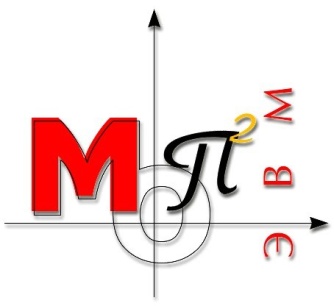
СМинистерство образования и науки Российской Федерации

Федеральное государственное автономное образовательное учреждения высшего образования   
«Южный федеральный университет»

Инженерно-технологическая академия

Институт компьютерных технологий и информационной безопасности

Кафедра математического обеспечения и применения ЭВМ

**

Лабораторная работа №5

по дисциплине

"ООП"

на тему

". Классы, объекты,

наследование в С#"

**Выполнил:**

студент группы КТбо2-6

Савков П.А.

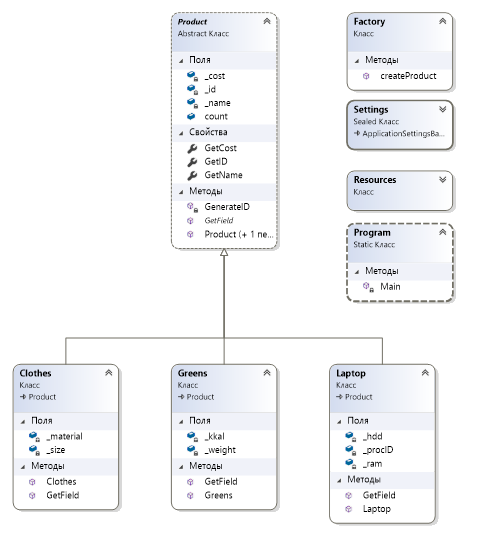
**Проверил:**

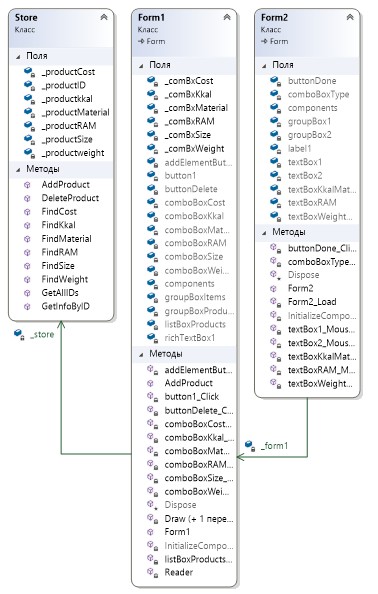
Таганрог, 2020

**Вариант**

**Задание:**

Выполните одну из написанных ранее работ на языке C#. В качестве задания следует выбрать уже готовый вариант на С++.

**Диаграмма классов**

****

**Листинг программы**

**Product.cs**

using System;

namespace OOP\_LAB\_6

{

abstract class Product

{

public static int count;

public Product() { }

public Product(int cost, string name)

{

\_cost = cost;

\_name = name;

\_id = GenerateID();

}

public int GetCost

{

get { return \_cost; }

}

public string GetName

{

get { return \_name; }

}

public int GetID

{

get { return \_id; }

}

public abstract string[] GetField();

private int GenerateID()

{

count++;

return count + 100;

}

private int \_cost;

private int \_id;

private string \_name;

}

}

**Greens.cs**

using System;

namespace OOP\_LAB\_6

{

class Greens : Product

{

public Greens(int cost, string name, double weight, int kkal)

: base(cost, name)

{

\_weight = weight;

\_kkal = kkal;

}

public override string[] GetField()

{

string[] items = new string[] { Convert.ToString(\_kkal), Convert.ToString(\_weight), "Greens" };

return items;

}

private double \_weight;

private int \_kkal;

}

}

**Clothes.cs**

using System;

namespace OOP\_LAB\_6

{

class Clothes : Product

{

public Clothes(int cost, string name, char size, string material)

: base(cost, name)

{

\_size = size;

\_material = material;

}

public override string[] GetField()

{

string[] items = new string[] { Convert.ToString(\_size), Convert.ToString(\_material), "Clothes" };

return items;

}

private char \_size;

private string \_material;

}

}

**Laptop.cs**

using System;

namespace OOP\_LAB\_6

{

class Laptop : Product

{

public Laptop(int cost, string name, string procID, int ram, int hdd)

: base(cost, name)

{

\_procID = procID;

\_ram = ram;

\_hdd = hdd;

}

public override string[] GetField()

{

string[] items = new string[] { Convert.ToString(\_procID), Convert.ToString(\_ram), Convert.ToString(\_hdd), "Laptop" };

return items;

}

private string \_procID;

private int \_ram;

private int \_hdd;

}

}

**Factory.cs**

using System;

namespace OOP\_LAB\_6

{

class Factory

{

public Product createProduct(string field)

{

string[] items = field.Split();

Product newProduct = null;

switch(items[0])

{

case "Greens":

newProduct = new Greens(Convert.ToInt32(items[2]), items[1],

Convert.ToDouble(items[3]), Convert.ToInt32(items[4]));

break;

case "Clothes":

newProduct = new Clothes(Convert.ToInt32(items[2]), items[1],

Convert.ToChar(items[3]), items[4]);

break;

case "Laptop":

newProduct = new Laptop(Convert.ToInt32(items[2]), items[1],

items[3], Convert.ToInt32(items[4]), Convert.ToInt32(items[5]));

break;

