using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace Tic\_Tac\_Toe\_Game

{

public partial class Form1 : Form

{

public enum Player

{

X, O

}

Player currentPlayer;

Random random = new Random();

int playerWinCount = 0;

int CPUWinCount = 0;

List<Button> buttons;

public Form1()

{

InitializeComponent();

RestartGame();

}

private void CPUmove(object sender, EventArgs e)

{

if (buttons.Count > 0)

{

int index = random.Next(buttons.Count);

buttons[index].Enabled = false;

currentPlayer = Player.O;

buttons[index].Text = currentPlayer.ToString();

buttons[index].BackColor = Color.DarkSalmon;

buttons.RemoveAt(index);

CheckGame();

CPUTimer.Stop();

}

}

private void PlayerClickButton(object sender, EventArgs e)

{

var button = (Button)sender;

currentPlayer = Player.X;

button.Text = currentPlayer.ToString();

button.Enabled = false;

button.BackColor = Color.Cyan;

buttons.Remove(button);

CheckGame();

CPUTimer.Start();

}

private void RestartGame(object sender, EventArgs e)

{

RestartGame();

}

private void CheckGame()

{

if (button1.Text == "X" && button2.Text == "X" && button3.Text == "X"

|| button4.Text == "X" && button5.Text == "X" && button6.Text == "X"

|| button7.Text == "X" && button8.Text == "X" && button9.Text == "X"

|| button1.Text == "X" && button4.Text == "X" && button7.Text == "X"

|| button2.Text == "X" && button5.Text == "X" && button8.Text == "X"

|| button3.Text == "X" && button6.Text == "X" && button9.Text == "X"

|| button1.Text == "X" && button5.Text == "X" && button9.Text == "X"

|| button3.Text == "X" && button5.Text == "X" && button7.Text == "X"

)

{

CPUTimer.Stop();

MessageBox.Show("Player Wins");

playerWinCount++;

label1.Text = "Player Wins:" + playerWinCount;

RestartGame();

}

else if (button1.Text == "O" && button2.Text == "O" && button3.Text == "O"

|| button4.Text == "O" && button5.Text == "O" && button6.Text == "O"

|| button7.Text == "O" && button8.Text == "O" && button9.Text == "O"

|| button1.Text == "O" && button4.Text == "O" && button7.Text == "O"

|| button2.Text == "O" && button5.Text == "O" && button8.Text == "O"

|| button3.Text == "O" && button6.Text == "O" && button9.Text == "O"

|| button1.Text == "O" && button5.Text == "O" && button9.Text == "O"

|| button3.Text == "O" && button5.Text == "O" && button7.Text == "O"

)

{

CPUTimer.Stop();

MessageBox.Show("CPU Wins");

CPUWinCount++;

label2.Text = "CPU Wins:" + CPUWinCount;

RestartGame();

}

}

private void RestartGame()

{

buttons = new List<Button> { button1, button2, button3, button4, button5, button6, button6, button7, button8, button9 };

foreach (Button x in buttons)

{

x.Enabled = true;

x.Text = "?";

x.BackColor = DefaultBackColor;

}

}

private void Form1\_Load(Object sender, EventArgs e)

{

}

private void button11\_Click(object sender, EventArgs e)

{

MessageBox.Show("Click any boxes you want and Computer will also occupy boxes.\nMake three boxes in row to win the game");

}

private void button12\_Click(object sender, EventArgs e)

{

MessageBox.Show("1. The game is played on a grid that's 3 squares by 3 squares.\n2. You are X, your friend (or the computer in this case) is O. Players take turns putting their marks in empty squares.\n3. The first player to get 3 of her marks in a row (up, down, across, or diagonally) is the winner.\n4. When all 9 squares are full, the game is over. If no player has 3 marks in a row, the game ends in a tie.");

}

}

}