaning.";

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Login

{

class Bathroom : CallMaid

{

private int bathtub;

public Bathroom() : base()

{

}

public Bathroom(string loc, int slry, double wrktime, int wrkScale, int rmtype)

: base(loc, slry, wrktime, wrkScale,rmtype)

{

roomType = rmtype;

}

public override string CleaningApartament()

{

return "The bathroom is clean";

}

public int Bathtub

{

get { return bathtub; }

set

{

if (value > 0)

bathtub = value;

}

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Login

{

class Bedroom : CallMaid

{

private int bed;

private int sheets;

public Bedroom() : base()

{

}

public Bedroom(string loc, int slry, double wrktime, int wrkScale, int rmtype)

: base(loc,slry,wrktime,wrkScale,rmtype)

{

roomType = rmtype;

}

public override string CleaningApartament()

{

return "The Bathroom is clean";

}

public int Bed

{

get { return bed; }

set

{

if (value > 0)

bed = value;

}

}

public int Sheets

{

get { return sheets; }

set

{

if (value > 0)

sheets = value;

}

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Login

{

class Kitchen : CallMaid

{

private int glasses;

private int spoons;

private int forks;

private int plates;

public Kitchen() : base()

{

}

public Kitchen(string loc, int slry, double wrktime, int wrkScale,int rmtype)

: base(loc, slry, wrktime, wrkScale, rmtype)

{

roomType = rmtype;

}

public override string CleaningApartament()

{

return "The kitchen is clean";

}

public int Glasses

{

get { return glasses; }

set

{

if (value > 0)

glasses = value;

}

}

public int Spoons

{

get { return spoons; }

set

{

if (value > 0)

spoons = value;

}

}

public int Forks

{

get { return forks; }

set

{

if (value > 0)

forks = value;

}

}

public int Plates

{

get { return plates; }

set

{

if (value > 0)

plates = value;

}

}

}

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Login

{

class Livingroom : CallMaid

{

private int tables;

private int chairs;

private int cauch;

public Livingroom() : base()

{

}

public Livingroom(string loc, int slry, double wrktime, int wrkScale, int rmtype)

: base(loc, slry, wrktime, wrkScale, rmtype)

{

roomType = rmtype;

}

public override string CleaningApartament()

{

return "The livingroom is clean";

}

public int Tables

{

get { return tables; }

set

{

if (value > 0)

tables = value;

}

}

public int Chairs

{

get { return chairs; }

set

{

if (value > 0)

chairs = value;

}

}

public int Cauch

{

get { return cauch; }

set

{

if (value > 0)

cauch = value;

}

}

}

}

Form 1 Design

private System.Windows.Forms.Button button1; // Login

private System.Windows.Forms.Button button2; // Exit

private System.Windows.Forms.TextBox textBox1;

private System.Windows.Forms.TextBox textBox2;

private System.Windows.Forms.Label label1; // login

private System.Windows.Forms.Label label2; // username

private System.Windows.Forms.Label label3; // password

private System.Windows.Forms.Panel panel1; // login design  
  
Form Main Design

private System.Windows.Forms.Button button1; // Show properties

private System.Windows.Forms.Button button2; // Remove snow

private System.Windows.Forms.Button button3; // Close

private System.Windows.Forms.ListBox Properties; // Properties(ListBox)

private System.Windows.Forms.Button button4; // CallMaid

Form Maid Design

private System.Windows.Forms.ListBox listBox1;

"Name: Ana, Telephone (08854030241)",

"Name: Katia, Telephone (08854030241)",

"Name: Sara, Telephone (08854030241)",

"Name: Maria, Telephone (0886432341)",

"Name: Teodora, Telephone (0888842359)",

"Name: Roza, Telephone (0884241231)",

"Name: Nicole, Telephone (0887444221)",

"Name: Margarita, Telephone (088426211)",

"Name: Ivana, Telephone (0887421231)",

"Name: Iva, Telephone (0887542545)",

"Name: Zara, Telephone (0887513211)",

"Name: Minka, Telehpone (0885123425)"});

private System.Windows.Forms.Label label1; // Maids

private System.Windows.Forms.Button button1; // Select Maid

private System.Windows.Forms.Button button3; // Close

private System.Windows.Forms.ListBox Cleaning;

private System.Windows.Forms.Button ClearBtn; // Check Maid

private System.Windows.Forms.Button button4; // Check Rooms

private System.Windows.Forms.TextBox textBox1; // Clearing

private System.Windows.Forms.Button button; // Maid Location

private System.Windows.Forms.Button button2; // Show Cleaning