}

return newProduct;

}

}

}

**Store.cs**

using System;

using System.Collections.Generic;

namespace OOP\_LAB\_6

{

class Store

{

private Dictionary<int, Product> \_productID = new Dictionary<int, Product>();

private Dictionary<int, HashSet<int>> \_productkkal = new Dictionary<int, HashSet<int>>();

private Dictionary<double, HashSet<int>> \_productweight = new Dictionary<double, HashSet<int>>();

private Dictionary<int, HashSet<int>> \_productCost = new Dictionary<int, HashSet<int>>();

private Dictionary<char, HashSet<int>> \_productSize = new Dictionary<char, HashSet<int>>();

private Dictionary<string, HashSet<int>> \_productMaterial = new Dictionary<string, HashSet<int>>();

private Dictionary<int, HashSet<int>> \_productRAM = new Dictionary<int, HashSet<int>>();

public HashSet<int> FindRAM(int param)

{

HashSet<int> ids = new HashSet<int>();

ids = \_productRAM[param];

return ids;

}

public HashSet<int> FindMaterial(string param)

{

HashSet<int> ids = new HashSet<int>();

ids = \_productMaterial[param];

return ids;

}

public HashSet<int> FindSize(char param)

{

HashSet<int> ids = new HashSet<int>();

ids = \_productSize[param];

return ids;

}

public HashSet<int> FindWeight(double param)

{

HashSet<int> ids = new HashSet<int>();

ids = \_productweight[param];

return ids;

}

public HashSet<int> FindKkal(int param)

{

HashSet<int> ids = new HashSet<int>();

ids = \_productkkal[param];

return ids;

}

public HashSet<int> FindCost(int param)

{

HashSet<int> ids = new HashSet<int>();

ids = \_productCost[param];

return ids;

}

public List<int> GetAllIDs()

{

List<int> ids = new List<int>();

foreach (var i in \_productID)

{

ids.Add(i.Key);

}

return ids;

}

public string[] GetInfoByID(int id)

{

string[] buf = \_productID[id].GetField();

string[] items = new string[buf.Length + 2];

items[0] = Convert.ToString(\_productID[id].GetCost);

items[1] = \_productID[id].GetName;

for (int i = 0; i < buf.Length; i++)

{

items[i + 2] = Convert.ToString(buf[i]);

}

return items;

}

public void AddProduct(string fields)

{

Factory newFactoryProduct = new Factory();

Product newElement = newFactoryProduct.createProduct(fields);

string[] items = newElement.GetField();

switch (newElement.GetType().Name)

{

case "Greens":

// int kkal = Convert.ToInt32(items[0]);

// double weight = Convert.ToDouble(items[1]);

if (\_productkkal.ContainsKey(Convert.ToInt32(items[0])) == false)

{

\_productkkal.Add(Convert.ToInt32(items[0]), new HashSet<int>());

}

\_productkkal[Convert.ToInt32(items[0])].Add(newElement.GetID);

if (\_productweight.ContainsKey(Convert.ToDouble(items[1])) == false)

{

\_productweight.Add(Convert.ToDouble(items[1]), new HashSet<int>());

}

\_productweight[Convert.ToDouble(items[1])].Add(newElement.GetID);

break;

case "Clothes":

// char size = Convert.ToChar(items[3]);

// string material = items[4];

if (\_productSize.ContainsKey(Convert.ToChar(items[0])) == false)

{

\_productSize.Add(Convert.ToChar(items[0]), new HashSet<int>());

}

\_productSize[Convert.ToChar(items[0])].Add(newElement.GetID);

if (\_productMaterial.ContainsKey(items[1]) == false)

{

\_productMaterial.Add(items[1], new HashSet<int>());

}

\_productMaterial[items[1]].Add(newElement.GetID);

break;

case "Laptop":

// int ram = Convert.ToInt32(items[4]);

if (\_productRAM.ContainsKey(Convert.ToInt32(items[1])) == false)

{

\_productRAM.Add(Convert.ToInt32(items[1]), new HashSet<int>());

}

\_productRAM[Convert.ToInt32(items[1])].Add(newElement.GetID);

break;

}

if (\_productCost.ContainsKey(newElement.GetCost) == false)

{

\_productCost.Add(newElement.GetCost, new HashSet<int>());

}

\_productCost[newElement.GetCost].Add(newElement.GetID);

\_productID.Add(newElement.GetID, newElement);

}

public void DeleteProduct(int id)

{

string[] items = \_productID[id].GetField();

switch (Convert.ToString(\_productID[id].GetType().Name))

{

case "Greens":

\_productkkal[Convert.ToInt32(items[0])].Remove(id);

\_productweight[Convert.ToDouble(items[1])].Remove(id);

break;

case "Clothes":

\_productSize[Convert.ToChar(items[0])].Remove(id);

\_productMaterial[items[1]].Remove(id);

break;

case "Laptop":

\_productRAM[Convert.ToInt32(items[1])].Remove(id);

break;

}

\_productID.Remove(id);

}

}

}

**Form1.cs**

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.IO;

namespace OOP\_LAB\_6

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

Reader();

}

public void AddProduct(string str)

{

\_store.AddProduct(str);

string[] items;

items = str.Split();

\_comBxCost.Add(Convert.ToInt32(items[2]));

comboBoxCost.Items.Clear();

switch (items[0])

