

```
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.Windows.Forms;
9
10 namespace WindowsFormsApplication3
11 {
12
13     public partial class Form1 : Form
14     {
15         public static bool gameFinish;
16         public static bool verrouComputer;
17         public static bool verrouPlayer;
18
19         public static int nbPush;
20         public static int turnValue;
21         public static int scoreJoueur;
22         public List<string> listesCoupsMemory = new List<string>();
23
24         public string[] coupsPossibles = {"RED", "BLUE", "GREEN", "YELLOW"};
25         public const int SCORE_CLICK_CORRECT_VALUE = 10;
26         public const int SCORE_SERIE_CORRECT_VALUE = 100;
27
28
29         public Form1()
30         {
31             InitializeComponent();
32             initializeGame();
33             this.buttonRed.Click += new System.EventHandler(this. playColorHandler_Click);
34             this.buttonYellow.Click += new System.EventHandler(this. playColorHandler_Click);
35             this.buttonGreen.Click += new System.EventHandler(this. playColorHandler_Click);
36             this.buttonBlue.Click += new System.EventHandler(this. playColorHandler_Click);
37         }
38
39         private void initializeGame()
40         {
41             turnValue = 1;
42             scoreJoueur = 0;
43             gameFinish = false;
44         }
45
46         private void initializeTurn()
47         {
48             buttonRed.Text = coupsPossibles[0];
49             buttonBlue.Text = coupsPossibles[1];
50             buttonGreen.Text = coupsPossibles[2];
51             buttonYellow.Text = coupsPossibles[3];
52             listesCoupsMemory = new List<string>();
53             nbPush = 0;
54             for (int i = 0; i < turnValue; i++) {
55                 int valeurRandom = new Random().Next(0, coupsPossibles.Length - 1);
56                 listesCoupsMemory.Add(coupsPossibles[valeurRandom]);
57                 verrouComputer = true;
58                 showColor(coupsPossibles[valeurRandom]);
59                 verrouComputer = false;
60             }
61             //System.Threading.Thread.Sleep(15000);
62         }
63
64         private void playColorHandler_Click(object sender, EventArgs e)
65         {
66             buttonRed.Text = coupsPossibles[0];
67             buttonBlue.Text = coupsPossibles[1];
68             buttonGreen.Text = coupsPossibles[2];
69             buttonYellow.Text = coupsPossibles[3];
70             if (!verrouComputer) {
```

```
71         verrouPlayer = true;
72         Button button = (Button)sender;
73         string buttonValue = button.Text;
74         if (listesCoupsMemory.IndexOf(buttonValue) == nbPush)
75         {
76             scoreJoueur += SCORE_CLICK_CORRECT_VALUE;
77
78             if (++nbPush == listesCoupsMemory.Count)
79             {
80                 scoreJoueur += SCORE_SERIE_CORRECT_VALUE;
81                 turnValue++;
82                 verrouPlayer = false;
83             }
84             else
85             {
86                 nbPush++;
87             }
88             labelTurnValue.Text = turnValue.ToString();
89             scoreValue.Text = scoreJoueur.ToString();
90         }
91         else {
92             gameFinish = true;
93         }
94     }
95 }
96 if (gameFinish) {
97     label2.Text = "Perdu!";
98     initializeGame();
99 }
100 }
101
102 public void showColor(String color)
103 {
104     if (color.Equals("RED")) {
105         //buttonRed.PerformClick();
106         buttonRed.Text = "X";
107     } else if (color.Equals("BLUE")) {
108         //buttonBlue.PerformClick();
109         buttonBlue.Text = "X";
110     } else if (color.Equals("GREEN")) {
111         //buttonGreen.PerformClick();
112         buttonGreen.Text = "X";
113     } else if (color.Equals("YELLOW")) {
114         //buttonYellow.PerformClick();
115         buttonYellow.Text = "X";
116     } else {
117         //couleur non gérée
118     }
119     System.Console.Beep();
120 }
121
122 private void buttonNewGame_Click(object sender, EventArgs e)
123 {
124     initializeTurn();
125 }
126
127 private void buttonExit_Click(object sender, EventArgs e)
128 {
129     Application.Exit();
130 }
131
132 }
133 }
134
```