

Create a Tic-Tac-Start plugin

Welcome in this tutorial ! I will teach you how to create a Tic-Tac-Start plugin that will match an action. The language to create this plugin will be C# !

A plugin contains 2 elements :

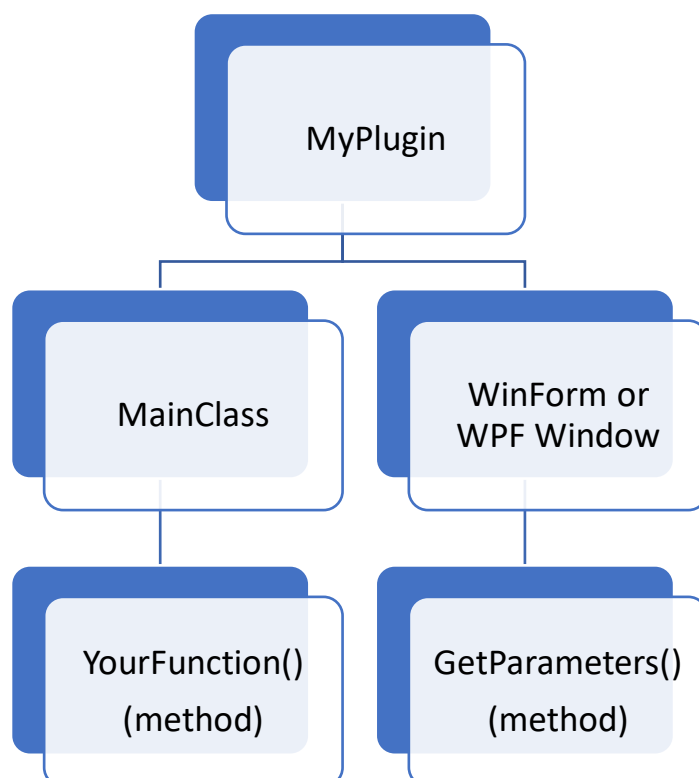
- A **main class** in which you will develop the goal of the plugin
(ex : Play a sound)
- A **WinForm or a WPF Window** which will enable the user to give values to the arguments (parameters) of the main function.

The main class will contain :

- The **main function of the plugin** (action) which will be called by Tic-Tac-Start. This function will be **public** and **static**. You can use parameters (arguments).

The WindowsForm or the WPF Window will contains:

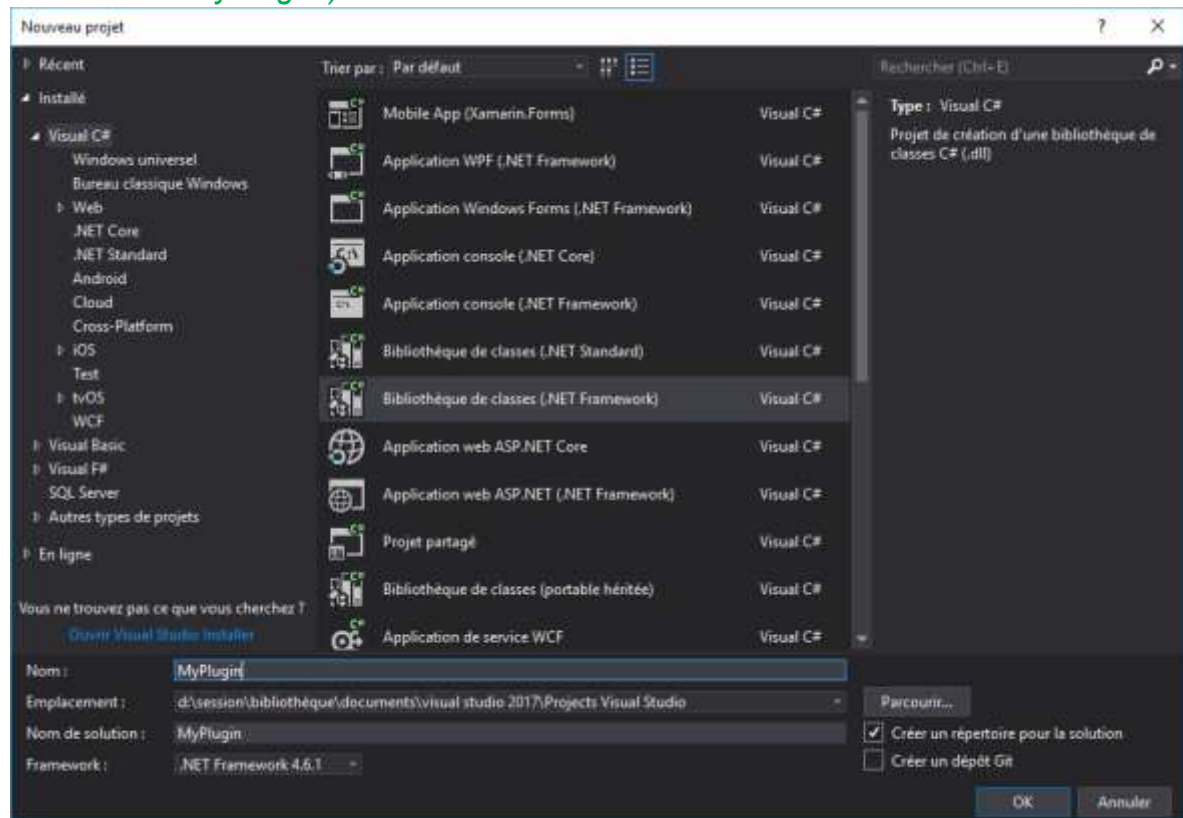
- A **function public** which will return an array of **object** and will obligatory be named "**GetParameters**". It will have no argument ! This function will return the values entered by the user. These values will be used to call the main function, these will be the values of the parameters.
- A **button** whose the "**DialogResult**" propriety is set on "**OK**" (In WPF Window, this button will set the "**DialogResult**" property of the window to "**true**")