{

case "Greens":

\_comBxWeight.Add(Convert.ToDouble(items[3]));

\_comBxKkal.Add(Convert.ToInt32(items[4]));

break;

case "Clothes":

\_comBxSize.Add(Convert.ToChar(items[3]));

\_comBxMaterial.Add(items[4]);

break;

case "Laptop":

\_comBxRAM.Add(Convert.ToInt32(items[4]));

break;

}

Draw();

}

private void Reader()

{

StreamReader sr = new StreamReader("data.txt");

string str;

while ((str = sr.ReadLine()) != null)

{

AddProduct(str);

}

}

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

{

this.Enabled = false;

Form2 form2 = new Form2(this);

form2.Show();

}

private void Draw(HashSet<int> ids)

{

listBoxProducts.Items.Clear();

string[] items = new string[6];

foreach (var i in ids)

{

items = \_store.GetInfoByID(i);

listBoxProducts.Items.Add(Convert.ToString(i) + ": " + items[1]);

}

}

private void Draw()

{

listBoxProducts.Items.Clear();

List<int> ids = \_store.GetAllIDs();

string[] items = new string[6];

for (int i = 0; i < ids.Count(); i++)

{

items = \_store.GetInfoByID(ids[i]);

listBoxProducts.Items.Add(Convert.ToString(ids[i]) + ": " + items[1]);

}

comboBoxCost.Items.Clear();

comboBoxKkal.Items.Clear();

comboBoxMaterial.Items.Clear();

comboBoxRAM.Items.Clear();

comboBoxSize.Items.Clear();

comboBoxWeight.Items.Clear();

foreach (var i in \_comBxCost.Reverse())

{

comboBoxCost.Items.Add(i);

}

foreach (var i in \_comBxKkal.Reverse())

{

comboBoxKkal.Items.Add(i);

}

foreach (var i in \_comBxWeight.Reverse())

{

comboBoxWeight.Items.Add(i);

}

foreach (var i in \_comBxSize.Reverse())

{

comboBoxSize.Items.Add(i);

}

foreach (var i in \_comBxMaterial.Reverse())

{

comboBoxMaterial.Items.Add(i);

}

foreach (var i in \_comBxRAM.Reverse())

{

comboBoxRAM.Items.Add(i);

}

}

private Store \_store = new Store();

private SortedSet<int> \_comBxCost = new SortedSet<int>();

private SortedSet<int> \_comBxKkal = new SortedSet<int>();

private SortedSet<double> \_comBxWeight = new SortedSet<double>();

private SortedSet<char> \_comBxSize = new SortedSet<char>();

private SortedSet<string> \_comBxMaterial = new SortedSet<string>();

private SortedSet<int> \_comBxRAM = new SortedSet<int>();

private void listBoxProducts\_SelectedIndexChanged(object sender, EventArgs e)

{

if (listBoxProducts.SelectedIndex != -1)

{

buttonDelete.Enabled = true;

string id = (Convert.ToString(listBoxProducts.SelectedItem).Split())[0];

id = id.Remove(id.Length - 1);

string[] items = \_store.GetInfoByID(Convert.ToInt32(id));

switch (items.Last())

{

case "Greens":

richTextBox1.Text = " Type: " + items[4] + "\n Cost: " + items[0]

+ "\n Weight: " + items[3] + "\n Kkal: " + items[2];

break;

case "Laptop":

richTextBox1.Text = " Type: " + items[5] + "\n Cost: " + items[0]

+ "\n Processor ID: " + items[2] + "\n RAM: " + items[3] + "\n HDD: " + items[4];

break;

case "Clothes":

richTextBox1.Text = " Type: " + items[4] + "\n Cost: " + items[0]

+ "\n Size: " + items[2] + "\n Material: " + items[3];

break;

}

}

else

{

richTextBox1.Text = "";

buttonDelete.Enabled = false;

}

}

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

{

if (listBoxProducts.SelectedIndex != -1)

{

string id = (Convert.ToString(listBoxProducts.SelectedItem).Split())[0];

id = id.Remove(id.Length - 1);

string[] items = \_store.GetInfoByID(Convert.ToInt32(id));

\_comBxCost.Remove(Convert.ToInt32(items[0]));

switch (items.Last())

{

case "Greens":

\_comBxKkal.Remove(Convert.ToInt32(items[2]));

\_comBxWeight.Remove(Convert.ToDouble(items[3]));

break;

case "Clothes":

\_comBxSize.Remove(Convert.ToChar(items[2]));

\_comBxMaterial.Remove(items[3]);

break;

case "Laptop":

\_comBxRAM.Remove(Convert.ToInt32(items[3]));

break;

}

\_store.DeleteProduct(Convert.ToInt32(id));

Draw();

}

richTextBox1.Text = "";

}

private void comboBoxCost\_SelectedIndexChanged(object sender, EventArgs e)

{

comboBoxKkal.Text = "KKAL";

comboBoxMaterial.Text = "MATERIAL";

comboBoxSize.Text = "SIZE";

comboBoxWeight.Text = "WEIGHT";

comboBoxRAM.Text = "RAM";

Draw(\_store.FindCost(Convert.ToInt32(comboBoxCost.Text)));

}

private void comboBoxKkal\_SelectedIndexChanged(object sender, EventArgs e)

