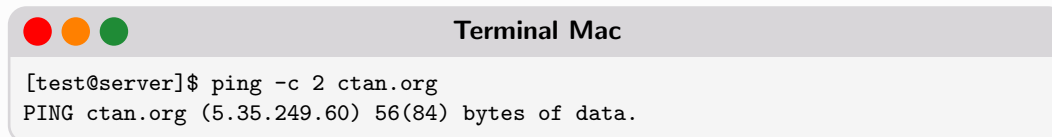# sim-os-menus

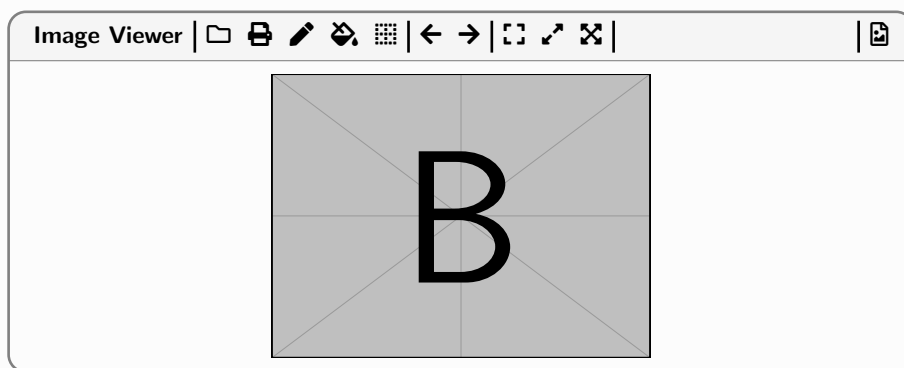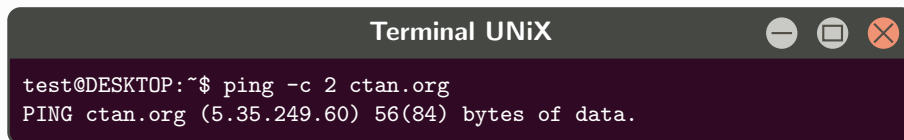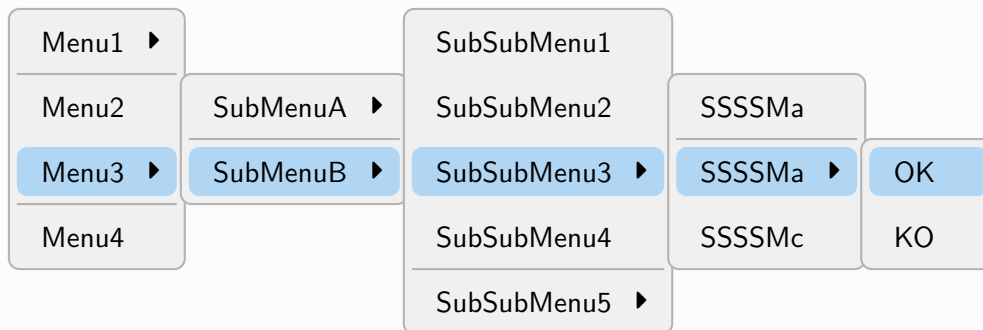## Simulate 'windows', 'terminal' or 'context menu' like in an OS.

Version 0.1.0 -- 13/11/2023

Cédric Pierquet
c pierquet -- at -- outlook . fr
https://github.com/cpierquet/sim-os-menus

| Menu1 ▶ |
| Menu2 |
| Menu3 ▶ |
| Menu4 |

| SubMenuA ▶ |
| SubMenuB ▶ |

| SubSubMenu1 |
| SubSubMenu2 |
| SubSubMenu3 ▶ |
| SubSubMenu4 |
| SubSubMenu5 ▶ |

| SSSSMa |
| SSSSMa ▶ |
| SSSSMc |

| OK |
| KO |

Terminal UNiX ⊖ ▣ ⊗

```
test@DESKTOP:~$ ping -c 2 ctan.org
PING ctan.org (5.35.249.60) 56(84) bytes of data.
```

