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.Windows.Forms.DataVisualization.Charting;

namespace Lab\_Work4

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

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

{

}

private void label1\_Click(object sender, EventArgs e)

{

}

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

{

Application.Exit();

}

private void numericUpDown1\_ValueChanged(object sender, EventArgs e)

{

int a = (int)numericUpDown1.Value;

numericUpDown1.Maximum = 10;

numericUpDown1.Minimum = 1;

dataGridView1.RowCount = a;

dataGridView1.ColumnCount = 4;

dataGridView1.Columns[0].HeaderCell.Style.Alignment = DataGridViewContentAlignment.MiddleLeft;

dataGridView1.Columns[1].HeaderCell.Style.Alignment = DataGridViewContentAlignment.MiddleLeft;

dataGridView1.Columns[2].HeaderCell.Style.Alignment = DataGridViewContentAlignment.MiddleLeft;

dataGridView1.Columns[3].HeaderCell.Style.Alignment = DataGridViewContentAlignment.MiddleLeft;

dataGridView1.RowHeadersWidth = 50;

dataGridView1.Columns[0].SortMode = DataGridViewColumnSortMode.NotSortable;

dataGridView1.Columns[1].SortMode = DataGridViewColumnSortMode.NotSortable;

dataGridView1.Columns[2].SortMode = DataGridViewColumnSortMode.NotSortable;

dataGridView1.Columns[3].SortMode = DataGridViewColumnSortMode.NotSortable;

dataGridView1.Columns[0].HeaderCell.Value = "Название товара";

dataGridView1.Columns[1].HeaderCell.Value = "Цена товара";

dataGridView1.Columns[2].HeaderCell.Value = "Количество";

dataGridView1.Columns[3].HeaderCell.Value = "Стоимость";

for (int i = 0; i < a; i++)

{

dataGridView1.Rows[i].HeaderCell.Value = string.Format((i + 1).ToString(), "0");

dataGridView1.Rows[i].HeaderCell.Style.Alignment = DataGridViewContentAlignment.MiddleLeft;

}

}

private void chart1\_Click(object sender, EventArgs e)

{

}

private void ShowMessageBox(string message, string text)

{

bool showed = false;

if (!showed)

MessageBox.Show(message, text);

showed = true;

}

private void deal()

{

double l;

double x, y, z, sum = 0;

for (int i = 0; i < dataGridView1.Rows.Count; i++)

{

for (int j = 0; j < dataGridView1.Columns.Count; j++)

{

if (dataGridView1.Rows[i].Cells[j].Value == null)

{

dataGridView1.Rows[i].Cells[0].Value = "";

dataGridView1.Rows[i].Cells[1].Value = 0;

dataGridView1.Rows[i].Cells[2].Value = 0;

dataGridView1.Rows[i].Cells[3].Value = 0;

}

}

}

for (int i = 0; i < dataGridView1.RowCount; i++)

{

dataGridView1.Columns[i].Width = 150;

if (double.TryParse(dataGridView1.Rows[i].Cells[1].Value.ToString(), out l) && double.TryParse(dataGridView1.Rows[i].Cells[2].Value.ToString(), out l) && chart1.Series["S1"].ChartType == System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Pie)

{

string name = dataGridView1.Rows[i].Cells[0].Value.ToString();

x = Convert.ToDouble(dataGridView1.Rows[i].Cells[1].Value);

y = Convert.ToDouble(dataGridView1.Rows[i].Cells[2].Value);

z = x \* y;

sum += z;

string Percent = ((z / sum) \* 100).ToString("0.00") + "%";

dataGridView1.Rows[i].Cells[3].Value = Convert.ToString(z);

chart1.Series["S1"].Label = "#PERCENT{P}";

chart1.Series["S1"].LegendText = "#VALX";

chart1.Series["S1"].Points.AddXY(z + " " + name, z);

}

if (double.TryParse(dataGridView1.Rows[i].Cells[1].Value.ToString(), out l) && double.TryParse(dataGridView1.Rows[i].Cells[2].Value.ToString(), out l) && chart1.Series["S1"].ChartType == System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Column)

{

string name = dataGridView1.Rows[i].Cells[0].Value.ToString();

x = Convert.ToDouble(dataGridView1.Rows[i].Cells[1].Value);

y = Convert.ToDouble(dataGridView1.Rows[i].Cells[2].Value);

z = x \* y;

sum += z;

string Percent = ((z / sum) \* 100).ToString("0.00") + "%";

dataGridView1.Rows[i].Cells[3].Value = Convert.ToString(z);

chart1.Series["S1"].Label = "#PERCENT{P}";

chart1.Series["S1"].LegendText = "Стоимость" ;

chart1.Series["S1"].Points.AddXY(z + " " + name,z);

}

if(double.TryParse(dataGridView1.Rows[i].Cells[1].Value.ToString(), out l) == false || double.TryParse(dataGridView1.Rows[i].Cells[2].Value.ToString(), out l) == false)

{

ShowMessageBox("Введены некорректные данные", "Сообщение");

}

}

}

private void groupBox2\_Enter(object sender, EventArgs e)

{

}

private void dataGridView1\_CellContentClick(object sender, DataGridViewCellEventArgs e)

{

if (chart1.Series["S1"].ChartType == System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Pie)

{

chart1.Series.Clear();

chart1.Series.Add("S1");

deal();

chart1.Series["S1"].ChartType = System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Pie;

}

else if (chart1.Series["S1"].ChartType == System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Column)

{

chart1.Series.Clear();

chart1.Series.Add("S1");

deal();

chart1.Series["S1"].ChartType = System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Column;

}

}

private void dataGridView1\_CellClick(object sender, DataGridViewCellEventArgs e)

{

if (chart1.Series["S1"].ChartType == System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Pie)

{

chart1.Series.Clear();

chart1.Series.Add("S1");

chart1.Series["S1"].LegendText = "#VALX";

deal();

chart1.Series["S1"].ChartType = System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Pie;

}

else if (chart1.Series["S1"].ChartType == System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Column)

{

chart1.Series.Clear();

chart1.Series.Add("S1");

deal();

chart1.Series["S1"].ChartType = System.Windows.Forms.DataVisualization.Charting.SeriesChartType.Column;

}

}

private void Form1\_Load\_1(object sender, EventArgs e)

{

}

private void radioButton1\_CheckedChanged(object sender, EventArgs e)

{

chart1.Series.Clear();

chart1.Series.Add("S1");

chart1.Series["S1"].ChartType = SeriesChartType.Pie;

deal();

}

private void radioButton2\_CheckedChanged(object sender, EventArgs e)

{

chart1.Series.Clear();

chart1.Series.Add("S1");

chart1.Series["S1"].ChartType = SeriesChartType.Column;

deal();

}

}

}