{

comboBoxMaterial.Text = "MATERIAL";

comboBoxCost.Text = "COST";

comboBoxSize.Text = "SIZE";

comboBoxWeight.Text = "WEIGHT";

comboBoxRAM.Text = "RAM";

Draw(\_store.FindKkal(Convert.ToInt32(comboBoxKkal.Text)));

}

private void comboBoxWeight\_SelectedIndexChanged(object sender, EventArgs e)

{

comboBoxKkal.Text = "KKAL";

comboBoxMaterial.Text = "MATERIAL";

comboBoxCost.Text = "COST";

comboBoxSize.Text = "SIZE";

comboBoxRAM.Text = "RAM";

Draw(\_store.FindWeight(Convert.ToDouble(comboBoxWeight.Text)));

}

private void comboBoxSize\_SelectedIndexChanged(object sender, EventArgs e)

{

comboBoxKkal.Text = "KKAL";

comboBoxMaterial.Text = "MATERIAL";

comboBoxCost.Text = "COST";

comboBoxWeight.Text = "WEIGHT";

comboBoxRAM.Text = "RAM";

Draw(\_store.FindSize(Convert.ToChar(comboBoxSize.Text)));

}

private void comboBoxMaterial\_SelectedIndexChanged(object sender, EventArgs e)

{

comboBoxKkal.Text = "KKAL";

comboBoxCost.Text = "COST";

comboBoxSize.Text = "SIZE";

comboBoxWeight.Text = "WEIGHT";

comboBoxRAM.Text = "RAM";

Draw(\_store.FindMaterial(comboBoxMaterial.Text));

}

private void comboBoxRAM\_SelectedIndexChanged(object sender, EventArgs e)

{

comboBoxKkal.Text = "KKAL";

comboBoxMaterial.Text = "MATERIAL";

comboBoxCost.Text = "COST";

comboBoxSize.Text = "SIZE";

comboBoxWeight.Text = "WEIGHT";

Draw(\_store.FindRAM(Convert.ToInt32(comboBoxRAM.Text)));

}

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

{

comboBoxKkal.Text = "KKAL";

comboBoxMaterial.Text = "MATERIAL";

comboBoxCost.Text = "COST";

comboBoxSize.Text = "SIZE";

comboBoxWeight.Text = "WEIGHT";

comboBoxRAM.Text = "RAM";

Draw();

}

}

}

Form2.cs

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 OOP\_LAB\_6

{

public partial class Form2 : Form

{

public Form2(Form1 form1)

{

\_form1 = form1;

InitializeComponent();

}

private void Form2\_Load(object sender, EventArgs e)

{

}

private void comboBoxType\_SelectedIndexChanged(object sender, EventArgs e)

{

switch (comboBoxType.SelectedItem)

{

case "Greens":

textBox1.Enabled = true;

textBox2.Enabled = true;

textBoxWeightSize.Enabled = true;

textBoxWeightSize.Text = "WEIGHT";

textBoxKkalMaterial.Enabled = true;

textBoxKkalMaterial.Text = "KKAL";

textBoxRAM.Enabled = false;

textBoxRAM.Text = "";

break;

case "Clothes":

textBox1.Enabled = true;

textBox2.Enabled = true;

textBoxWeightSize.Enabled = true;

textBoxWeightSize.Text = "SIZE";

textBoxKkalMaterial.Enabled = true;

textBoxKkalMaterial.Text = "MATERIAL";

textBoxRAM.Enabled = false;

textBoxRAM.Text = "";

break;

case "Laptop":

textBox1.Enabled = true;

textBox2.Enabled = true;

textBoxWeightSize.Enabled = true;

textBoxWeightSize.Text = "PROCESSOR ID";

textBoxKkalMaterial.Enabled = true;

textBoxKkalMaterial.Text = "RAM";

textBoxRAM.Enabled = true;

textBoxRAM.Text = "HDD";

break;

}

}

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

{

bool flag = false;

try

{

if (Convert.ToInt32(textBox1.Text) != null)

{

switch (comboBoxType.SelectedItem)

{

case "Greens":

if (Convert.ToInt32(textBoxKkalMaterial.Text) != null &&

Convert.ToDouble(textBoxWeightSize.Text) != null)

{

string str = "Greens " + textBox2.Text + " " + textBox1.Text + " " + textBoxWeightSize.Text +

" " + textBoxKkalMaterial.Text;

\_form1.AddProduct(str);

}

break;

case "Clothes":

if (Convert.ToChar(textBoxWeightSize.Text) != null)

{

string str = "Clothes " + textBox2.Text + " " + textBox1.Text +

" " + textBoxWeightSize.Text + " " + textBoxKkalMaterial.Text;

\_form1.AddProduct(str);

}

break;

case "Laptop":

if (Convert.ToInt32(textBoxKkalMaterial.Text) != null &&

Convert.ToInt32(textBoxRAM.Text) != null)

{

string str = "Laptop " + textBox2.Text + " " + textBox1.Text + " " + textBoxWeightSize.Text +

" " + textBoxKkalMaterial.Text + " " + textBoxRAM.Text;

\_form1.AddProduct(str);

}

break;

}

}

}

catch(FormatException)

{

MessageBox.Show("ERROR : WRONG ITEMS");

}

\_form1.Enabled = true;

this.Close();

}

private Form1 \_form1;

private void textBox2\_MouseClick(object sender, MouseEventArgs e)

{

textBox2.Text = "";

}

private void textBox1\_MouseClick(object sender, MouseEventArgs e)

{

textBox1.Text = "";

}

private void textBoxWeightSize\_MouseClick(object sender, MouseEventArgs e)

{

textBoxWeightSize.Text = "";

}

private void textBoxKkalMaterial\_MouseClick(object sender, MouseEventArgs e)

{

textBoxKkalMaterial.Text = "";

}

private void textBoxRAM\_MouseClick(object sender, MouseEventArgs e)

{

textBoxRAM.Text = "";

}

}

}

**Form1.Designer.cs**

namespace OOP\_LAB\_6

{

partial class Form1

{

/// <summary>

/// Обязательная переменная конструктора.

