

Черняков Артем 01 группа.

Задание №1: Классы, инкапсуляция, наследование, полиморфизм

Код:

```
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();
            this.AutoSizeMode =
            System.Windows.Forms.AutoSizeMode.GrowAndShrink;
        }
        public float x, y;
        private void Выбор_SelectedIndexChanged(object sender, EventArgs e)
        {
        }
        private void Картина_Click(object sender, EventArgs e)
        {
        }
        private void button1_Click(object sender, EventArgs e)
        {
            Картина.Image = null;
        }
    }
}
```

```

}

private void button2_Click(object sender, EventArgs e)
{
}

private Point start;

private bool drawing = false;

Bitmap bm = new Bitmap(400, 400);
Bitmap bm2 = new Bitmap(400, 400);

private void pictureBox1_Click(object sender, EventArgs e)
{
}

private void Тест_MouseDown(object sender, MouseEventArgs e)
{
drawing = true;
}

private void Тест_MouseUp(object sender, MouseEventArgs e)
{
drawing = false;
Тест.Invalidate();
}

private void Тест_MouseMove(object sender, MouseEventArgs e)
{
if (!drawing) return;

var start = new Point(e.X - 200, e.Y - 80); //по нормальному тут не
должно быть констант(200 и 80) просто лень было все координаты менять

bm2 = new Bitmap(bm);

Тест.Image = bm2;

var g = Graphics.FromImage(bm2);

Pen pen = new Pen(Color.Black);

g.DrawLine(pen, start.X + 200, start.Y + 100, start.X + 400, start.Y +
100);

g.DrawLine(pen, start.X + 400, start.Y + 100, start.X + 400, start.Y +

```

```

300);

g.DrawLine(pen, start.X + 200, start.Y + 100, start.X + 200, start.Y +
300);

g.DrawLine(pen, start.X + 200, start.Y + 300, start.X + 400, start.Y +
300);

g.Dispose();

Тест.Invalidate();

}

private void Добавить_Click(object sender, EventArgs e)
{
    if (Выбор.SelectedIndex == 0)
    {
        Random rnd = new Random();
        int value = rnd.Next(1, 300);

        Graphics gr = this.Картина.CreateGraphics();
        x = this.Картина.Width / 2;
        y = this.Картина.Height / 2;
        Pen myPen = new Pen(Color.FromArgb(rnd.Next(255),
rnd.Next(255), rnd.Next(255)), 2);
        gr.DrawRectangle(myPen, value, value, 80, 80);
    }

    if (Выбор.SelectedIndex == 1)
    {
        Random rnd = new Random();
        int value = rnd.Next(1, 300);
        float radius = 40.0f;
        float diametr = radius * 2.0f;
        Graphics gr = this.Картина.CreateGraphics();
        x = this.Картина.Width / 2;
        y = this.Картина.Height / 2;
        Pen myPen = new Pen(Color.FromArgb(rnd.Next(255),
rnd.Next(255), rnd.Next(255)), 2);

```

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gr.DrawEllipse(myPen, value, value, diametr, diametr);
}
if (Выбор.SelectedIndex == 2)
{
Graphics gr = this.Картина.CreateGraphics();
Pen pen = new Pen(Color.Green, 2);
x = this.Картина.Width;
y = this.Картина.Height;
Point[] points =
{
new Point(360, 30),
new Point(330, 60),
new Point(390, 60),
new Point(360, 30)
};
gr.DrawLine(pen, points);
}
}
}
}
}

```