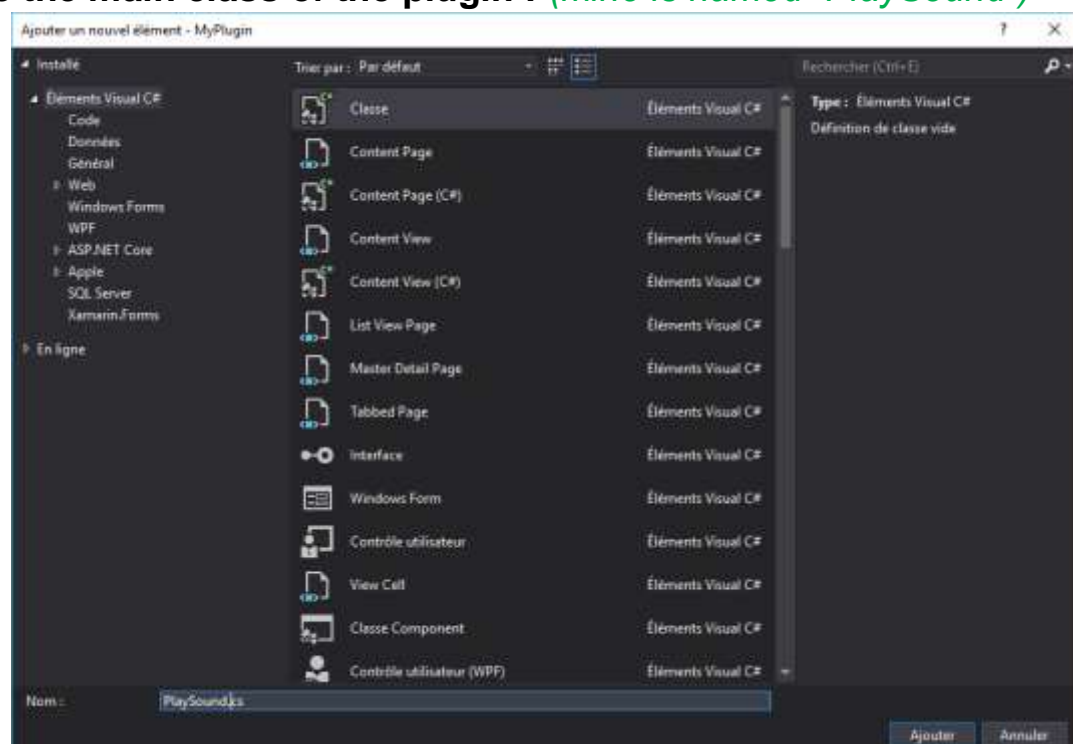
Concrete example :

To understand well, we will create a plugin together. This plugin will play a sound file in .wav format.