/// </summary>

private System.ComponentModel.IContainer components = null;

/// <summary>

/// Освободить все используемые ресурсы.

/// </summary>

/// <param name="disposing">истинно, если управляемый ресурс должен быть удален; иначе ложно.</param>

protected override void Dispose(bool disposing)

{

if (disposing && (components != null))

{

components.Dispose();

}

base.Dispose(disposing);

}

#region Код, автоматически созданный конструктором форм Windows

/// <summary>

/// Требуемый метод для поддержки конструктора — не изменяйте

/// содержимое этого метода с помощью редактора кода.

/// </summary>

private void InitializeComponent()

{

this.addElementButton = new System.Windows.Forms.Button();

this.listBoxProducts = new System.Windows.Forms.ListBox();

this.buttonDelete = new System.Windows.Forms.Button();

this.comboBoxCost = new System.Windows.Forms.ComboBox();

this.comboBoxKkal = new System.Windows.Forms.ComboBox();

this.comboBoxWeight = new System.Windows.Forms.ComboBox();

this.groupBoxProducts = new System.Windows.Forms.GroupBox();

this.groupBoxItems = new System.Windows.Forms.GroupBox();

this.richTextBox1 = new System.Windows.Forms.RichTextBox();

this.comboBoxSize = new System.Windows.Forms.ComboBox();

this.comboBoxMaterial = new System.Windows.Forms.ComboBox();

this.comboBoxRAM = new System.Windows.Forms.ComboBox();

this.button1 = new System.Windows.Forms.Button();

this.groupBoxProducts.SuspendLayout();

this.groupBoxItems.SuspendLayout();

this.SuspendLayout();

//

// addElementButton

//

this.addElementButton.BackColor = System.Drawing.Color.FromArgb(((int)(((byte)(122)))), ((int)(((byte)(212)))), ((int)(((byte)(48)))));

this.addElementButton.Font = new System.Drawing.Font("Bahnschrift SemiBold SemiConden", 16F, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

this.addElementButton.ForeColor = System.Drawing.Color.MintCream;

this.addElementButton.Location = new System.Drawing.Point(537, 362);

this.addElementButton.Name = "addElementButton";

this.addElementButton.Size = new System.Drawing.Size(262, 78);

this.addElementButton.TabIndex = 0;

this.addElementButton.Text = "ADD PRODUCT";

this.addElementButton.UseVisualStyleBackColor = false;

this.addElementButton.Click += new System.EventHandler(this.addElementButton\_Click);

//

// listBoxProducts

//

this.listBoxProducts.BorderStyle = System.Windows.Forms.BorderStyle.None;

this.listBoxProducts.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 12F);

this.listBoxProducts.FormattingEnabled = true;

this.listBoxProducts.ItemHeight = 24;

this.listBoxProducts.Location = new System.Drawing.Point(6, 21);

this.listBoxProducts.Name = "listBoxProducts";

this.listBoxProducts.Size = new System.Drawing.Size(502, 312);

this.listBoxProducts.TabIndex = 1;

this.listBoxProducts.SelectedIndexChanged += new System.EventHandler(this.listBoxProducts\_SelectedIndexChanged);

//

// buttonDelete

//

this.buttonDelete.BackColor = System.Drawing.Color.FromArgb(((int)(((byte)(212)))), ((int)(((byte)(38)))), ((int)(((byte)(63)))));

this.buttonDelete.Enabled = false;

this.buttonDelete.Font = new System.Drawing.Font("Bahnschrift SemiBold SemiConden", 12F, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

this.buttonDelete.ForeColor = System.Drawing.Color.MintCream;

this.buttonDelete.Location = new System.Drawing.Point(537, 446);

this.buttonDelete.Name = "buttonDelete";

this.buttonDelete.Size = new System.Drawing.Size(262, 50);

this.buttonDelete.TabIndex = 4;

this.buttonDelete.Text = "DELETE";

this.buttonDelete.UseVisualStyleBackColor = false;

this.buttonDelete.Click += new System.EventHandler(this.buttonDelete\_Click);

//

// comboBoxCost

//

this.comboBoxCost.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

this.comboBoxCost.FormattingEnabled = true;

this.comboBoxCost.Location = new System.Drawing.Point(18, 362);

this.comboBoxCost.Name = "comboBoxCost";

this.comboBoxCost.Size = new System.Drawing.Size(121, 24);

this.comboBoxCost.TabIndex = 5;

this.comboBoxCost.Text = "COST";

this.comboBoxCost.SelectedIndexChanged += new System.EventHandler(this.comboBoxCost\_SelectedIndexChanged);

