Introduction to ManialinkUI/ManiaScript

Abstract

In this file I try to give resources and a small introduction to ManialinkUI/ManiaScript Mediatracker. I will provide a small template where you can easily create your own UI Element for a easter egg. It helps a lot if you understand some HTML/JavaScript and have basic Webdesign knowledge. I'll share my go to way on how to host the file and use the Manialink Mediatracker inside a Trackmania2020 Map. Credit goes to Nize where i saw this being used the first time in The Wild West at the end of the easter egg. https://trackmania.exchange/s/tr/32851 The template i provide is based on the code he shared to me and i want to mention that i dont fully understand it yet. So some things might be worng explained - or could be done better and more sophisticated. This is basically my knowledge i've got from 3 afternoons looking at other peoples code and some own research. This file will contain some Spoilers for easter eggs from a couple of different maps in the Example Use section.
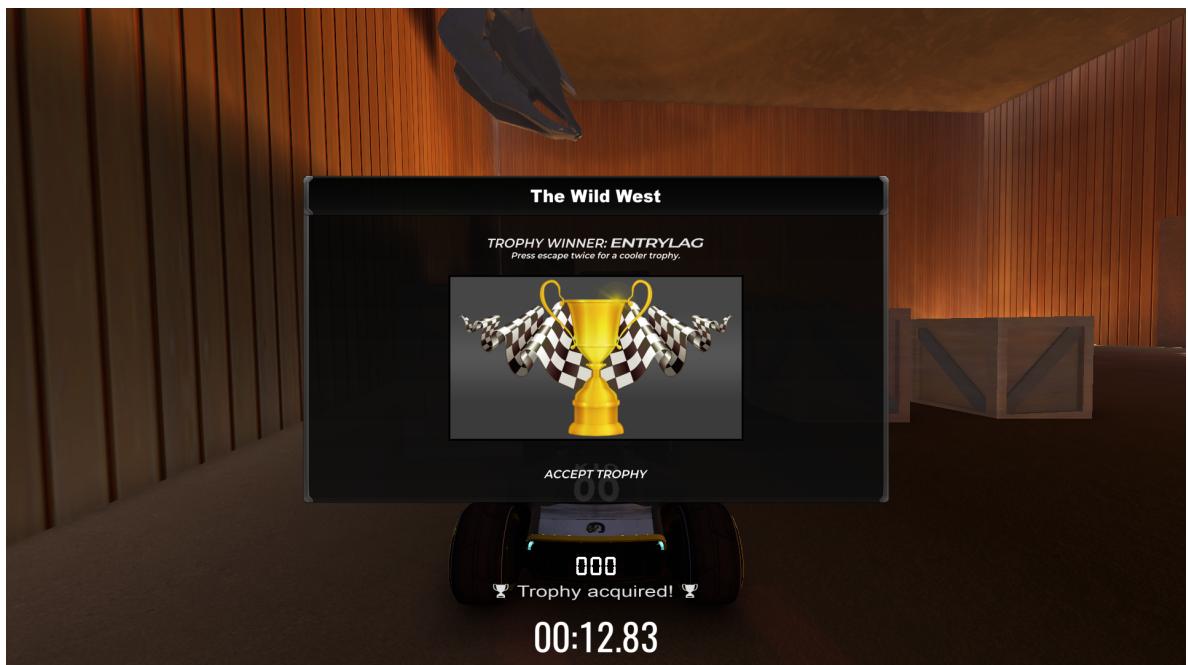
Resources

- Official ManiaScript 2021 documentation https://maniascript.boss-bravo.fr/
- Styleguide for ManialinkUI https://forum.maniaplanet.com/viewtopic.php?f=464&t=22355
- Syntax basics manialink https://forum.maniaplanet.com/viewtopic.php?f=279&t=1672
- Maniaplanet documentation https://doc.maniaplanet.com/manialink/maniacode

Example Use

Longmen by EntryLag https://trackmania.exchange/s/tr/38096

The Wild West by niZe and Neon1990 https://trackmania.exchange/s/tr/32851

Both maps are not password protected but be so kind and give a heads up to nize/neon if you want to take a look at this stuff and take code. You can always use stuff from EntryLag.