Image Viewer | 🗀 🖶 ✏ 🪣 ▦ | ← → | ⟦ ⟧ ⤢ ⛶ | 🗎

B

🔴 🟠 🟢   **Terminal Mac**

```
[test@server]$ ping -c 2 ctan.org
PING ctan.org (5.35.249.60) 56(84) bytes of data.
```

Contents

1 Introduction

1.1 Description

With this package you can create context menu, or terminal, or doc viewer, like in an OS. Global styles are mostly fixed, but some customizations are possible.

1.2 Loading

To load the package, simply use :

```
\usepackage{sim-os-menus}
```

The package loads the packages :

- `tikz` (with `calc,positioning`), `pgf`, `pgffor` ;

- `calc`, `fontawesome5` ;

- `simplekv`, `xintexpr`, `listofitems`, `xstring` ;

- `settobox`, `tabularray` ;

- `tcolorbox` (with `breakable,fitting,skins,listings,listingsutf8,hooks`).

1.3 History

```
0.1.0 : Initial version
```

2   The macros

2.1   Context menu

I order to create a context menu, the command is :

```
%----contextual menu
\ContextMenu[keys]{list of items}<tikz options>
```

Optional keys, between `[...]` are :

- `ColBack` := background color ;

- `ColHL` : = highlight color ;

- `Rounded` := boolean for rounded corners (`true` by default) ;

- `Font` := font for the items (`\normalsize\normalfont` by default) ;

- `ColItems` := color(s) for the items (`black` by default) ;

- `MarginV` := vertical margin of the lines (`6pt` by default) ;

- `MarginH` := horizontal margin of the lines (`12pt` by default) ;

- `Arrow` := character for the arrow (`\faCaretRight` by default) ;

- `ListSeps` := list for the possible sep lines (empty or for all the levels !) ;

- `ListIcons` := list for the possible icons (empty or for all the levels/items !) ;

- `ListOffsets` := list for the possible vertical offset of levels (from 2, ...!) (empty or for all the sub-levels !) ;

- `Icons` := boolean for icons (`false` by default) ;

- `Bar` := boolean for small vertical bar with icons (`true` by default) ;

- `Space` := horizontal space between levels (`-0.125` by default).

The mandatory argument, between {...}, is given as :

<div align="center">

`item1A,item1B,... § item2A,itemp2B,... § ...`

</div>

- if an item ends with `(*)`, this is the beginning of the next level (only one by level !) ;

- if an item ends with `(>)` (before optional `(*)`), an arrow is written at the end of the line.

A correct usage of the syntax is necessary for the code !

A few tips, due to `ListIcons`, `ListOffsets` and `ListSeps` keys, which are *sensitive* :

- `ListIcons` must have the same number of elements than the number of levels/items (with possible empty items) ;

- `ListSeps` must have the same number of elements than the number of levels (with possible empty items) ;

- `ListOffsets` must have the same number of elements than the numbers of sub-levels (with 0 si no offset !).

```
%default style
\ContextMenu{Item1A(>),Item1B,Item1C(>)(*),Item1D § Item2A(*),Item2B(>),Item2C}
```

| Item1A ▶ |
| Item1B |
Item1C ▶	Item2A
Item1D	Item2B ▶
	Item2C
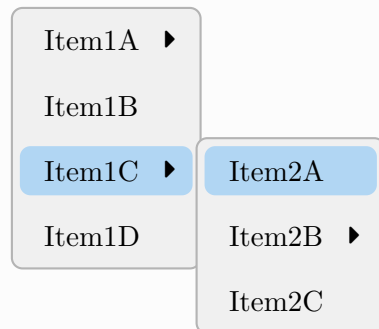
```
%custom style
\ContextMenu[Rounded=false,ColBack=yellow,ColHL=teal,%
  ListSeps={1,3/2},ColItems={black/white},Icons,Space=0,%
  ListIcons={\faCut,\faIcon[regular]{copy},\faCopy,\faPaste / \faNotEqual}]
  {Item1A(>)(*),Item1B,Item1C(>),Item1D § Item2A(*),Item2B(>),Item2C}
```