//

// comboBoxKkal

//

this.comboBoxKkal.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.comboBoxKkal.FormattingEnabled = true;

this.comboBoxKkal.Location = new System.Drawing.Point(145, 362);

this.comboBoxKkal.Name = "comboBoxKkal";

this.comboBoxKkal.Size = new System.Drawing.Size(121, 24);

this.comboBoxKkal.TabIndex = 6;

this.comboBoxKkal.Text = "KKAL";

this.comboBoxKkal.SelectedIndexChanged += new System.EventHandler(this.comboBoxKkal\_SelectedIndexChanged);

//

// comboBoxWeight

//

this.comboBoxWeight.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.comboBoxWeight.FormattingEnabled = true;

this.comboBoxWeight.Location = new System.Drawing.Point(272, 362);

this.comboBoxWeight.Name = "comboBoxWeight";

this.comboBoxWeight.Size = new System.Drawing.Size(121, 24);

this.comboBoxWeight.TabIndex = 7;

this.comboBoxWeight.Text = "WEIGHT";

this.comboBoxWeight.SelectedIndexChanged += new System.EventHandler(this.comboBoxWeight\_SelectedIndexChanged);

//

// groupBoxProducts

//

this.groupBoxProducts.Controls.Add(this.listBoxProducts);

this.groupBoxProducts.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.groupBoxProducts.Location = new System.Drawing.Point(12, 12);

this.groupBoxProducts.Name = "groupBoxProducts";

this.groupBoxProducts.Size = new System.Drawing.Size(514, 340);

this.groupBoxProducts.TabIndex = 8;

this.groupBoxProducts.TabStop = false;

this.groupBoxProducts.Text = "PRODUCTS";

//

// groupBoxItems

//

this.groupBoxItems.Controls.Add(this.richTextBox1);

this.groupBoxItems.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.groupBoxItems.Location = new System.Drawing.Point(537, 12);

this.groupBoxItems.Name = "groupBoxItems";

this.groupBoxItems.Size = new System.Drawing.Size(262, 340);

this.groupBoxItems.TabIndex = 9;

this.groupBoxItems.TabStop = false;

this.groupBoxItems.Text = "ITEMS";

//

// richTextBox1

//

this.richTextBox1.BorderStyle = System.Windows.Forms.BorderStyle.None;

this.richTextBox1.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 12F);

this.richTextBox1.Location = new System.Drawing.Point(0, 21);

this.richTextBox1.Name = "richTextBox1";

this.richTextBox1.Size = new System.Drawing.Size(256, 312);

this.richTextBox1.TabIndex = 0;

this.richTextBox1.Text = "";

//

// comboBoxSize

//

this.comboBoxSize.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.comboBoxSize.FormattingEnabled = true;

this.comboBoxSize.Location = new System.Drawing.Point(399, 362);

this.comboBoxSize.Name = "comboBoxSize";

this.comboBoxSize.Size = new System.Drawing.Size(121, 24);

this.comboBoxSize.TabIndex = 10;

this.comboBoxSize.Text = "SIZE";

this.comboBoxSize.SelectedIndexChanged += new System.EventHandler(this.comboBoxSize\_SelectedIndexChanged);

//

// comboBoxMaterial

//

this.comboBoxMaterial.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.comboBoxMaterial.FormattingEnabled = true;

this.comboBoxMaterial.Location = new System.Drawing.Point(18, 392);

this.comboBoxMaterial.Name = "comboBoxMaterial";

this.comboBoxMaterial.Size = new System.Drawing.Size(121, 24);

this.comboBoxMaterial.TabIndex = 11;

this.comboBoxMaterial.Text = "MATERIAL";

this.comboBoxMaterial.SelectedIndexChanged += new System.EventHandler(this.comboBoxMaterial\_SelectedIndexChanged);

//

// comboBoxRAM

//

this.comboBoxRAM.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.comboBoxRAM.FormattingEnabled = true;

this.comboBoxRAM.Location = new System.Drawing.Point(145, 392);

this.comboBoxRAM.Name = "comboBoxRAM";

this.comboBoxRAM.Size = new System.Drawing.Size(121, 24);

this.comboBoxRAM.TabIndex = 12;

this.comboBoxRAM.Text = "RAM";

this.comboBoxRAM.SelectedIndexChanged += new System.EventHandler(this.comboBoxRAM\_SelectedIndexChanged);

//

// button1

//

this.button1.BackColor = System.Drawing.Color.FromArgb(((int)(((byte)(212)))), ((int)(((byte)(38)))), ((int)(((byte)(63)))));

this.button1.Font = new System.Drawing.Font("Bahnschrift SemiBold SemiConden", 12F, System.Drawing.FontStyle.Bold);

this.button1.ForeColor = System.Drawing.Color.MintCream;

this.button1.Location = new System.Drawing.Point(18, 422);

this.button1.Name = "button1";

this.button1.Size = new System.Drawing.Size(92, 49);

this.button1.TabIndex = 13;

this.button1.Text = "CANCEL";

this.button1.UseVisualStyleBackColor = false;

this.button1.Click += new System.EventHandler(this.button1\_Click);