Design UI Elements

You can access the Interface designer within tm2020 if you use openplanet.

Via Scripts > Classic Menu > Editors you can access the maniaplanet/titlepack editors.
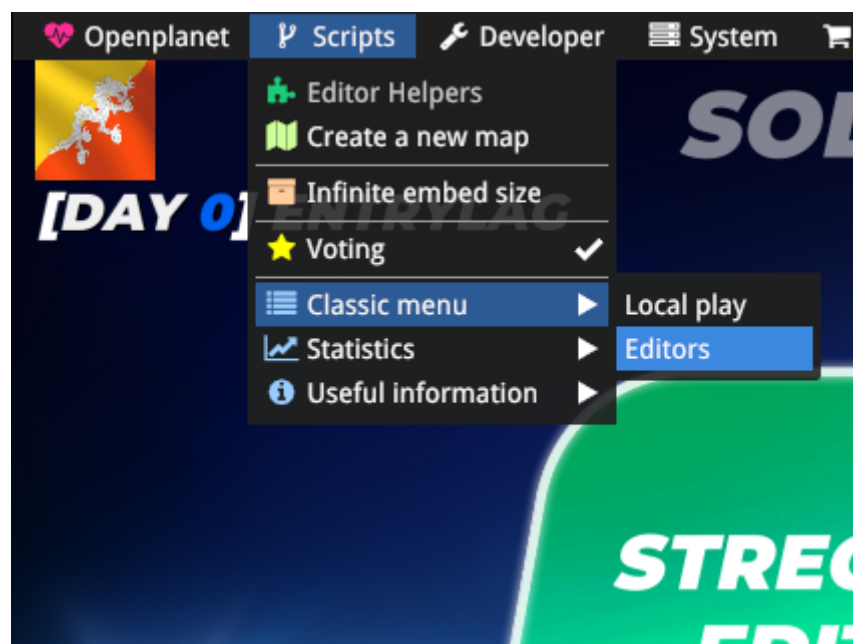
Over there you can see at the bottom **Title Tools**. In this menu you can access the Interface Designer

