

Joppes GUI

Problem

According to:

<https://docs.microsoft.com/en-us/answers/questions/19216/wpf-in-linux.html>

"According to this blog(<https://devblogs.microsoft.com/dotnet/announcing-net-5-0-preview-1/>), The .NET Core and .NET 5 (latest .NET platforms) will support WPF. But looks like the support is limited only to Windows OS."

There are others UI frameworks like electron and such but I did not have the time to learn this framework and send the assignment on time.

Solution

The only solution that i found doable in the time limit is to write manually all code for the ui in winforms.

```
dotnet new winforms --name JoppesAnimalFamily
```

Then open the
Form1.Designer.cs

Google how to for example write a button like so:

```
this.buttonExit = new System.Windows.Forms.Button();
```

```
// buttonExit
//
this.buttonExit.Dock = System.Windows.Forms.DockStyle.Bottom;
this.buttonExit.Location = new System.Drawing.Point(0, 376);
```

```
this.buttonExit.Name = "buttonExit";
this.buttonExit.Size = new System.Drawing.Size(800, 74);
this.buttonExit.TabIndex = 1;
this.buttonExit.Text = "E&xit";
this.buttonExit.UseVisualStyleBackColor = true;
this.buttonExit.Click += new System.EventHandler(this.buttonExit_Click);
```

adding to the form1

```
this.Controls.Add(this.buttonExit);
private System.Windows.Forms.Button buttonExit;
```

And continued this way until I got the ui as i wanted

Class lib

creating a class lib and compile as a library

```
dotnet new classlib -o backend
```

Here i compiled the JopperLib.cs file that is the program that I wrote in the wprevious module. removed static void Main() and compiled like a library.

```
mcs -t:library JoppesLib.cs
```

Compiling and running

Compile the DarkUI app with the reference JoppesLib.dll and target is windows exe file no terminal in the background

```
mcs *.cs -pkg:dotnet -r:JoppesLib.dll -t:winexe  
run the exe in linux  
mono Form1.exe
```

Thoughts

This was a lot of challenges but I have learned a lot. Added all the joppes pet on the left side. then added then buttons for:

Play

Feed

Check Ball

List Pets

Feed has 3 radio buttons that will appear after you chose a pet. Depending of the food you choose the pet will react in different ways

List pets will list all the pets name, age and breed. It has also a print to file button that will create a pets.txt file with the list.

Check ball will show the current stay of the ball, it change when you choose the pet and play.

Removed the standard window frame for better looks. but of course cant be resized , you can move the window with ctrl+ mouse.

I feel content with the project, and what I have accomplished in within the time limit and learning about gui from scratch and writing everything from the editor.

I think i could have done better job if I had Windows machine and visual studio IDE.

to just graphically drag and drop buttons and labels and design the whole UI visually.

In my case I had to guess the location x,y in relation to each panel etc. and try to find the code for write colors, fonts, size etc.

If I will work with c# then installing windows is a must.