

PROJECT REPORT

GAME USING C# FORM

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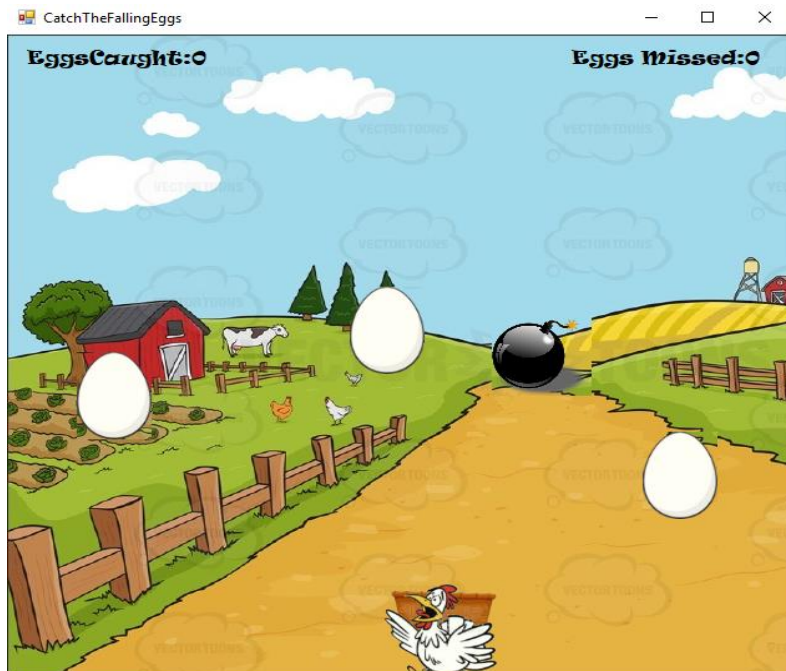
STARTING FORM:



FORM CODE:

```
19 }
20 SoundPlayer Sound = new SoundPlayer("button-3.wav");
21 SoundPlayer _sound = new SoundPlayer("Lynn Music Boulangerie Gaming Background Music HD.wav");
22 private void button1_Click_1(object sender, EventArgs e)
23 {
24     Sound.Play();
25     Form1 f = new Form1();
26     f.Show();
27     this.Hide();
28 }
29 private void Form2_Load(object sender, EventArgs e)
30 {
31     label1.Text = "EGGILICIOUS";
32     label1.BackColor = System.Drawing.Color.Transparent;
33     button1.BackColor = System.Drawing.Color.Transparent;
34     button1.BackColor = System.Drawing.Color.Transparent;
35     button1.BackColor = System.Drawing.Color.Transparent;
36     _sound.Play();
37 }
38 private void button2_Click(object sender, EventArgs e)
39 {
40     Sound.Play();
41     Form4 f4 = new Form4();
42     f4.Show();
43     this.Hide();
44 }
45 private void button3_Click(object sender, EventArgs e)
46 {
47     Sound.Play();
48     this.Close();
49 }
50 }
51 }
52 }
```

This Form makes all the Controls Transparent and on Button1_Click event it opens the second Form that is the Game Form and closes itself.



While on Button2_Click event it shows the Instructions Form, with the following code:

INSTRUCTION FORM:

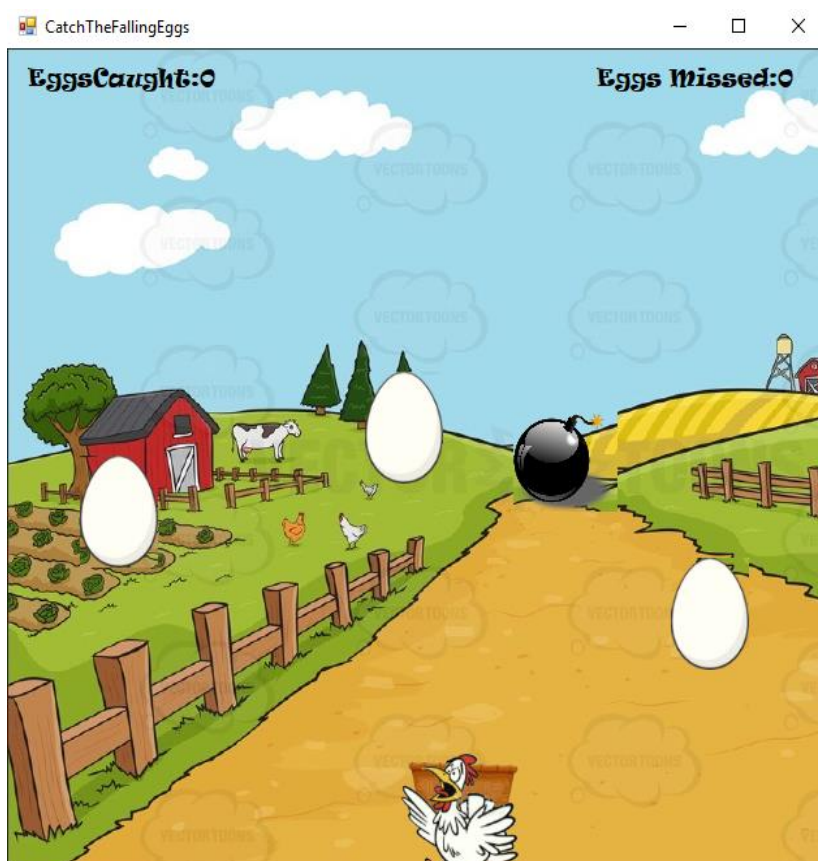


FORM CODE:

```
1 using System;
2 using System.Collections.Generic;
3 using System.ComponentModel;
4 using System.Data;
5 using System.Drawing;
6 using System.Linq;
7 using System.Text;
8 using System.Threading.Tasks;
9 using System.Windows.Forms;
10 using System.Media;
11 namespace catch_the_eggs
12 {
13     public partial class Form4 : Form
14     {
15
16         SoundPlayer s1 = new SoundPlayer("button-3.wav");
17         SoundPlayer _sound = new SoundPlayer("Lynn Music Boulangerie Gaming Background Music HD.wav");
18         public Form4()
19         {
20             InitializeComponent();
21         }
22         private void button1_Click(object sender, EventArgs e)
23         {
24             s1.Play();
25             Form2 f = new Form2();
26             f.Show();
27             this.Close();
28         }
29         private void Form4_Load(object sender, EventArgs e)
30         {
31             _sound.Play();
32         }
33     }
34 }
```

And on Button3_Click it closes the Game and Returns to the Desktop.

MAIN GAME FORM:



FORM CODE:

```
11
12 namespace catch_the_eggs
13 {
14     public partial class Form1 : Form
15     {
16         bool goleft;           //to check if the user can move to the left or not
17         bool goright;          //to check if the user can move to the right or not
18         int speed = 8;         //egg falling speed(default set to 8)
19         int score = 0;         //default score set to zero
20         int missed = 0;        //number of eggs missed(default set to zero)
21         Random rndX = new Random(); //to generate a random x location
22         Random rndY = new Random(); //to generate a random y location
23         PictureBox splash = new PictureBox(); //creates a new picture box for splashed egg DYNAMICALLY
24         SoundPlayer _sound = new SoundPlayer("Lynn Music Boulangerie Gaming Background Music HD.wav");
25         SoundPlayer _sound1 = new SoundPlayer("244745__reitanna__egg-crack19.wav");
26
27         public Form1()
28         {
29             InitializeComponent();
30             chicken.BackColor = System.Drawing.Color.Transparent;
31             pictureBox1.BackColor = System.Drawing.Color.Transparent;
32             pictureBox2.BackColor = System.Drawing.Color.Transparent;
33             pictureBox3.BackColor = System.Drawing.Color.Transparent;
34             Bomb.BackColor = System.Drawing.Color.Transparent;
35         }
36     }
37 }
```

