

```
1 //Programmer: Aaron Yoon
2 //Date: 9/30/22
3 //Project: craps Simulator
4
5 using System.ComponentModel;
6 using System.Runtime.CompilerServices;
7
8 namespace Dice_Game
9 {
10     public partial class Form1 : Form
11     {
12         //make variables to track how many times a number was rolled
13         double totalRolls = 0;
14         int rolled2 = 0;
15         int rolled3 = 0;
16         int rolled4 = 0;
17         int rolled5 = 0;
18         int rolled6 = 0;
19         int rolled7 = 0;
20         int rolled8 = 0;
21         int rolled9 = 0;
22         int rolled10 = 0;
23         int rolled11 = 0;
24         int rolled12 = 0;
25
26         double prob2 = 0;
27         double prob3 = 0;
28         double prob4 = 0;
29         double prob5 = 0;
30         double prob6 = 0;
31         double prob7 = 0;
32         double prob8 = 0;
33         double prob9 = 0;
34         double prob10 = 0;
35         double prob11 = 0;
36         double prob12 = 0;
37
38         bool isRound2 = false;
39         int point = 0;
40
41         //generate random numbers
42         System.Random r = new System.Random((int)
43             System.DateTime.Now.Ticks);
44         public Form1()
45         {
46             InitializeComponent();
47         }
48         private void Form1_Load(object sender, EventArgs e)
```

```
49     {
50
51     }
52
53     private void btnQUIT_Click(object sender, EventArgs e)
54     {
55         this.Close();
56     }
57
58     private void btnRoll_Click(object sender, EventArgs e)
59     {
60         arbiString.Visible = true;
61         lblNumRolled.Visible = true;
62
63         int randomizer1 = r.Next(1, 7);
64         int randomizer2 = r.Next(1, 7);
65         int numRolled = randomizer1 + randomizer2;
66
67
68         lblRoll1.Text = randomizer1.ToString();
69         lblRoll2.Text = randomizer2.ToString();
70         lblNumRolled.Text = numRolled.ToString();
71
72         picSetter(picRoll1, randomizer1);
73         picSetter(picRoll2, randomizer2);
74
75         if ((numRolled == 7 || numRolled == 11) && isRound2 == false)
76         {
77             MessageBox.Show("YOU WIN!!!",
78                 "CONGRATS!!",
79                 MessageBoxButtons.OK,
80                 MessageBoxIcon.Exclamation
81             );
82             picWin.Visible = true;
83             reset();
84             lblOutput.Text = "Round 1";
85         }
86
87         else if((numRolled == 2 || numRolled == 3 || numRolled == 12) && isRound2 == false)
88         {
89             MessageBox.Show("YOU LOSE!!!",
90                 "OH WELL, BETTER LUCK NEXT TIME!",
91                 MessageBoxButtons.OK,
92                 MessageBoxIcon.Exclamation
93             );
94             reset();
95         }
96     }
```

```
97         else if(!isRound2)
98         {
99             point = numRolled;
100             isRound2 = true;
101             setMarker(point);
102             lblPoint.Text = "Your point: " + point.ToString() + "\n"
103                 + "You need a: " + point.ToString() + " to win!";
104             lblOutput.Text = "Round 2";
105         }
106
107         else if (isRound2 && numRolled == 7)
108         {
109             MessageBox.Show("YOU LOSE!!!",
110                 "GAME OVER",
111                 MessageBoxButtons.OK,
112                 MessageBoxIcon.Exclamation
113             );
114             reset();
115         }
116
117         else if(isRound2 && point == numRolled)
118         {
119             MessageBox.Show("YOU WIN!!!",
120                 "GAME OVER",
121                 MessageBoxButtons.OK,
122                 MessageBoxIcon.Exclamation
123             );
124             picWin.Visible = true;
125             reset();
126         }
127     }
128
129     private void picSetter(PictureBox picture, int number)
130     {
131         if (number == 1)
132             picture.Image = picDice1.Image;
133         else if (number == 2)
134             picture.Image = picDice2.Image;
135         else if (number == 3)
136             picture.Image = picDice3.Image;
137         else if (number == 4)
138             picture.Image = picDice4.Image;
139         else if (number == 5)
140             picture.Image = picDice5.Image;
141         else if (number == 6)
142             picture.Image = picDice6.Image;
143     }
144
```

```
145     private void setNumRolled(int num)
146     {
147         if (num == 2)
148             rolled2 += 1;
149         if (num == 3)
150             rolled3 += 1;
151         if (num == 4)
152             rolled4 += 1;
153         if (num == 5)
154             rolled5 += 1;
155         if (num == 6)
156             rolled6 += 1;
157         if (num == 7)
158             rolled7 += 1;
159         if (num == 8)
160             rolled8 += 1;
161         if (num == 9)
162             rolled9 += 1;
163         if (num == 10)
164             rolled10 += 1;
165         if (num == 11)
166             rolled11 += 1;
167         if (num == 12)
168             rolled12 += 1;
169     }
170
171     private void reset()
172     {
173         lblOutput.Text = "Round 1";
174         isRound2 = false;
175         point = 0;
176         picRoll1.Image = null;
177         picRoll2.Image = null;
178         lblRoll1.Text = null;
179         lblRoll2.Text = null;
180         lblNumRolled.Text = null;
181         lblPoint.Text = "No point yet";
182         toggleVisibleExcept(null, false);
183         picWin.Visible = false;
184     }
185
186     private void setMarker(int point)
187     {
188         if (point == 4)
189             toggleVisibleExcept(picMark4, false);
190         else if (point == 5)
191             toggleVisibleExcept(picMark5, false);
192         else if (point == 6)
193             toggleVisibleExcept(picMark6, false);
```

```
194         else if (point == 8)
195             toggleVisibleExcept(picMark8, false);
196         else if (point == 9)
197             toggleVisibleExcept(picMark9, false);
198         else if (point == 10)
199             toggleVisibleExcept(picMark10, false);
200     }
201
202     private void toggleVisibleExcept(PictureBox picture, bool isVisible)
203     {
204         picMark4.Visible = isVisible;
205         picMark5.Visible = isVisible;
206         picMark6.Visible = isVisible;
207         picMark8.Visible = isVisible;
208         picMark9.Visible = isVisible;
209         picMark10.Visible = isVisible;
210
211         if (picture == null)
212             return;
213         else
214             picture.Visible = !isVisible;
215     }
216
217     private void picRoll1_Click(object sender, EventArgs e)
218     {
219
220     }
221
222     private void arbiString_Click(object sender, EventArgs e)
223     {
224
225     }
226
227     private void lblOutput_Click(object sender, EventArgs e)
228     {
229
230     }
231
232     private void pictureBox2_Click(object sender, EventArgs e)
233     {
234
235     }
236 }
237 }
```