Re BASIC! Tab generation and management

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Conventions

Commands syntax, instructions in programming language and examples are with font `COURIER NEW`**. The optional parties of syntactic explanation are contained between** `[square parentheses]`**, alternatives are separated by** `|` **and the variable parties are in** *`italics`*.

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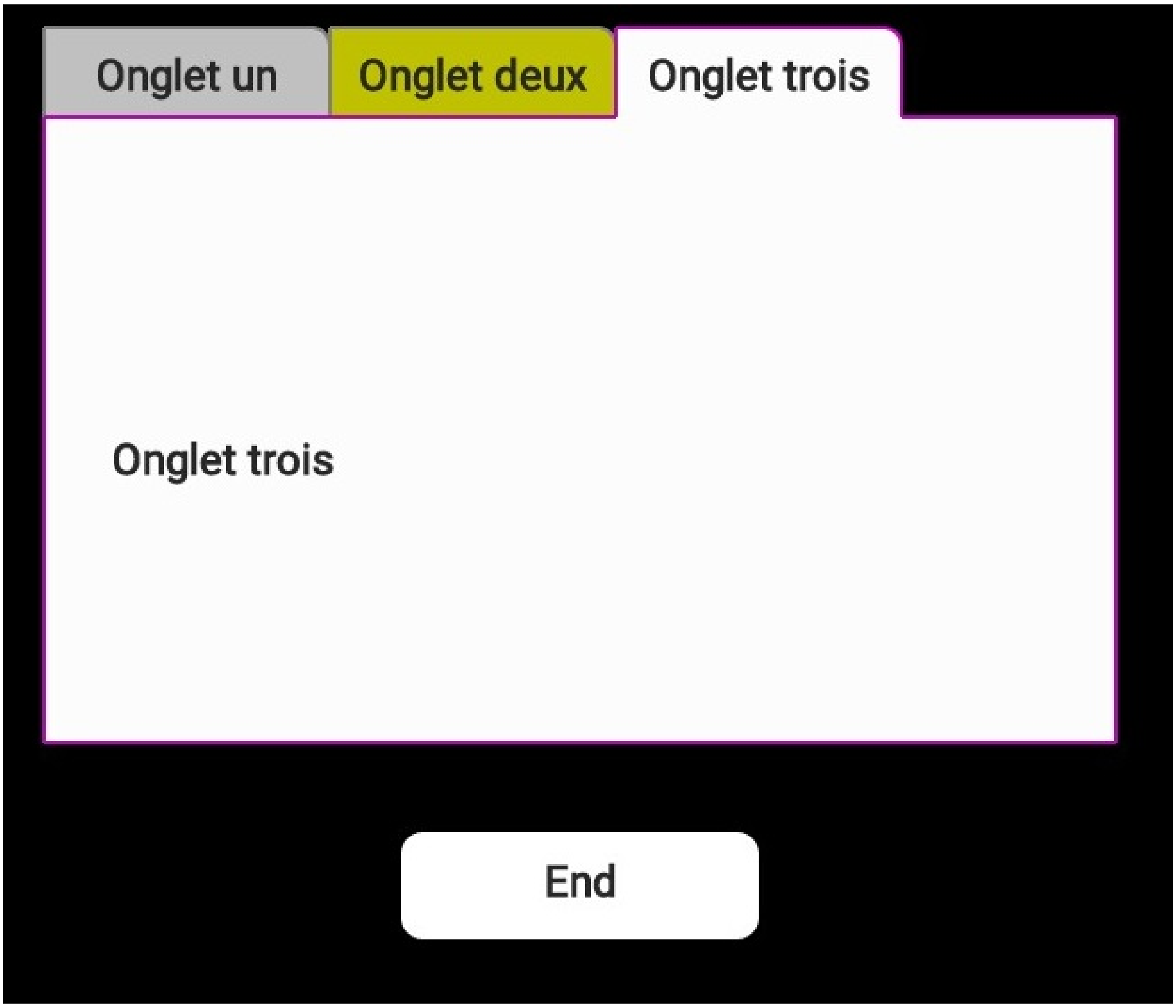

1 Tab generator

The script is a demo that contains functions to generate tabs in RFO Basic (version 1.91).