Here, we are initializing some default values for our game controls and data members. The variable “rndX” and “rndY” are objects of random class which will help us later. We initialized the object of class PictureBox named “splash”, and SoundPlayer class was used by adding the statement of “using System.Media”. In Form1() we made all the PictureBoxes present in Form1() as Transparent.

```
38
39
40 private void keyisdown(object sender, KeyEventArgs e) //invoked when any key is pressed
41 {
42     if (e.KeyCode == Keys.Left)
43     {
44         goleft = true;
45     }
46     if (e.KeyCode == Keys.Right)
47     {
48         goright = true;
49     }
50 }
51
52 private void keyisup(object sender, KeyEventArgs e) //invoked when the pressed key is released
53 {
54     if (e.KeyCode == Keys.Left)
55     {
56         goleft = false;
57     }
58     if (e.KeyCode == Keys.Right)
59     {
60         goright = false;
61     }
62 }
```

The events of keyisdown() is invoked if the key is pressed and then checks what key is pressed (Left or Right arrow keys) and assigning value as ‘True’ to the respective variable. The events of keyisup() is invoked if the key is released and then checks what key is

released(Left or Right arrow keys) and assigning value as 'False' to the respective variable.

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private void gameTick(object sender, EventArgs e)
{
    label1.BackColor = System.Drawing.Color.Transparent;
    label2.BackColor = System.Drawing.Color.Transparent;
    label1.Text = "EggsCaught:" + score;
    label2.Text = "Eggs Missed:" + missed;
    if (goleft == true && chicken.Left > 0)
    {
        chicken.Left -= 12;
        chicken.Image = Properties.Resources.chicken_normal2;
    }
    if (goright == true && chicken.Left + chicken.Width < 628)
    {
        chicken.Left += 12;
        chicken.Image = Properties.Resources.chicken_normal;
    }
    foreach (Control X in this.Controls)
    {
        if (X is PictureBox && (string)X.Tag == "Bomb")
        {
            X.Top += speed;
            if (X.Top + X.Height > this.Height)
            {
                X.Top = rndY.Next(80, 300);
                X.Left = rndX.Next(5, 628 - X.Width);
            }
        }
    }
}
```

The GameTick() event is the main event where all the main code is placed. The first and second IF() are checking the bool value for goleft and goright variable if they are 'True'(Key is Pressed) the PictureBox which is named as 'chicken' and placed on the Form1 is being moved to LEFT and RIGHT accordingly with the key pressed and the value is changed using 'chicken.Left' along the horizontal and the image in the PictureBox is also changing by using 'Properties.Resources.(image_name)' which is used to get the image from the Resource Folder.

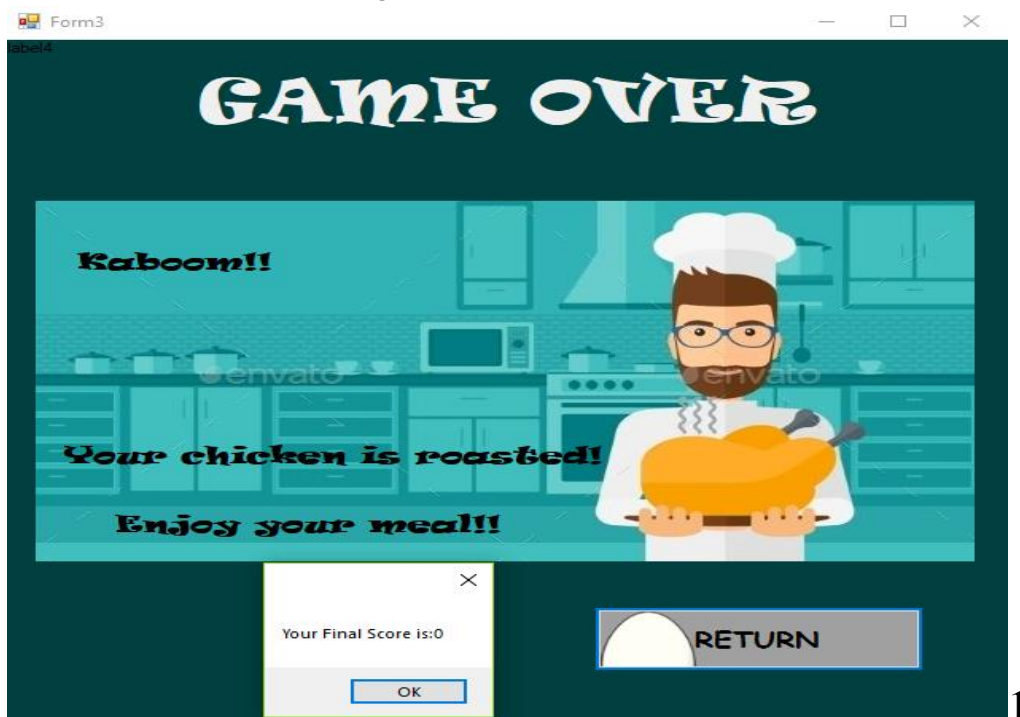
There are 5 controls placed on the Form1 to manipulate every control the keyword 'foreach()' is used in which an object of 'Control' class is created and referred to where the controls are. The first if() placed inside it is defined as a PictureBox and to clarify, a 'Tag' property is used to identify the PictureBox. 'X.Top+=speed' is making the Control 'X' move down and when the Control 'X'(Bomb) crosses the form it is again randomly generated by 'rndX' setting the x-position n 'rndY' setting the y-position.