✄ Item1A ▶	≠ Item2A
🗐 Item1B	Item2B ▶
🗎 Item1C ▶	Item2C
🗐 Item1D	
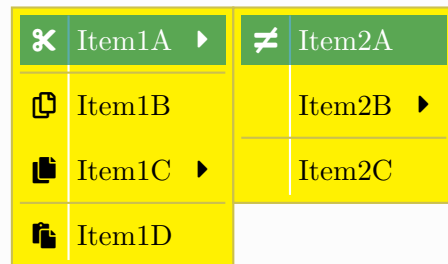
```
\ContextMenu[Font=\sffamily,ListSeps={1,3/1/4/1/},ListOffsets={1,2,1,0}]{%
  Menu1(>),Menu2,Menu3(>)(*),Menu4 §
  SubMenuA(>),SubMenuB(>)(*) §
  SubSubMenu1,SubSubMenu2,SubSubMenu3(>)(*),SubSubMenu4,SubSubMenu5(>) §
  SSSSMa,SSSSMa(>)(*),SSSSMc §
  OK(*),KO
}
```

Menu1 ▶		SubSubMenu1		
Menu2	SubMenuA ▶	SubSubMenu2	SSSSMa	
Menu3 ▶	SubMenuB ▶	SubSubMenu3 ▶	SSSSMa ▶	OK
Menu4		SubSubMenu4	SSSSMc	KO
		SubSubMenu5 ▶		
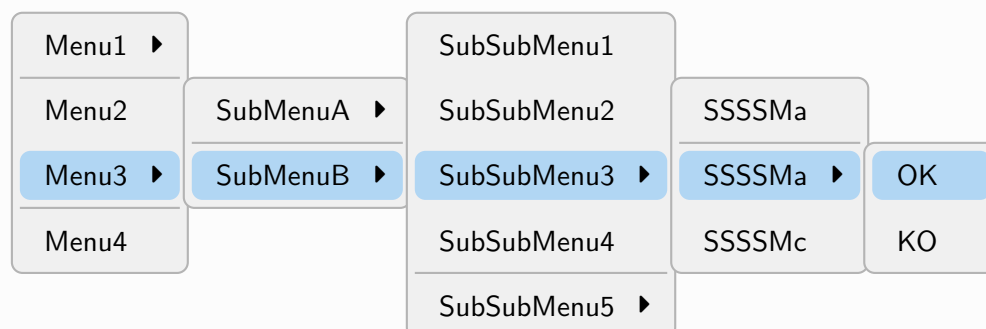
2.2 Terminal

In order to create a terminal (Win/UNiX/Mac), environments are :

```
%----Windows like terminal
\begin{TermWin}[keys]{tcbox options}
    ...
\end{TermWin}


%----UNiX like terminal
\begin{TermUnix}[keys]{tcbox options}
    ...
\end{TermUnix}


%----OSX like terminal
\begin{TermMac}[keys]{tcbox options}
    ...
\end{TermMac}
```

Optional keys, between `[...]` are :

- `Title` := title of the terminal (`Terminal Win/UNiX/Mac` by default) ;

- `Align` := horizontal alignment of the box (`center` by default) ;

- `Width` := width of the box (`\linewidth` by default).

