

```

1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6 using System.Windows;
7 using System.Windows.Controls;
8 using System.Windows.Data;
9 using System.Windows.Documents;
10 using System.Windows.Input;
11 using System.Windows.Media;
12 using System.Windows.Media.Imaging;
13 using System.Windows.Navigation;
14 using System.Windows.Shapes;
15 using System.Windows.Threading;
16
17 namespace MatchGame
18 {
19     public partial class MainWindow : Window
20     {
21         // variables Timer
22         DispatcherTimer timer = new DispatcherTimer();
23         int tenthsOfSecondsElapsed;
24         int matchesFound;
25
26         // variables Random
27         Random random = new Random();
28
29         // variables pareja
30         TextBlock lastTextBlockClicked;
31         bool findingMatch = false;
32
33
34         public MainWindow()
35         {
36             InitializeComponent();
37
38             timer.Interval = TimeSpan.FromSeconds(0.1);
39             timer.Tick += Timer_Tick;
40
41             CreateGame();
42         }
43
44
45         public void CreateGame()
46         {
47             // Creacion Lista de parejas
48             List<string> listPairs = new List<string>()
49             {
50                 "👤", "👤",
51                 "👤", "👤",
52                 "👤", "👤",
53                 "👤", "👤",

```

```

54         "♂", "♂",
55         "♀", "♀",
56         "♂", "♂",
57         "♂", "♂"
58     };
59
60     // Distribucion de parejas en el tablero
61     foreach (TextBlock textBlock in mainGrid.Children.OfType<TextBlock>())
62     {
63         if (textBlock.Name != "timeTextBlock")
64         {
65             textBlock.Visibility = Visibility.Visible;
66             int index = random.Next(listPairs.Count);
67             string nextPair = listPairs[index];
68             textBlock.Text = nextPair;
69             listPairs.RemoveAt(index);
70         }
71     }
72
73     // Inicio del juego
74     timer.Start();
75     tenthsOfSecondsElapsed = 0;
76     matchesFound = 0;
77 }
78
79
80 // Funcionamiento del botón del ratón
81 private void TextBlock_MouseDown(object sender,
82     MouseButtonEventArgs e)
83 {
84     TextBlock textBlock = sender as TextBlock;
85
86     if (findingMatch == false)
87     {
88         textBlock.Visibility = Visibility.Hidden;
89         lastTextBlockClicked = textBlock;
90         findingMatch = true;
91     }
92     else if (textBlock.Text == lastTextBlockClicked.Text)
93     {
94         matchesFound++;
95         textBlock.Visibility = Visibility.Hidden;
96         findingMatch = false;
97     }
98     else
99     {
100         lastTextBlockClicked.Visibility = Visibility.Visible;
101         findingMatch = false;
102     }
103 }
104

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```
105         // Temporizador
106         private void Timer_Tick(object sender, EventArgs e)
107         {
108             tenthsOfSecondsElapsed++;
109             timeTextBlock.Text = (tenthsOfSecondsElapsed / 10F).ToString("0.0s");
110             if (matchesFound == 8)
111             {
112                 timer.Stop();
113                 timeTextBlock.Text = timeTextBlock.Text + " - Play again?";
114             }
115         }
116
117         // Reinicio del juego
118         private void timeTextBlock_MouseDown(object sender, MouseButtonEventArgs e)
119         {
120             if (matchesFound == 8)
121             {
122                 CreateGame();
123             }
124         }
125     }
126 }
127 }
128
```