Titel-Werkzeuge
AKTION AUSWÄHLEN

ACTION MAKER
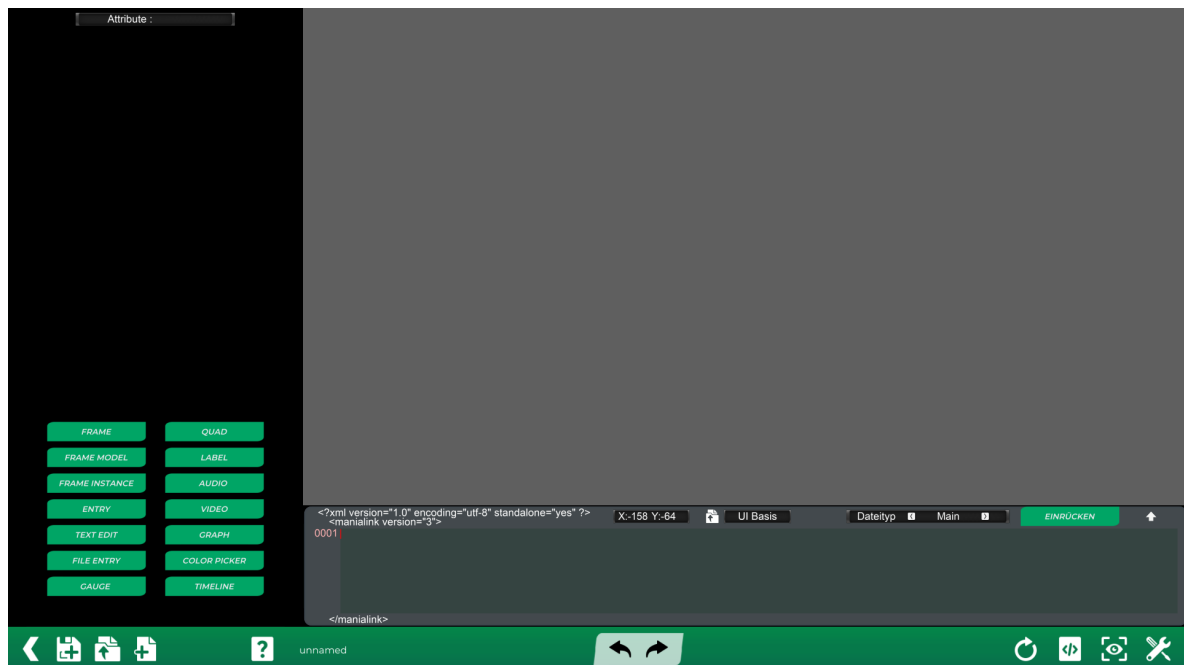
OBJEKT-EDITOR

INTERFACE DESIGNER

MODULSTUDIO

MESH MODELLIERER

EDITORSTUDIO

This is the main tool I used to design the interface with for my easter egg. Here you can easily design your UI. You can scale quad elements for textboxes and add lables for text which should be displayed.

Refer to the styleguide provided in Resources to see what ui elements are available. From personal experience it seems that quite a bit is deprecated and does not work as intended. But there are still some neat little things you can use to create a nice UI.

Set up Distribution Enviroment

Finding a host for the manialink xml file can be quite a struggle since it has to be a direct download to the file. The only big platform that allows this without going over too much trouble is **dropbox.com**. For images that you wanna use within the manialinkUI I recommend useing:

http://upload.maniacdn.net/.

After you created a dropbox account you can upload your xml files there and share. You will need the direct link for the file. You can access the link via the menu for the file: More > Share > CopyLink
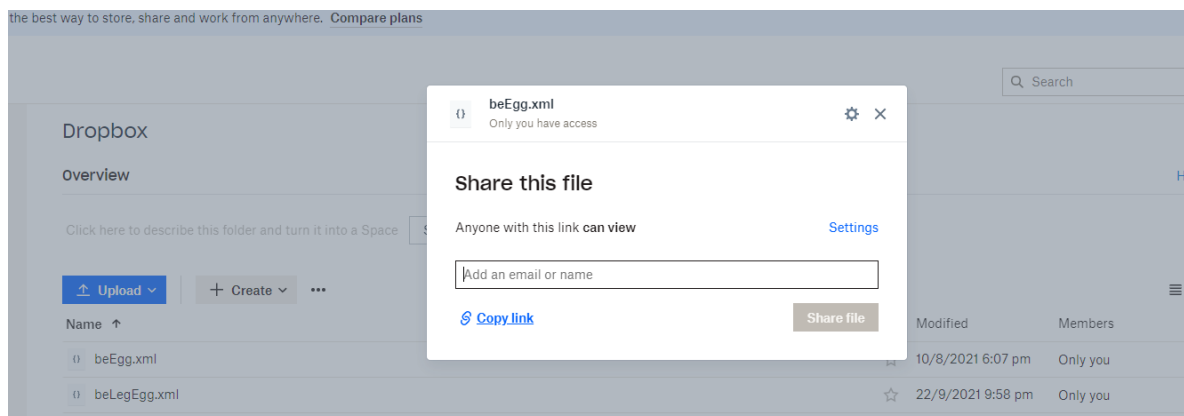
You will end up with a link like this:

https://www.dropbox.com/s/e2p2htykndn88zk/beEgg.xml?dl=0

Make sure to change the download parameter from dl=0 to dl = 1 or else the file wont load in Trackmania.

A big advantage of dropbox is that the link stays the same. So you can, in theory, patch the file, upload it to dropbox and dont have to re-validate the trackmania map gbx. Since everytime you trigger the media ingame, a http request gets send out to the file, if you use manialink-URL media track.

