

```
1 using System.Security.Cryptography.X509Certificates;
2
3 namespace rockPaperScissors
4 {
5     public partial class Form1 : Form
6     {
7         //Programmer: Aaron Yoon
8         //date 12/5/22
9         //project rock paper scissors simulation
10
11
12         int player1Wins = 0;
13         int player2Wins = 0;
14         int gamesPlayed = 0;
15         public Form1()
16         {
17             InitializeComponent();
18         }
19
20         private void Form1_Load(object sender, EventArgs e)
21         {
22             togglePlayer2();
23         }
24
25         private void btnShoot_Click(object sender, EventArgs e)
26         {
27             DialogResult resultAnswer = new DialogResult();
28
29             resultAnswer = MessageBox.Show("You sure?", "dill pickle",
30                 MessageBoxButtons.YesNo);
31
32             if(resultAnswer == DialogResult.Yes)
33             {
34                 displayPics1();
35                 togglePlayer1();
36                 togglePlayer2();
37             }
38
39
40
41         }
42
43         private void btnQuit_Click(object sender, EventArgs e)
44         {
45             this.Close();
46         }
47
48         private string displayPics1()
```

```
49     {
50         //picPlayer1.Visible = true;
51         if (radRock1.Checked)
52         {
53             picPlayer1.Image = picRock.Image;
54             return "rock";
55         }
56
57         else if (radPaper1.Checked)
58         {
59             picPlayer1.Image = picPaper.Image;
60             return "paper";
61         }
62
63         else if (radScissors1.Checked)
64         {
65             picPlayer1.Image = picScissors.Image;
66             return "scissors";
67         }
68
69         else if (radSpock1.Checked)
70         {
71             picPlayer1.Image = picSpock.Image;
72             return "spock";
73         }
74
75         else if (radLizard1.Checked)
76         {
77             picPlayer1.Image = picLizard.Image;
78             return "lizard";
79         }
80         else
81             return "how did we get here?";
82
83     }
84
85     private string displayPics2()
86     {
87         //picPlayer2.Visible = true;
88         if (radRock2.Checked)
89         {
90             picPlayer2.Image = picRock.Image;
91             return "rock";
92         }
93
94
95         else if (radPaper2.Checked)
96         {
97             picPlayer2.Image = picPaper.Image;
```

```
98         return "paper";
99     }
100
101     else if (radScissors2.Checked)
102     {
103         picPlayer2.Image = picScissors.Image;
104         return "scissors";
105     }
106
107     else if (radSpock2.Checked)
108     {
109         picPlayer2.Image = picSpock.Image;
110         return "spock";
111     }
112
113     else if (radLizard2.Checked)
114     {
115         picPlayer2.Image = picLizard.Image;
116         return "lizard";
117     }
118     else
119         return "how did we get here?";
120
121
122 }
123
124 private void reset()
125 {
126     picPlayer1.Image = null;
127     picPlayer2.Image = null;
128
129     //grpBxHand2.Visible = true;
130     //picPlayer2.Visible = true;
131     //btnChoose2.Enabled = true;
132
133     grpBxHand1.Visible = true;
134     picPlayer1.Visible = true;
135     btnChoose1.Enabled = true;
136
137     btnReveal.Enabled = false;
138 }
139
140 private void grpBxHand_Enter(object sender, EventArgs e)
141 {
142     displayPics1();
143 }
144
145 private void togglePlayer1()
146 {
```

```
147         if(grpBxHand1.Visible == true)
148         {
149             grpBxHand1.Visible = false;
150             picPlayer1.Visible = false;
151             btnChoose1.Enabled= false;
152         }
153         else if(grpBxHand1.Visible == false)
154         {
155             grpBxHand1.Visible = true;
156             picPlayer1.Visible = true;
157             btnChoose1.Enabled = true;
158         }
159     }
160
161     private void togglePlayer2()
162     {
163         if (grpBxHand2.Visible == true)
164         {
165             grpBxHand2.Visible = false;
166             picPlayer2.Visible = false;
167             btnChoose2.Enabled = false;
168         }
169         else if (grpBxHand2.Visible == false)
170         {
171             grpBxHand2.Visible = true;
172             picPlayer2.Visible = true;
173             btnChoose2.Enabled = true;
174         }
175     }
176
177     private void btnChoose2_Click(object sender, EventArgs e)
178     {
179         DialogResult resultAnswer = new DialogResult();
180
181         resultAnswer = MessageBox.Show("You sure?", "dill pickle",      ↗
182             MessageBoxButtons.YesNo);
183
184         if (resultAnswer == DialogResult.Yes)
185         {
186             displayPics2();
187             togglePlayer2();
188             btnReveal.Enabled = true;
189         }
190     }
191
192     private void btnReveal_Click(object sender, EventArgs e)
193     {
194         picPlayer1.Visible = true;
```

```
195         picPlayer2.Visible = true;
196         gamesPlayed += 1;
197         chooseWinner(displayPics1(), displayPics2());
198     }
199
200     private void chooseWinner(string choice1, string choice2)
201     {
202         string verdict = "";
203         if (choice1 == choice2)
204         {
205             verdict = "Tie!";
