

**ОТЧЕТ О ВЫПОЛНЕНИИ**

**практической работы № 18**

Выполнил: ст.гр.

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Информационные системы и программирование

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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 WindowsFormsApp1

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

SetSize();

}

private class ArrayPoints

{

private int index = 0;

private Point[] points;

public ArrayPoints(int size)

{

if (size <=0) { size = 2; }

points = new Point[size];

}

public void SetPoint(int x, int y)

{

if (index >= points.Length)

{

index = 0;

}

points[index] = new Point (x, y);

index++;

}

public void ResetPoints()

{

index = 0;

}

public int GetCountPoints() // public void GetCountPoints()

{

return index;

}

public Point[] GetPoints()

{

return points;

}

}

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

{

}

private void pictureBox1\_Click(object sender, EventArgs e)

{

}

private bool Mouse = false;

private ArrayPoints arrayPoints = new ArrayPoints(2);

Bitmap map = new Bitmap (100, 100);

Graphics graphics;

Pen pen = new Pen(Color.Black, 3f);

private void SetSize()

{

Rectangle rectangle = Screen.PrimaryScreen.Bounds;

map = new Bitmap(rectangle.Width, rectangle.Height);

graphics = Graphics.FromImage (map);

pen.StartCap = System.Drawing.Drawing2D.LineCap.Round;

pen.EndCap = System.Drawing.Drawing2D.LineCap.Round;

}

private void pictureBox1\_MouseDown(object sender, MouseEventArgs e)

{

Mouse = true;

}

private void pictureBox1\_MouseUp(object sender, MouseEventArgs e)

{

Mouse = false;

arrayPoints.ResetPoints();

}

private void pictureBox1\_MouseMove(object sender, MouseEventArgs e)

{

if(!Mouse) { return; }

arrayPoints.SetPoint(e.X, e.Y);

if(arrayPoints.GetCountPoints() >= 2)

{

graphics.DrawLines(pen, arrayPoints.GetPoints());

pictureBox1.Image = map;

arrayPoints.SetPoint(e.X, e.Y);

}

}

private void button3\_Click(object sender, EventArgs e)

{

pen.Color = ((Button)sender).BackColor;

}

private void button10\_Click(object sender, EventArgs e)

{

if (colorDialog1.ShowDialog() == DialogResult.OK)

{

pen.Color = colorDialog1.Color;

((Button)sender).BackColor = colorDialog1.Color;

}

}

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

{

graphics.Clear(pictureBox1.BackColor);

pictureBox1.Image = map;

}

private void trackBar1\_Scroll(object sender, EventArgs e)

{

}

private void trackBar1\_ValueChanged(object sender, EventArgs e)

{

pen.Width = trackBar1.Value;

}

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

{

saveFileDialog1.Filter = "JPG(\*.JPG)|\*.jpg";

if (saveFileDialog1.ShowDialog() == DialogResult.OK)

{

if (pictureBox1.Image != null)

{

pictureBox1.Image.Save(saveFileDialog1.FileName);

}

}

}

}

}