Hello World Manialink

I provide a simple Hello World snippet for a sample Textbox below:

```xml
<?xml version="1.0" encoding="utf-8" standalone="yes" ?>
<manialink version="3">
<frame id="Window" hidden="0">
    <quad pos="-76 63.4" z-index="0" size="147 121" bgcolor="9C2A47FF"
opacity="0.7" style="ManiaplanetSystem" styleselected="1" substyle="BgDialog"/>
    <quad pos="-76 63.4" z-index="2" size="148 11.3" bgcolor="9C2A47FF"
opacity="0.7" style="ManiaplanetSystem" styleselected="1" substyle="BgDialog"/>
    <label id="Title" pos="-2 58" z-index="3" size="147 9.89" text="Hello World"
halign="center" valign="center" style="TextTitle1"/>
    <label id="Message1" pos="-2.67 38.6" z-index="1" size="146 26.6"
text="Message1" halign="center" valign="center" style="TextTitle2"/>
    <quad id="eImg" pos="0 1.21" halign="center" valign="center" z-index="4"
size="106 54.3" image=""/>
    <label id="Close"  pos="0 -48.1" z-index="3" halign="center"
style="TextButtonMedium" scriptevents="1" text="Close" size="30.3 4.45"/>
</frame>
</manialink>
```

You can save this into a helloWorld.xml or paste everything that is within the

```xml
<frame>
...
</frame>
```

tag into the Interface designer editor. Upload it to your dropbox and dont forget to change the dl=1 parameter.

Or you can use this link: https://www.dropbox.com/s/iurbn5p7x3a3bmp/helloWorld.xml?dl=1

On a trackmania map you want to use the Manialink-URL Media Track. Just paste the URL into the option.
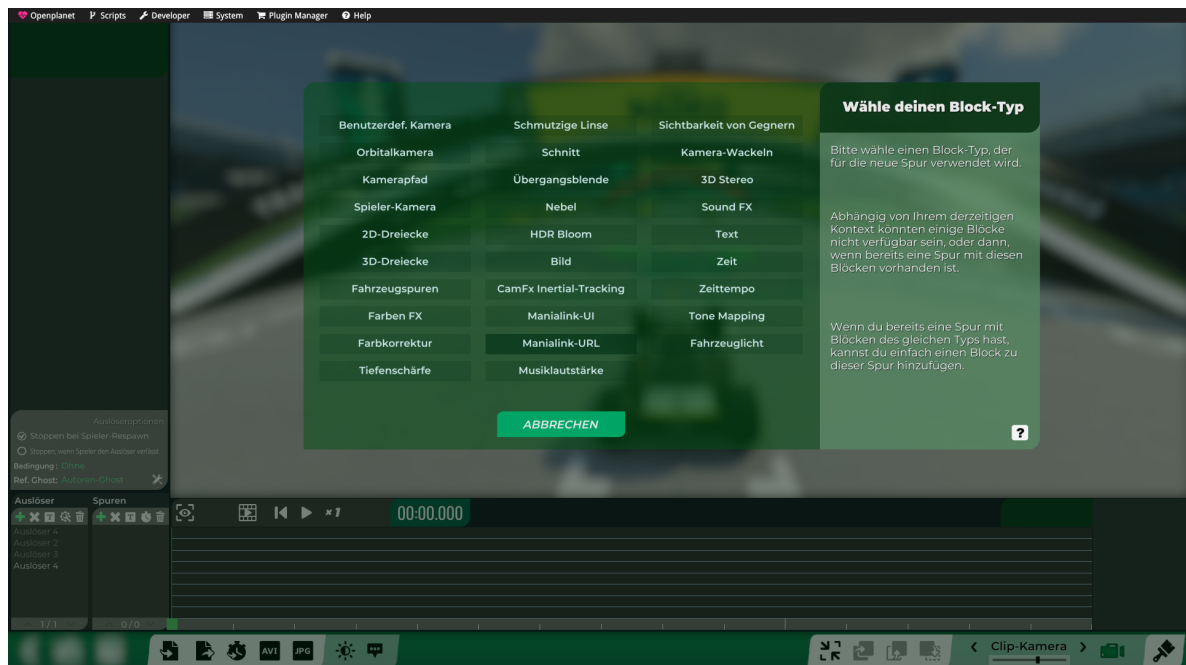
 If you drive throug the trigger you will see bottom left that something is loading and if everything is set up correct you will see the UI ingame.

