**Moving Image example**

Look and feel:

Graphical user interface, application

Description automatically generated

Click on move image moves the first image and also Restart starts in this position with new images

Also restart

Graphical user interface

Description automatically generated

On collision the second image changes and moves moves

A picture containing graphical user interface

Description automatically generated

Moving stops when width of Form is reached

Graphical user interface, text, application, website

Description automatically generated

Clicking on moving first image shows animal name and number of clicks

Code:

using System;

using System.IO;

using System.Drawing;

using System.Windows.Forms;

namespace MovingImageExmple

{

public partial class frmMoveImage : Form

{

bool collision;//to check if images are colapsed

string[] imageArr;//array of images

public frmMoveImage()

{

InitializeComponent();

createRandomImageArray();

//random images

changeImage(pb1);

changeImage(pb2);

}

//read file names from Resources directory in the project

//to array and create a random order

private void createRandomImageArray()

{

imageArr = Directory.GetFiles(@"../../../Resources/");

shuffle(imageArr);

}

// basic Knuth shuffle algorithm :: courtesy of Wikipedia :)

private void shuffle(string[] arr)

{

//basic shuffle algorithm Knuth

Random rnd = new Random();

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

{

int r = rnd.Next(arr.Length);

string tmp = arr[i];

arr[i] = arr[r];

arr[r] = tmp;

}

}

//start timer all the logic in in timer

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

{

timerImageMove.Start();

}

//choose random image to replace current image

private void changeImage(PictureBox p)

{

Random rnd = new Random();

int r = rnd.Next(imageArr.Length);

p.ImageLocation = imageArr[r];

}

//all the logic of movement

private void timerImageMove\_Tick(object sender, EventArgs e)

{

//move untill picture 2

if(pb1.Location.X+pb1.Width<=pb2.Location.X && collision==false)

pb1.Location = new Point(pb1.Location.X+10,pb1.Location.Y);

//collision

else if(pb1.Location.X+pb1.Width>pb2.Location.X && collision==false)

{

collision = true;

//change image

changeImage(pb2);

}

//moving picture 2 untill form width

else if(pb2.Location.X+pb2.Width<=this.Width)

pb2.Location = new Point(pb2.Location.X + 10, pb2.Location.Y);

}

//stop the timer

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

{

timerImageMove.Stop();

}

//restart all the images to the original location

//if timer works - then it continues to work?

//if want to stop just add timerImageMove.Stop();

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

{

collision = false;

pb1.Location=new Point(12, 68);

pb2.Location=new Point(391, 68);

changeImage(pb1);

changeImage(pb2);

}

}

}