```

91         if (X.Bounds.IntersectsWith(chicken.Bounds))
92         {
93             gameTimer.Stop();
94             Form3 f3 = new Form3();
95             f3.Show();
96             this.Hide();
97             MessageBox.Show("Your Final Score is:" + score);
98             this.Close();
99         }
100     }
101
102     if (X is PictureBox && (string)X.Tag == "Eggs")
103     {
104         X.Top += speed;
105         if (X.Top + X.Height > this.Height)
106         {
107             splash.Image = Properties.Resources.splash;
108             splash.Location = X.Location;
109             splash.Height = 59;
110             splash.Width = 60;
111             splash.BackColor = System.Drawing.Color.Transparent;
112             this.Controls.Add(splash);
113             _sound1.Play();
114             _sound.Play();
115             X.Top = rndY.Next(80, 300);
116             X.Left = rndX.Next(5, 628 - X.Width);
117             missed++;
118             chicken.Image = Properties.Resources.chicken_hurt;
119         }

```

But if the 'Bomb' were to collide with the 'chicken' the game will be over and the following form will show:



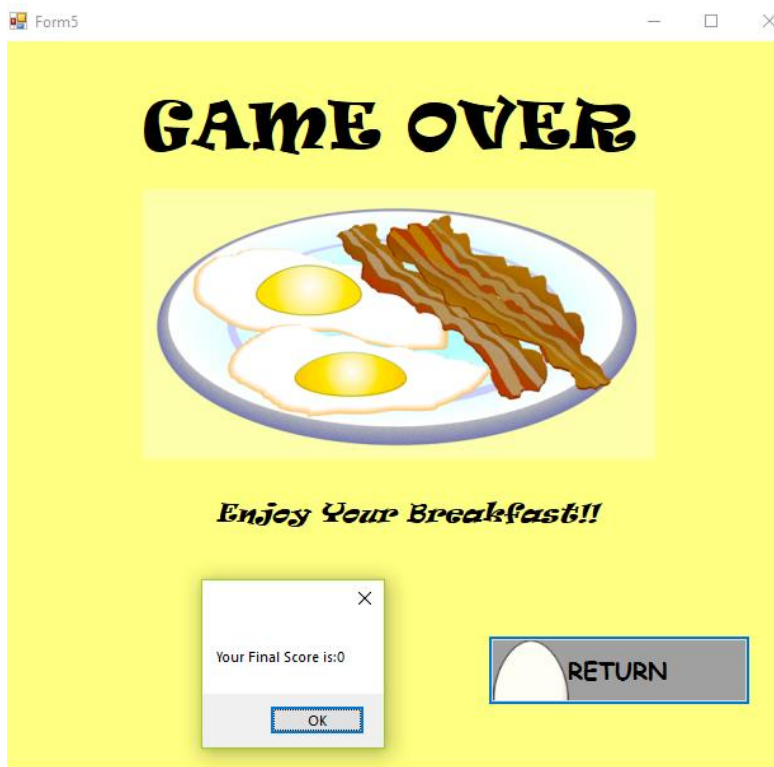
The same logic is applied afterwards for the Control 'X' to be the PictureBox of 'Eggs'. At first it moves down with 'X.Top+=speed' and then if it were to collide with the bounds of the form, the image then displayed will be of 'splash' which is also recovered from 'Properties.Resources.(image_name)' and using 'rndX' and 'rndY' a next Random Location for the PictureBox of Eggs. And an increment to variable 'missed' is made.