We gonna add some script to make the message a bit more personalized and interactable. So you can actually close the UI. I would advice doing this inside a real editor like SublimeText or Notepad++.

```
<script><!--

        #Include "TextLib" as TextLib
        #Include "MathLib" as MathLib


        main()
        {
            declare Text HideGui = "no";

            //Get the local User playing the map right now
            declare Text username = LocalUser.Name;
```

```
                declare CMlFrame Window = (Page.GetFirstChild("Window") as
CMlFrame);
                if(LocalUser.RequestsSpectate == False)
                {
                    Window.Visible = False;
                    declare Text State = "board";
                    switch (State)
                    {

                        case "board":
                        {

                            Window.Visible = True;

                            // Get the UI Elements you want to change with code
by ID

                            declare CMlLabel Title =
(Page.GetFirstChild("Title") as CMlLabel);
                            declare CMlLabel Message1 =
(Page.GetFirstChild("Message1") as CMlLabel);
                            declare CMlQuad img = (Page.GetFirstChild("eImg") as
CMlQuad);

                            // Use the SetText functions to set a new text for
the Title and the first message
                            // you can bind variables with ^ <variableName> ^ so
it gets displayed in the UI
                            Title.SetText("Hello " ^ username ^ "$z");
                            Message1.SetText("Here you did set a text via script
$z");

img.ChangeImageUrl("http://maniacdn.net/neoobs/beLegendaryEntryLag/beleg-
mfg.png");


                            // This part is used to catch any User event - like
pressing close
                            declare Boolean Loopme = True;
                            while(Loopme)
                            {
                                foreach (Event in PendingEvents)
                                {
                                    if (Event.Type ==
CMlScriptEvent::Type::MouseClick)
                                    {
                                        // Event Close is triggered by user
                                        if(Event.ControlId=="Close")
                                        {
                                            declare CMlFrame Window =
(Page.GetFirstChild("Window") as CMlFrame);
                                            Window.Visible = False;
                                            Loopme   = False;
                                        }
                                    }
                                }
                                yield;
                            }
```

```
                    }
                }
            }
            // Cleanup
            else
            {
                declare CMlFrame Window = (Page.GetFirstChild("Window") as
CMlFrame);

                Window.Visible = False;
                //Loopme  = False;
            }
        }
--></script>
```

Add everything below the frame tag but above the manialink

You can use this link for testing https://www.dropbox.com/s/e0z1yzu62cjlyhb/helloUser.xml?dl=1

Now you made a little interactable UI that get the localUser name and displays a custom message.

What I did on Longmen was to get the local Players Trigram. You can see what parameters the User class has here: https://maniascript.boss-bravo.fr/class_c_user.html

It is a documentation but tbh not a very good one. If you want to do something more complex there might be some trial and error required to make it work. And the debug tool is also not that great.

If the Trigram did match a specific combination then an other text and image will get displayed. I am sure there are more neat things you can do for easter eggs via ManiaScript Codeing. So if you want to troll someone specifc with the easter egg you can just add a condition that triggers only for the player with the case sensitive username. Only this one player will get to see that message you coded for him.

Eg. I got vojteek55 to do the easter egg on Longmen, only so that after 30 min he got DEEZ NUTS'ed by me.

Worth it.

Summary

I hope you got a overview what you have to do in order to create a manialinkUI, host the file the right way and use it on a map. I personally belive it has quite a big potential to do some really cool stuff for the community, with the benefit that you can acutally patch it remote.