//

// Form1

//

this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);

this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;

this.BackColor = System.Drawing.SystemColors.ControlLight;

this.ClientSize = new System.Drawing.Size(811, 512);

this.Controls.Add(this.button1);

this.Controls.Add(this.comboBoxRAM);

this.Controls.Add(this.comboBoxMaterial);

this.Controls.Add(this.comboBoxSize);

this.Controls.Add(this.comboBoxWeight);

this.Controls.Add(this.comboBoxKkal);

this.Controls.Add(this.comboBoxCost);

this.Controls.Add(this.buttonDelete);

this.Controls.Add(this.addElementButton);

this.Controls.Add(this.groupBoxProducts);

this.Controls.Add(this.groupBoxItems);

this.Name = "Form1";

this.Text = "Store of products";

this.groupBoxProducts.ResumeLayout(false);

this.groupBoxItems.ResumeLayout(false);

this.ResumeLayout(false);

}

#endregion

private System.Windows.Forms.Button addElementButton;

private System.Windows.Forms.ListBox listBoxProducts;

private System.Windows.Forms.Button buttonDelete;

private System.Windows.Forms.ComboBox comboBoxCost;

private System.Windows.Forms.ComboBox comboBoxKkal;

private System.Windows.Forms.ComboBox comboBoxWeight;

private System.Windows.Forms.GroupBox groupBoxProducts;

private System.Windows.Forms.GroupBox groupBoxItems;

private System.Windows.Forms.ComboBox comboBoxSize;

private System.Windows.Forms.ComboBox comboBoxMaterial;

private System.Windows.Forms.ComboBox comboBoxRAM;

private System.Windows.Forms.RichTextBox richTextBox1;

private System.Windows.Forms.Button button1;

}

}

**Form2.Designer.cs**

namespace OOP\_LAB\_6

{

partial class Form2

{

/// <summary>

/// Required designer variable.

/// </summary>

private System.ComponentModel.IContainer components = null;

/// <summary>

/// Clean up any resources being used.

/// </summary>

/// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>

protected override void Dispose(bool disposing)

{

if (disposing && (components != null))

{

components.Dispose();

}

base.Dispose(disposing);

}

#region Windows Form Designer generated code

/// <summary>

/// Required method for Designer support - do not modify

/// the contents of this method with the code editor.

/// </summary>

private void InitializeComponent()

{

this.textBox1 = new System.Windows.Forms.TextBox();

this.textBox2 = new System.Windows.Forms.TextBox();

this.textBoxWeightSize = new System.Windows.Forms.TextBox();

this.comboBoxType = new System.Windows.Forms.ComboBox();

this.label1 = new System.Windows.Forms.Label();

this.groupBox1 = new System.Windows.Forms.GroupBox();

this.groupBox2 = new System.Windows.Forms.GroupBox();

this.textBoxRAM = new System.Windows.Forms.TextBox();

this.textBoxKkalMaterial = new System.Windows.Forms.TextBox();

this.buttonDone = new System.Windows.Forms.Button();

this.groupBox2.SuspendLayout();

this.SuspendLayout();

//

// textBox1

//

this.textBox1.Enabled = false;

this.textBox1.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.textBox1.Location = new System.Drawing.Point(11, 59);

this.textBox1.Multiline = true;

this.textBox1.Name = "textBox1";

this.textBox1.Size = new System.Drawing.Size(119, 24);

this.textBox1.TabIndex = 0;

this.textBox1.Text = "COST";

this.textBox1.TextAlign = System.Windows.Forms.HorizontalAlignment.Center;

this.textBox1.MouseClick += new System.Windows.Forms.MouseEventHandler(this.textBox1\_MouseClick);

//

// textBox2

//

this.textBox2.Enabled = false;

this.textBox2.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.textBox2.Location = new System.Drawing.Point(237, 84);

this.textBox2.Multiline = true;

this.textBox2.Name = "textBox2";

this.textBox2.Size = new System.Drawing.Size(119, 24);

this.textBox2.TabIndex = 1;

this.textBox2.Text = "NAME";

this.textBox2.TextAlign = System.Windows.Forms.HorizontalAlignment.Center;

this.textBox2.MouseClick += new System.Windows.Forms.MouseEventHandler(this.textBox2\_MouseClick);

//

// textBoxWeightSize

//

this.textBoxWeightSize.Enabled = false;

this.textBoxWeightSize.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.textBoxWeightSize.Location = new System.Drawing.Point(11, 89);

this.textBoxWeightSize.Multiline = true;

this.textBoxWeightSize.Name = "textBoxWeightSize";

this.textBoxWeightSize.Size = new System.Drawing.Size(119, 24);

this.textBoxWeightSize.TabIndex = 2;

this.textBoxWeightSize.TextAlign = System.Windows.Forms.HorizontalAlignment.Center;

this.textBoxWeightSize.MouseClick += new System.Windows.Forms.MouseEventHandler(this.textBoxWeightSize\_MouseClick);

//

// comboBoxType

//

this.comboBoxType.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.comboBoxType.FormattingEnabled = true;

this.comboBoxType.Items.AddRange(new object[] {

"Clothes",

"Greens",

"Laptop"});

this.comboBoxType.Location = new System.Drawing.Point(44, 84);

this.comboBoxType.Name = "comboBoxType";

this.comboBoxType.Size = new System.Drawing.Size(121, 24);

this.comboBoxType.TabIndex = 3;

this.comboBoxType.SelectedIndexChanged += new System.EventHandler(this.comboBoxType\_SelectedIndexChanged);

this.comboBoxType.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;