1.1 Calling the tab generator

The function `createTab` has one string parameter that contains informations for generate one tab; it returns a bundle of data.

```
answer = createTab("Title=Onglet un,color=FFC0C0C0,position=1,width=600,height=400)
```

1.2 Parameter description

The parameters have the form `parameter=value[,parameter=value [,...]]`, where *parameter* is indifferent to the case.

All parameters are optional and have a default value.

Parameter	Default value	Note
`Border`	`FF7F7F7F`	Border color
`Color`	`FFFCFCFC`	Background color (silver)
`Height`	`90% of screen height`	Tab height
`Left`	`5% of screen width`	Left position
`Position`	`1`	Tab position
`Title`	`Tab` *position*	Tab title
`Top`	`5% of screen height`	Top position
`Width`	`90% of screen width`	Tab width

1.3 Information returned

The function returns some information contained on a bundle useful for manage the form:

Key	Type	Note
`glist`	numeric list	list of object number used to create the tab
`touch`	string	containing the coordinate of rectangle: *Left*,*Top*,*Right*,*Bottom*
`label`	numeric	object number of the tab title

For act on tabs `glist` and `touch` must be stored: in this script `glist` is stored in an array and `touch` in a bundle with name `Tab`*Position* (see below).

```
bundle.create touchs       % key = fieldname, dtaa = left, top, right, bottom
bundle.create tabs         % key = TabPosition, data = gList
array.load arrayGList[],0,0,0,0,0      % grafic list array of tabs
...
answer = createTab("Title=Onglet un,position=1,width=600,height=400,LEFT=50,Top=50")
arrayGList[1] = getBundle(answer,"glist")
bundle.put touchs,"Tab1",getBundle$(answer,"touch")
```

1.4 Guideline

1.4.1 Adding graphic object to tab

A graphic object can be added to a tab by adding its object number to the list of tab objects:

```
gr.text.draw txt,150,300,"Onglet un"
list.add arrayGList[1],txt  % this text is added to tab
```

1.4.2 Changing a Tab presentation

All drawing object are contained in a list and are drawn from the first one: we must rearrange the list for send at bottom the graphic object list of the selected tab (see the script above fragment):

```
FN.DEF changeTab(tabNumber,aGList[],otherGraphics)
  ARRAY.LENGTH numberOfTabs, aGList[]
  list.create N,newLst
  For i=1 to numberOfTabs
    if aGList[i] > 0 Then if i <> tabNumber Then list.add.list newLst,aGList[i]
  Next
  list.add.list newLst,aGList[tabNumber]  % this is the tab to show
  if otherGraphics > 0 then list.add.list newLst,otherGraphics
  list.toArray newLst,newArr[]
  GR.newDL newArr[]  % replace the display list
  GR.render
FN.END
```

2 Functions

2.1 Create button

The function create a button with rounded corner; it returns the Object number list list.
Syntax:

`buttonGraphicList = button(text$,left,top,width,height)`

2.2 Test string by Regular Expression

The function `matchRE` return true if a string match a regular expression:

Syntax:

`boolAnswer = matchRE(stringToTest,regularExpression)`

```
FN.DEF matchRE(field$,re$)    % retun true if match
      split a$[],"*"+field$+"*",re$
      array.length ll,a$[]
      FN.RTN ll-1
FN.END
...
re$ = "[aAbBcCdDeEfF\\d]{8}"
if matchRE("f7c0c0c0",re$) Then ...  % this matches
```

2.3 Show tab selected

The function force the redraw of tabs.
Syntax:

`changeTab(tabNumber,arrayOfGraphicsList,otherGraphicsList)`

`otherGraphicsList` is a graphic list of objects outside of Tab or `0` if there are none.

2.4 Test choice

The function returns a name of the object touched or an empty string.
Syntax:

`nameOfObject = button(touchsBundle)`

3 Open problems

When Tabs contain touchable objects the script is unable, currently, may be unable to locate the correct object.

4 Technical notes

4.1 Arrays

Name	**Note**
`arrayGList`	Graphic list of Tabs

4.2 Bundles

Name	**Key**	**Value**	**Note**

`answer`	*`parameterName`*	*`parameterValue`*	Returned parameters
`touches`	*`Name`*	*`touchRectangle`*	