The mandatory argument, between `{...}`, are options to give to the tcbox.

```
\begin{TermWin}{}
Microsoft Windows [version 10.0.22000.493]
(c) Microsoft Corporation. Tous droits réservés.
C:\Users\test>ping ctan.org
Envoi d'une requête 'ping' sur ctan.org [5.35.249.60] avec 32 octets de données :
Réponse de 5.35.249.60 : octets=32 temps=35 ms TTL=51
Réponse de 5.35.249.60 : octets=32 temps=37 ms TTL=51
Réponse de 5.35.249.60 : octets=32 temps=35 ms TTL=51
Réponse de 5.35.249.60 : octets=32 temps=39 ms TTL=51
Statistiques Ping pour 5.35.249.60:
Paquets : envoyés = 4, reçus = 4, perdus = 0 (perte 0%),
Durée approximative des boucles en millisecondes :
Minimum = 35ms, Maximum = 39ms, Moyenne = 36ms
\end{TermWin}
```

```
>_  Terminal Win                                              — ▢ ✕
Microsoft Windows [version 10.0.22000.493]
(c) Microsoft Corporation. Tous droits réservés.
C:\Users\test>ping ctan.org
Envoi d'une requête 'ping' sur ctan.org [5.35.249.60] avec 32 octets de données :
Réponse de 5.35.249.60 : octets=32 temps=35 ms TTL=51
Réponse de 5.35.249.60 : octets=32 temps=37 ms TTL=51
Réponse de 5.35.249.60 : octets=32 temps=35 ms TTL=51
Réponse de 5.35.249.60 : octets=32 temps=39 ms TTL=51
Statistiques Ping pour 5.35.249.60:
Paquets : envoyés = 4, reçus = 4, perdus = 0 (perte 0%),
Durée approximative des boucles en millisecondes :
Minimum = 35ms, Maximum = 39ms, Moyenne = 36ms
```

```
\begin{TermUnix}[Align=flush right]{hbox}
test@DESKTOP:~$ ping -c 2 ctan.org
PING ctan.org (5.35.249.60) 56(84) bytes of data.
\end{TermUnix}
```

	Terminal UNiX	⊖ ▣ ⊗
test@DESKTOP:~$ ping -c 2 ctan.org		
PING ctan.org (5.35.249.60) 56(84) bytes of data.		
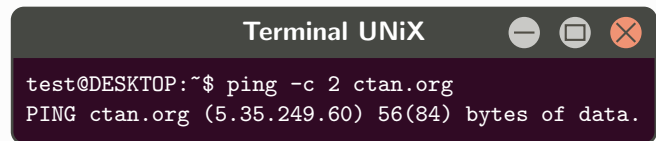
```
\begin{TermMac}[Width=14cm,Align=flush left]{}
[test@server]$ ping -c 2 ctan.org
PING ctan.org (5.35.249.60) 56(84) bytes of data.
\end{TermMac}
```

🔴 🟠 🟢   **Terminal Mac**

```
[test@server]$ ping -c 2 ctan.org
PING ctan.org (5.35.249.60) 56(84) bytes of data.
```
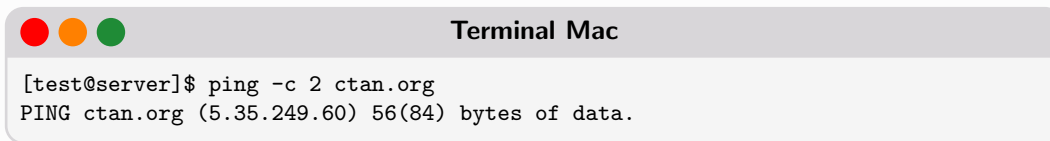
2.3 Viewers

In order to create a 'fake' viewer (for pdf or img), environments are :

```
%----PDF Viewer like
\begin{PDFViewer}[keys]{tcbox options}
    ....
\end{PDFViewer}

%----Image Viewer like
\begin{IMGViewer}[keys]{tcbox options}
    ....
\end{IMGViewer}
```

Optional keys, between `[...]` are :

- `Title` := title of the terminal (`Terminal Windows` by default) ;

- `Align` := horizontal alignment of the box (`center` by default) ;

- `Width` := width of the box (`\linewidth` by default) ;

- `Halign` := horizontal alignment fot the content (`left` by default) ;

- `Icons` := boolean for the icons (`true` by default).