- 1) **In Visual Studio, create a class library !**
(mine is named "MyPlugin")



- 2) **Create the main class of the plugin !** (mine is named "PlaySound")



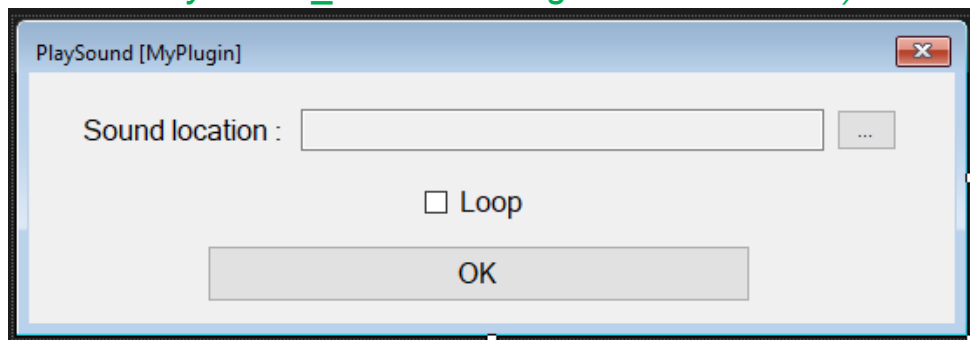
3) Create the main function **public** and **static** ! (mine is named "Play")

```
6 public static class PlaySound
7 {
8     //The main function of this plugin (Play sound)
9     public static void Play(string _soundPath, bool _loop)
10    {
11        if (_soundPath == "" || _soundPath == null)
12            return;
13
14        SoundPlayer sound = new SoundPlayer(_soundPath);
15
16        if (_loop)
17            sound.PlayLooping();
18        else
19            sound.Play();
20    }
21 }
22
23 }
```

For me it has 2 parameters : One **String** for the sound file location and one **boolean** too know if we play the sound over and over or not.

4) Create a WinForm or a WPF Window !

(mine is named "PlaySound_ParamsDialog". It's a WinForm)



5) DialogResult

- a. If you use a WindowsForm :

Set the "**DialogResult**" property of button to "**OK**" !

DialogResult	OK
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- b. If you use a WPF Window :

Create the "click" event for the button and copy this code !

```
//Enable this action
1 référence
private void BT_OK_Click(object sender, RoutedEventArgs e)
{
    this.DialogResult = true;
}
```

6) Create the "**GetParameters**" function in this window !

```
public partial class PlaySound_ParamsDialog : Form
{
    public PlaySound_ParamsDialog()
    {
        InitializeComponent();
    }

    //Get result (parameters to play a sound)
    public object[] GetParameters()
    {
        return new object[] { this.TB_SoundLocation.Text, this.CB_Loop.Checked };
    }

    //Choose a sound file
    private void BT_ChooseSound_Click(object sender, EventArgs e)
    {
        if (this.OFD.ShowDialog() == DialogResult.OK)
        {
            this.TB_SoundLocation.Text = this.OFD.FileName;
        }
    }
}
```

The values of the array correspond to the parameters (in order) of the main function (**String**, **bool**).

