Ключникова К.А

**Практическая работа №1**

1. Создать Forms в виде формы звезды и разукрасить её в любой цвет. По желанию. Делаем переносную форму при нажатии на неё курсором.

**Листинг программы:**

namespace Forms1

{

using System;

using System.Drawing;

using System.Drawing.Drawing2D;

using System.Windows.Forms;

public partial class Form1 : Form

{

private bool dragging = false;

private Point dragCursorPoint;

private Point dragFormPoint;

public Form1()

{

InitializeComponent();

this.ClientSize = new Size(400, 400);

this.Text = "Star Form";

SetFormToStar();

this.Paint += new PaintEventHandler(MainForm\_Paint);

this.MouseDown += new MouseEventHandler(Form1\_MouseDown);

this.MouseMove += new MouseEventHandler(Form1\_MouseMove);

this.MouseUp += new MouseEventHandler(Form1\_MouseUp);

this.MouseClick += new MouseEventHandler(Star\_MouseDown);

}

private void SetFormToStar()

{

GraphicsPath path = new GraphicsPath();

Point[] starPoints = GetStarPoints(5, new Point(ClientSize.Width / 2, ClientSize.Height / 2), 100, 50);

path.AddPolygon(starPoints);

this.Region = new Region(path);

}

private void MainForm\_Paint(object sender, PaintEventArgs e)

{

}

private Point[] GetStarPoints(int numPoints, Point center, int outerRadius, int innerRadius)

{

Point[] pt = new Point[2 \* numPoints];

double angle = Math.PI / numPoints;

double rotationAngle = -Math.PI / 2;

for (int ii = 0; ii < 2 \* numPoints; ii++)

{

double radius = (ii % 2 == 0) ? outerRadius : innerRadius;

double x = center.X + radius \* Math.Cos(ii \* angle + rotationAngle);

double y = center.Y + radius \* Math.Sin(ii \* angle + rotationAngle);

pt[ii] = new Point((int)x, (int)y);

}

return pt;

}

private void Form1\_MouseDown(object sender, MouseEventArgs e)

{

dragging = true;

dragCursorPoint = Cursor.Position;

dragFormPoint = this.Location;

}

private void Form1\_MouseMove(object sender, MouseEventArgs e)

{

if (dragging)

{

Point dif = new Point(Cursor.Position.X - dragCursorPoint.X, Cursor.Position.Y - dragCursorPoint.Y);

this.Location = new Point(dragFormPoint.X + dif.X, dragFormPoint.Y + dif.Y);

}

}

private void Form1\_MouseUp(object sender, MouseEventArgs e)

{

dragging = false;

}

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

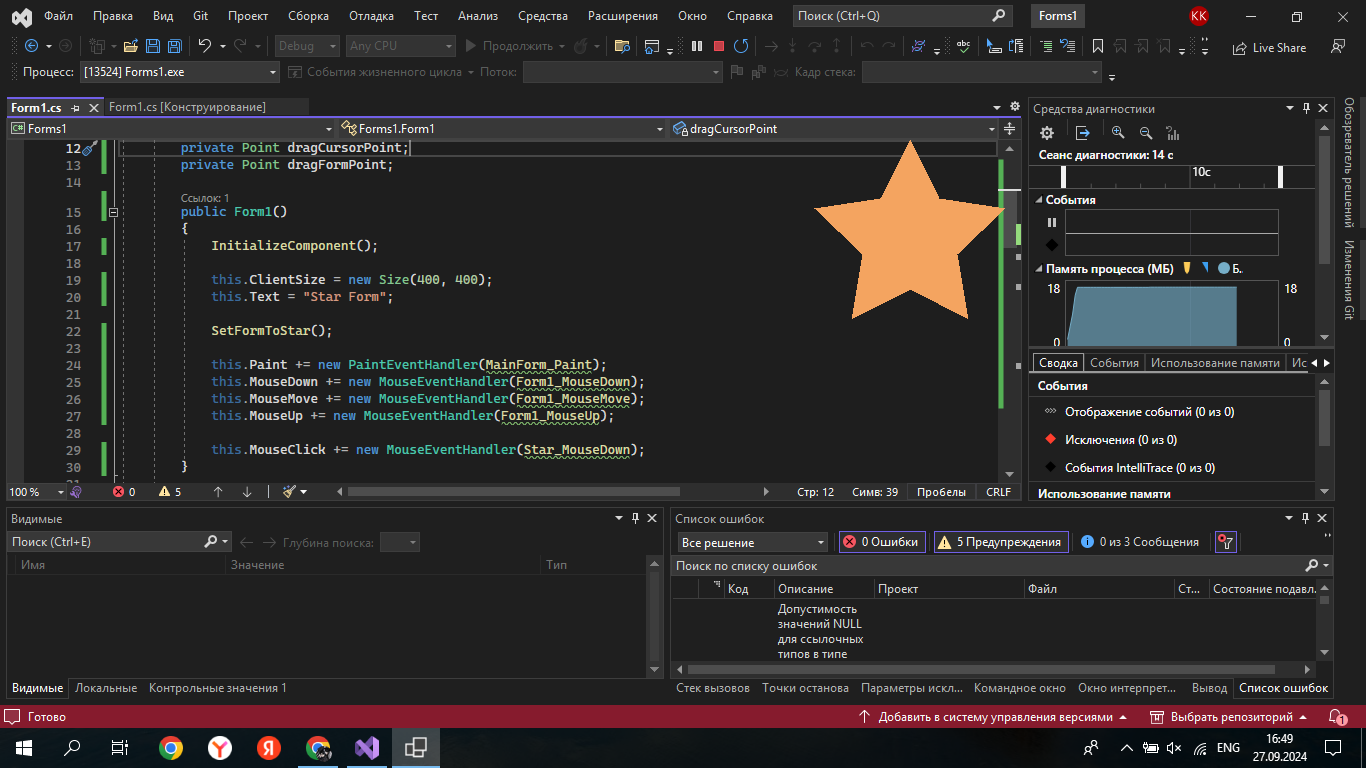
{

}

}

}

**Скриншот работы:**

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