The mandatory argument, between `{...}`, are options to give to the tcbox.

```
\begin{PDFViewer}{hbox}
\fbox{\includegraphics[page=35,width=6cm]{ProfLycee-doc.pdf}}%
\fbox{\includegraphics[page=36,width=6cm]{ProfLycee-doc.pdf}}
\end{PDFViewer}
```

```
\begin{PDFViewer}[Width=14cm,Icons=false]{}
\fbox{\includegraphics[page=65,width=4.75cm]{ProfLycee-doc.pdf}}
\end{PDFViewer}
```

PDF Viewer | 📄
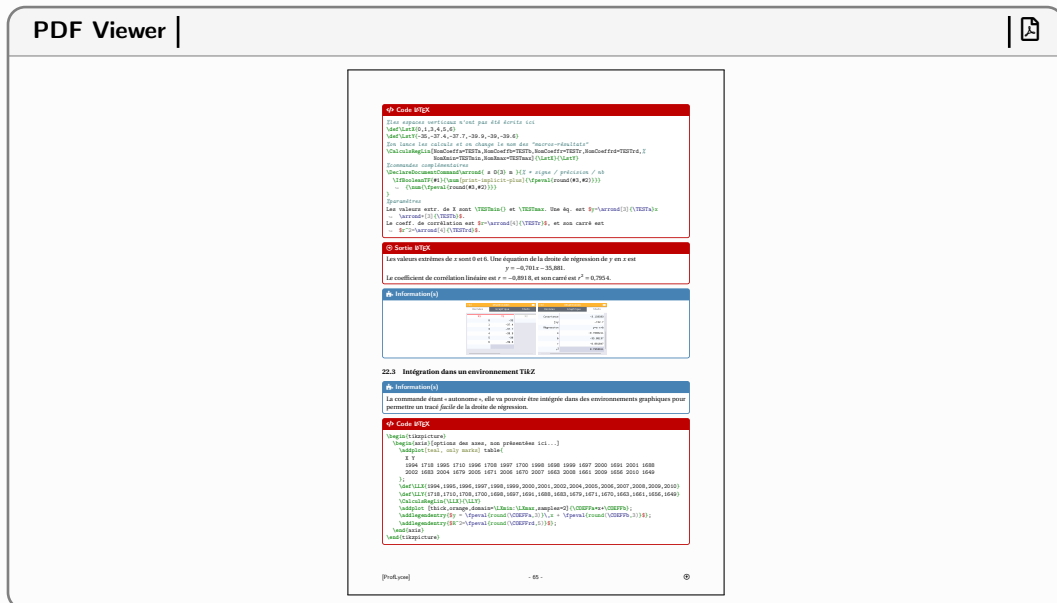

```
\begin{IMGViewer}[Icons=false]{hbox}
\includegraphics[width=5cm]{example-image-b}
\end{IMGViewer}
```
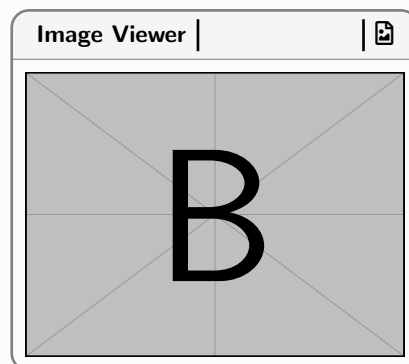
Image Viewer | 📄


```
\begin{IMGViewer}[Width=12cm]{}
\includegraphics[width=3cm]{example-image}
\end{IMGViewer}
```

Image Viewer | 🗁 🖨 ✏ 🪣 ▦ | ← → | ⟦⟧ ⤢ ⛶ | 📄