```

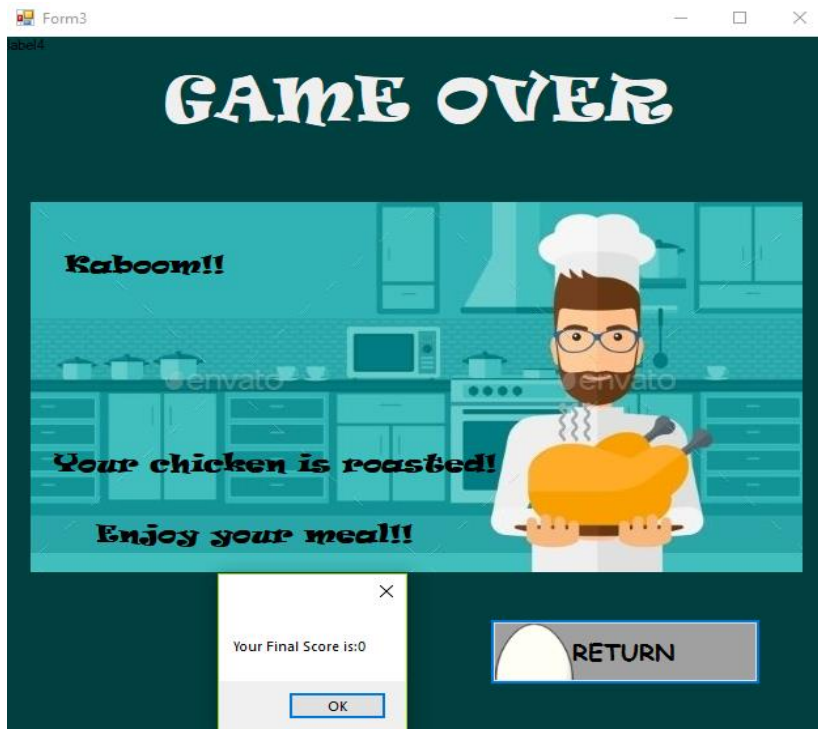
121     }
122     if (X.Bounds.IntersectsWith(chicken.Bounds))
123     {
124         X.Top = rndY.Next(100, 300) * -1;
125         X.Left = rndX.Next(5, 628 - X.Width);
126         score++;
127     }
128
129     if (score >= 10)
130     {
131         speed = 12;
132     }
133
134     if (missed > 6)
135     {
136         gameTimer.Stop();
137         Form5 f2 = new Form5();
138         f2.Show();
139         this.Hide();
140         MessageBox.Show("Your Final Score is:" + score);
141         this.Close();
142     }
143     }
144 }
145
146
147
148
149 private void Form1_Load(object sender, EventArgs e)
150 {
151     _sound.Play();

```

Similarly, if the 'Egg' intersects with the 'chicken' variable, 'score' is incremented. If the 'score' increases than 10, then the speed will increase. And also if the 'missed' were to exceed 6 the gameTimer() will Stop and the following Form will be displayed.



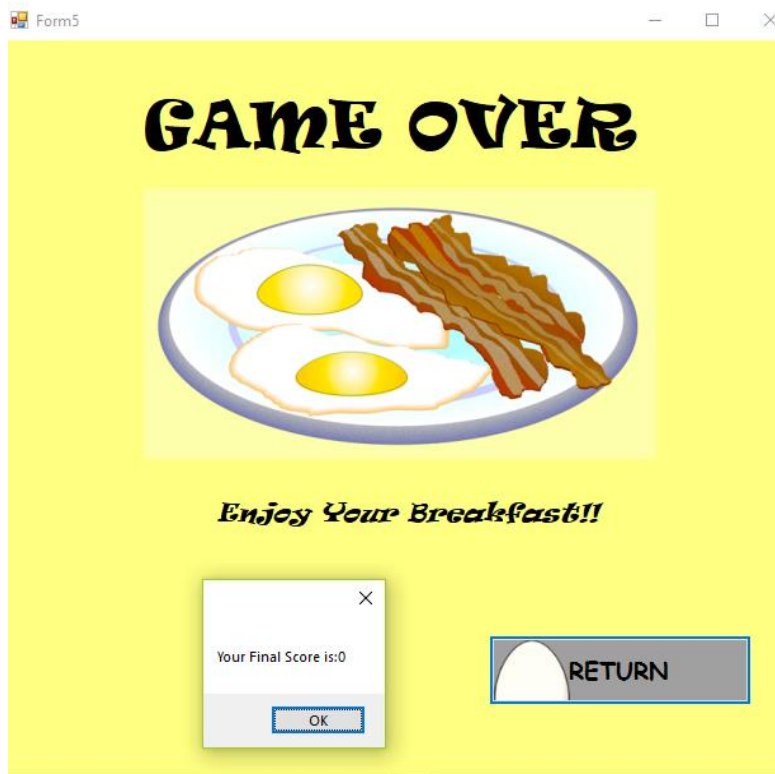
GAME OVER FORM:



FORM CODE:

```
1  using System;
2  using System.Collections.Generic;
3  using System.ComponentModel;
4  using System.Data;
5  using System.Drawing;
6  using System.Linq;
7  using System.Text;
8  using System.Threading.Tasks;
9  using System.Windows.Forms;
10 using System.Media;
11 namespace catch_the_eggs
12 {
13     public partial class Form3 : Form
14     {
15         SoundPlayer s1 = new SoundPlayer("button-3.wav");
16
17         public Form3()
18         {
19             InitializeComponent();
20         }
21
22         private void button1_Click(object sender, EventArgs e)
23         {
24             s1.Play();
25             Form2 form = new Form2();
26             form.Show();
27             this.Close();
28         }
29     }
30 }
```

GAME OVER FORM:



FORM CODE:

```
1  using System;
2  using System.Collections.Generic;
3  using System.ComponentModel;
4  using System.Data;
5  using System.Drawing;
6  using System.Linq;
7  using System.Text;
8  using System.Threading.Tasks;
9  using System.Windows.Forms;
10 using System.Media;
11
12 namespace catch_the_eggs
13 {
14     public partial class Form5 : Form
15     {
16         public Form5()
17         {
18             InitializeComponent();
19         }
20
21         SoundPlayer s1 = new SoundPlayer("button-3.wav");
22         private void button1_Click(object sender, EventArgs e)
23         {
24             s1.Play();
25             Form2 f = new Form2();
26             f.Show();
27             this.Close();
28         }
29     }
30 }
```