7) **Generate a DLL !**

Go to generate → generate the solution

8) **End of the development ! Return to Tic-Tac-Start !**

Go to Mode → add a plugin



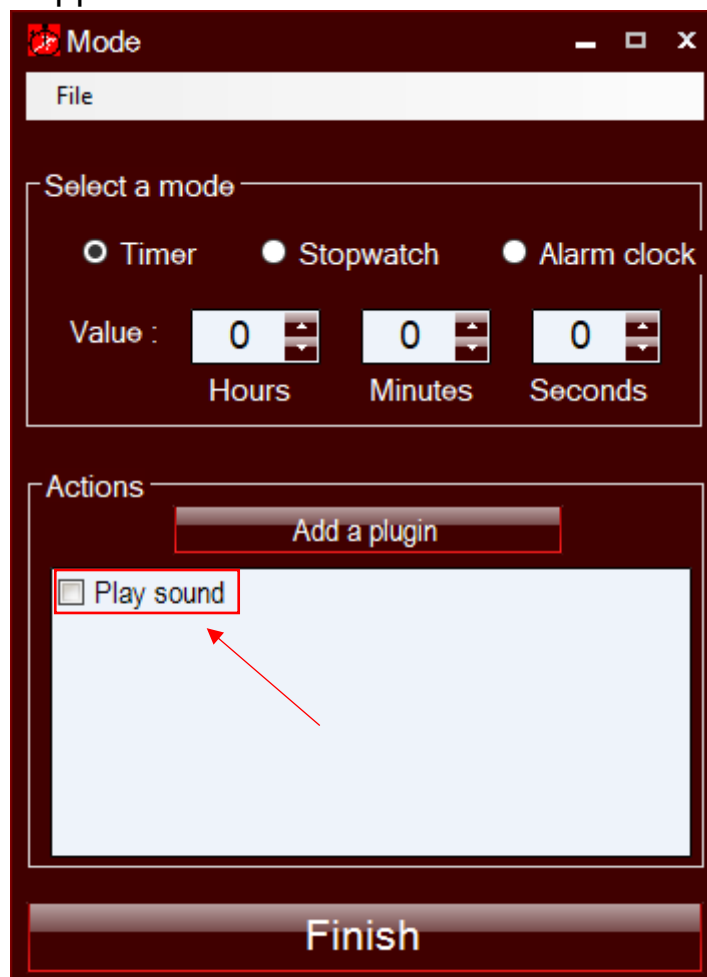
The 'Add a plugin' dialog box is shown with the following fields and values:

- Plugin location (DLL) : D:\Session\Bureau\MyPlugin\bin\Debug\MainPlugin.dll
- Title of this action :
 - French : Lire un son
 - English : Play sound
- Method class : PlaySound
- Method name : Play
- Parameters window : PlaySound_ParamsDialog

At the bottom, there is a button labeled 'Add this plugin'.

9) **After having filled all the fields, press on “Add this plugin” !**

Your plugin should appear in the actions list.

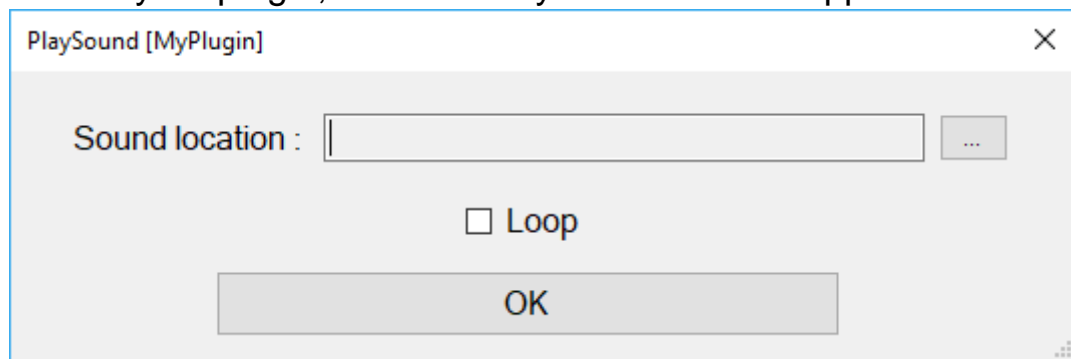


The 'Mode' application window is shown with the following elements:

- File menu
- Select a mode section:
 - Radio buttons for Timer, Stopwatch, and Alarm clock.
 - Value fields for Hours, Minutes, and Seconds, each set to 0.
- Actions section:
 - A button labeled 'Add a plugin'.
 - A list box containing 'Play sound', which is highlighted with a red box and a red arrow.
- A 'Finish' button at the bottom.

10) **You can use your plugin (action) like others plugins !**

If you activate your plugin, the window you created will appear.



If your plugin use other dll, copy this dll in the folder where is the .exe of Tic-Tac-Start.

You can now create your own Tic-Tac-Start plugin. If you come across any problem, contact me !

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