//

// label1

//

this.label1.AutoSize = true;

this.label1.Font = new System.Drawing.Font("Bahnschrift SemiBold SemiConden", 12F, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

this.label1.Location = new System.Drawing.Point(53, 9);

this.label1.Name = "label1";

this.label1.Size = new System.Drawing.Size(318, 24);

this.label1.TabIndex = 4;

this.label1.Text = "CHOOSE PARAMENTR OF NEW PRODUCT";

//

// groupBox1

//

this.groupBox1.Font = new System.Drawing.Font("Bahnschrift SemiBold SemiConden", 10.2F, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

this.groupBox1.Location = new System.Drawing.Point(30, 55);

this.groupBox1.Name = "groupBox1";

this.groupBox1.Size = new System.Drawing.Size(145, 60);

this.groupBox1.TabIndex = 5;

this.groupBox1.TabStop = false;

this.groupBox1.Text = "CHOOSE TYPE";

//

// groupBox2

//

this.groupBox2.Controls.Add(this.textBoxRAM);

this.groupBox2.Controls.Add(this.textBoxKkalMaterial);

this.groupBox2.Controls.Add(this.textBox1);

this.groupBox2.Controls.Add(this.textBoxWeightSize);

this.groupBox2.Font = new System.Drawing.Font("Bahnschrift SemiBold SemiConden", 10.2F, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

this.groupBox2.Location = new System.Drawing.Point(226, 55);

this.groupBox2.Name = "groupBox2";

this.groupBox2.Size = new System.Drawing.Size(145, 181);

this.groupBox2.TabIndex = 6;

this.groupBox2.TabStop = false;

this.groupBox2.Text = "ENTER ITEMS";

//

// textBoxRAM

//

this.textBoxRAM.Enabled = false;

this.textBoxRAM.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.textBoxRAM.Location = new System.Drawing.Point(11, 149);

this.textBoxRAM.Multiline = true;

this.textBoxRAM.Name = "textBoxRAM";

this.textBoxRAM.Size = new System.Drawing.Size(119, 24);

this.textBoxRAM.TabIndex = 4;

this.textBoxRAM.TextAlign = System.Windows.Forms.HorizontalAlignment.Center;

this.textBoxRAM.MouseClick += new System.Windows.Forms.MouseEventHandler(this.textBoxRAM\_MouseClick);

//

// textBoxKkalMaterial

//

this.textBoxKkalMaterial.Enabled = false;

this.textBoxKkalMaterial.Font = new System.Drawing.Font("Bahnschrift SemiLight SemiConde", 7.8F);

this.textBoxKkalMaterial.Location = new System.Drawing.Point(11, 119);

this.textBoxKkalMaterial.Multiline = true;

this.textBoxKkalMaterial.Name = "textBoxKkalMaterial";

this.textBoxKkalMaterial.Size = new System.Drawing.Size(119, 24);

this.textBoxKkalMaterial.TabIndex = 3;

this.textBoxKkalMaterial.TextAlign = System.Windows.Forms.HorizontalAlignment.Center;

this.textBoxKkalMaterial.MouseClick += new System.Windows.Forms.MouseEventHandler(this.textBoxKkalMaterial\_MouseClick);

//

// buttonDone

//

this.buttonDone.BackColor = System.Drawing.Color.FromArgb(((int)(((byte)(122)))), ((int)(((byte)(212)))), ((int)(((byte)(48)))));

this.buttonDone.Font = new System.Drawing.Font("Bahnschrift SemiBold SemiConden", 16F, System.Drawing.FontStyle.Bold, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

this.buttonDone.ForeColor = System.Drawing.Color.MintCream;

this.buttonDone.Location = new System.Drawing.Point(89, 267);

this.buttonDone.Name = "buttonDone";

this.buttonDone.Size = new System.Drawing.Size(231, 58);

this.buttonDone.TabIndex = 7;

this.buttonDone.Text = "DONE";

this.buttonDone.UseVisualStyleBackColor = false;

this.buttonDone.Click += new System.EventHandler(this.buttonDone\_Click);

//

// Form2

//

this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);

this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;

this.BackColor = System.Drawing.SystemColors.ControlLight;

this.ClientSize = new System.Drawing.Size(411, 359);

this.Controls.Add(this.buttonDone);

this.Controls.Add(this.label1);

this.Controls.Add(this.comboBoxType);

this.Controls.Add(this.textBox2);

this.Controls.Add(this.groupBox1);

this.Controls.Add(this.groupBox2);

this.Name = "Form2";

this.Text = "Adding product";

this.Load += new System.EventHandler(this.Form2\_Load);

this.groupBox2.ResumeLayout(false);

this.groupBox2.PerformLayout();

this.ResumeLayout(false);

this.PerformLayout();

}

#endregion

private System.Windows.Forms.TextBox textBox1;

private System.Windows.Forms.TextBox textBox2;

private System.Windows.Forms.TextBox textBoxWeightSize;

private System.Windows.Forms.ComboBox comboBoxType;

private System.Windows.Forms.Label label1;

private System.Windows.Forms.GroupBox groupBox1;

private System.Windows.Forms.GroupBox groupBox2;

private System.Windows.Forms.TextBox textBoxRAM;

private System.Windows.Forms.TextBox textBoxKkalMaterial;

private System.Windows.Forms.Button buttonDone;

}

}

**Вывод**

В данной лабораторной работе я ознакомился с возможностями утилиты Windows Forms и приобрел знания в настройке, отладке и конструировании своего GUI-интерфейса.