**//Christian Denis Marcelin**

**//V1.0.0**

**Description:**

The program generates Unique numbers for Lotto Max and Lotto 649. Write the numbers to a file and read them to a message box.  
-Language: C#  
-Tools: Visual Studio 2022

This is the main screen for the Lotto number program. There are multiple tabs but at the moment only the generated Numbers works.   
In this tab you can find two button to generate lotto numbers for lotto max and lotto 649  
On this page you also have an exit button.  
  


On this page you can generate 8 unique numbers for lotto max with the button generate numbers and read and display the numbers with the button read and display. there is also the textbox and an exit button.  
  


when you click on the generated number button the numbers are written into a file and also displayed in the textbox



when you click on the read and display button it shows a message box with the numbers.

**Code for the application**

**LottoMax:**

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.IO;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using static System.Windows.Forms.VisualStyles.VisualStyleElement;

namespace WindowsFormsApp7

{

public partial class frmMAX : Form

{

public frmMAX()

{

InitializeComponent();

}

private void button1\_Click(object sender, EventArgs e)

{

if (MessageBox.Show("You want to Exit?", "Exit", MessageBoxButtons.YesNo).ToString() == "Yes")

{

Application.Exit();

}

}

static List<int> GenerateUniqueRandomNumbers(int count, int min, int max)

{

List<int> numbers = new List<int>();

Random random = new Random();

while (numbers.Count < count)

{

int randomNumber = random.Next(min, max + 1);

if (!numbers.Contains(randomNumber))

{

numbers.Add(randomNumber);

}

}

return numbers;

}

private void button2\_Click(object sender, EventArgs e)

{

List<int> numbers = GenerateUniqueRandomNumbers(8, 1, 50);

String stringNumbers = String.Join("\t", numbers);

textBox1.Text = stringNumbers;

FileStream fs = new FileStream(@"./LottoNbrs.txt", FileMode.Append, FileAccess.Write);

// create the output stream for a text file that exists

StreamWriter textOut = new StreamWriter(fs);

// write the fields into text file

DateTime currentDate = DateTime.Now.Date;

textOut.Write($"MAX {currentDate} {textBox1.Text.Replace('\t', ',')} Extra 30"+"\n");

//textOut.WriteLine(textBox1.Text);

// close the output stream for the text file

textOut.Close();

}

private void label1\_Click(object sender, EventArgs e)

{

}

private void button3\_Click(object sender, EventArgs e)

{

FileStream fs = new FileStream(@"./LottoNbrs.txt", FileMode.Open, FileAccess.Read);

try

{

StreamReader textIn = new StreamReader(fs);

string textToPrint = "";

// read the data from the file and store it in the list

while (textIn.Peek() != -1)

{

string row = textIn.ReadLine();

// string[] columns = row.Split('|');

textToPrint += row + "\n";

}

MessageBox.Show(textToPrint);

// close the input stream for the text file

textIn.Close();

}

catch (FileNotFoundException)

{

MessageBox.Show(@".../LottoNbrs.txt" + " not found.", "File Not Found");

}

catch (DirectoryNotFoundException)

{

MessageBox.Show(@".../LottoNbrs.txt" + " not found.", "Directory Not Found");

}

catch (IOException ex)

{ MessageBox.Show(ex.Message, "IOException"); }

finally

{ if (fs != null) fs.Close(); }

}

}

}

**Code for Lotto 649**  
//Christian Denis Marcelin

//7/10/2023

//V1

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.IO;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace WindowsFormsApp7

{

public partial class frm649 : Form

{

public frm649()

{

InitializeComponent();

}

private void pictureBox1\_Click(object sender, EventArgs e)

{

}

private void label1\_Click(object sender, EventArgs e)

{

}

private void textBox1\_TextChanged(object sender, EventArgs e)

{

}

static List<int> GenerateUniqueNumbers(int count, int min, int max)

{

List<int> numbers = new List<int>();

Random random = new Random();

while (numbers.Count < count)

{

int randomNumber = random.Next(min, max + 1);

if (!numbers.Contains(randomNumber))

{

numbers.Add(randomNumber);

}

}

return numbers;

}

private void button2\_Click(object sender, EventArgs e)

{

List<int> numbers = GenerateUniqueNumbers(8, 1, 50);

String stringNumbers = String.Join("\t", numbers);

textBox1.Text = stringNumbers;

FileStream fs = new FileStream(@"./LottoNbrs.txt", FileMode.Append, FileAccess.Write);

// create the output stream for a text file that exists

StreamWriter textOut = new StreamWriter(fs);

// write the fields into text file

DateTime currentDate = DateTime.Now.Date;

textOut.Write($"649 {currentDate} {textBox1.Text.Replace('\t', ',')} Extra 11"+"\n");

//textOut.WriteLine(textBox1.Text);

// close the output stream for the text file

textOut.Close();

}

private void button3\_Click(object sender, EventArgs e)

{

FileStream fs = new FileStream(@"./LottoNbrs.txt", FileMode.Open, FileAccess.Read);

try

{

// create the object for the input stream for a text file

StreamReader textIn = new StreamReader(fs);

string textToPrint = "";

// read the data from the file and store it in the list

while (textIn.Peek() != -1)

{

string row = textIn.ReadLine();

// string[] columns = row.Split('|');

textToPrint += row + "\n";

}

MessageBox.Show(textToPrint);

// close the input stream for the text file

textIn.Close();

}

catch (FileNotFoundException)

{

MessageBox.Show(@".../LottoNbrs.txt" + " not found.", "File Not Found");

}

catch (DirectoryNotFoundException)

{

MessageBox.Show(@".../LottoNbrs.txt" + " not found.", "Directory Not Found");

}

catch (IOException ex)

{ MessageBox.Show(ex.Message, "IOException"); }

finally

{ if (fs != null) fs.Close(); }

}

private void button1\_Click(object sender, EventArgs e)

{

if (MessageBox.Show("You want to Exit?", "Exit", MessageBoxButtons.YesNo).ToString() == "Yes")

{

Application.Exit();

}

}

}

}

* **Present the classes and/or methods that you create or you did use in the project.**

|  |  |
| --- | --- |
| **Class/Method Name** | **Description** |
| * GenerateUniqueNumber | Generate a unique lotto number |
| * button2\_Click | This function generates number and write them to the textBox |
| * button3\_Click | This function Displays the numbers in a messagebox |
| * frmMax | Create the class for the Form Lotto MAX |
| * frm649 | Create the class for the Form Lotto 649 |

- MessageBox.Show Display a message box with a message  
 -Readline Read the line of a file  
 -Contains To check if a variable exist

-FileStream To open a file

**Present the difficulties that you have, what was the hardest and the easiest part of your project.**Generating a unique number was the hard. But the hardest was writting the numbers to a file and read them.