206         }
207         else if (choice1 == "rock" && choice2 == "scissors")
208         {
209             verdict = "Player 1 Wins!";
210             player1Wins += 1;
211         }
212         else if (choice1 == "rock" && choice2 == "lizard")
213         {
214             verdict = "Player 1 Wins!";
215             player1Wins += 1;
216         }
217         else if (choice1 == "scissors" && choice2 == "lizard")
218         {
219             verdict = "Player 1 Wins!";
220             player1Wins += 1;
221         }
222         else if (choice1 == "scissors" && choice2 == "paper")
223         {
224             verdict = "Player 1 Wins!";
225             player1Wins += 1;
226         }
227         else if (choice1 == "lizard" && choice2 == "paper")
228         {
229             verdict = "Player 1 Wins!";
230             player1Wins += 1;
231         }
232         else if (choice1 == "lizard" && choice2 == "spock")
233         {
234             verdict = "Player 1 Wins!";
235             player1Wins += 1;
236         }
237         else if (choice1 == "paper" && choice2 == "spock")
238         {
239             verdict = "Player 1 Wins!";
240             player1Wins += 1;
241         }
242         else if (choice1 == "paper" && choice2 == "rock")
243         {
```

```
244         verdict = "Player 1 Wins!";
245         player1Wins += 1;
246     }
247     else if (choice1 == "spock" && choice2 == "scissors")
248     {
249         verdict = "Player 1 Wins!";
250         player1Wins += 1;
251     }
252     else if (choice1 == "spock" && choice2 == "scissors")
253     {
254         verdict = "Player 1 Wins!";
255         player1Wins += 1;
256     }
257     else if (choice1 == "rock" && choice2 == "spock")
258     {
259         verdict = "Player 2 Wins!";
260         player2Wins += 1;
261     }
262     else if (choice1 == "rock" && choice2 == "paper")
263     {
264         verdict = "Player 2 Wins!";
265         player2Wins += 1;
266     }
267     else if (choice1 == "scissors" && choice2 == "spock")
268     {
269         verdict = "Player 2 Wins!";
270         player2Wins += 1;
271     }
272     else if (choice1 == "scissors" && choice2 == "rock")
273     {
274         verdict = "Player 2 Wins!";
275         player2Wins += 1;
276     }
277     else if (choice1 == "lizard" && choice2 == "scissors")
278     {
279         verdict = "Player 2 Wins!";
280         player2Wins += 1;
281     }
282     else if (choice1 == "lizard" && choice2 == "rock")
283     {
284         verdict = "Player 2 Wins!";
285         player2Wins += 1;
286     }
287     else if (choice1 == "paper" && choice2 == "lizard")
288     {
289         verdict = "Player 2 Wins!";
290         player2Wins += 1;
291     }
292     else if (choice1 == "paper" && choice2 == "scissors")
```

```
293         {
294             verdict = "Player 2 Wins!";
295             player2Wins += 1;
296         }
297         else if (choice1 == "spock" && choice2 == "paper")
298         {
299             verdict = "Player 2 Wins!";
300             player2Wins += 1;
301         }
302         else if (choice1 == "spock" && choice2 == "lizard")
303         {
304             verdict = "Player 2 Wins!";
305             player2Wins += 1;
306         }
307         else
308             verdict = "how did we get here?";
309
310         MessageBox.Show(verdict);
311     }
312
313     private void btnReset_Click(object sender, EventArgs e)
314     {
315         reset();
316     }
317
318     private void btnStats_Click(object sender, EventArgs e)
319     {
320         MessageBox.Show(
321             "player 1 wins: " + player1Wins.ToString() + "\n"
322             + "player 2 wins: " + player2Wins.ToString() + "\n"
323             + "total games: " + gamesPlayed.ToString());
324     }
325
326     private void radRock1_CheckedChanged(object sender, EventArgs e)
327     {
328         picPlayer1.Image = picRock.Image;
329     }
330
331     private void radPaper1_CheckedChanged(object sender, EventArgs e)
332     {
333         picPlayer1.Image = picPaper.Image;
334     }
335
336     private void radScissors1_CheckedChanged(object sender, EventArgs e)
337     {
338         picPlayer1.Image = picScissors.Image;
339     }
340 }
```

```
341
342     private void radSpock1_CheckedChanged(object sender, EventArgs e)
343     {
344         picPlayer1.Image = picSpock.Image;
345     }
346
347     private void radLizard1_CheckedChanged(object sender, EventArgs e)
348     {
349         picPlayer1.Image = picLizard.Image;
350     }
351
352     private void radRock2_CheckedChanged(object sender, EventArgs e)
353     {
354         picPlayer2.Image = picRock.Image;
355     }
356
357     private void radPaper2_CheckedChanged(object sender, EventArgs e)
358     {
359         picPlayer2.Image = picPaper.Image;
360     }
361
362     private void radScissors2_CheckedChanged(object sender, EventArgs e)
363     {
364         picPlayer2.Image = picScissors.Image;
365     }
366
367     private void radSpock2_CheckedChanged(object sender, EventArgs e)
368     {
369         picPlayer2.Image = picSpock.Image;
370     }
371
372     private void radLizard2_CheckedChanged(object sender, EventArgs e)
373     {
374         picPlayer2.Image = picLizard.Image;
375     }
376 }
377 }
```