

# **TkInter, toujours de la partie ?**

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# **TkInter, toujours de la partie ?**

- **Introduction**
- **Design, UX ...**
- **Aux origines**
- **Et TkInter dans tout ça ?**
- **Etude de cas / retour d'expérience**

# Introduction

***Ego Trip***

## **Introduction : *sponsor***



**Telespazio**

A Finmeccanica/Thales Company

***Merci Patron !***

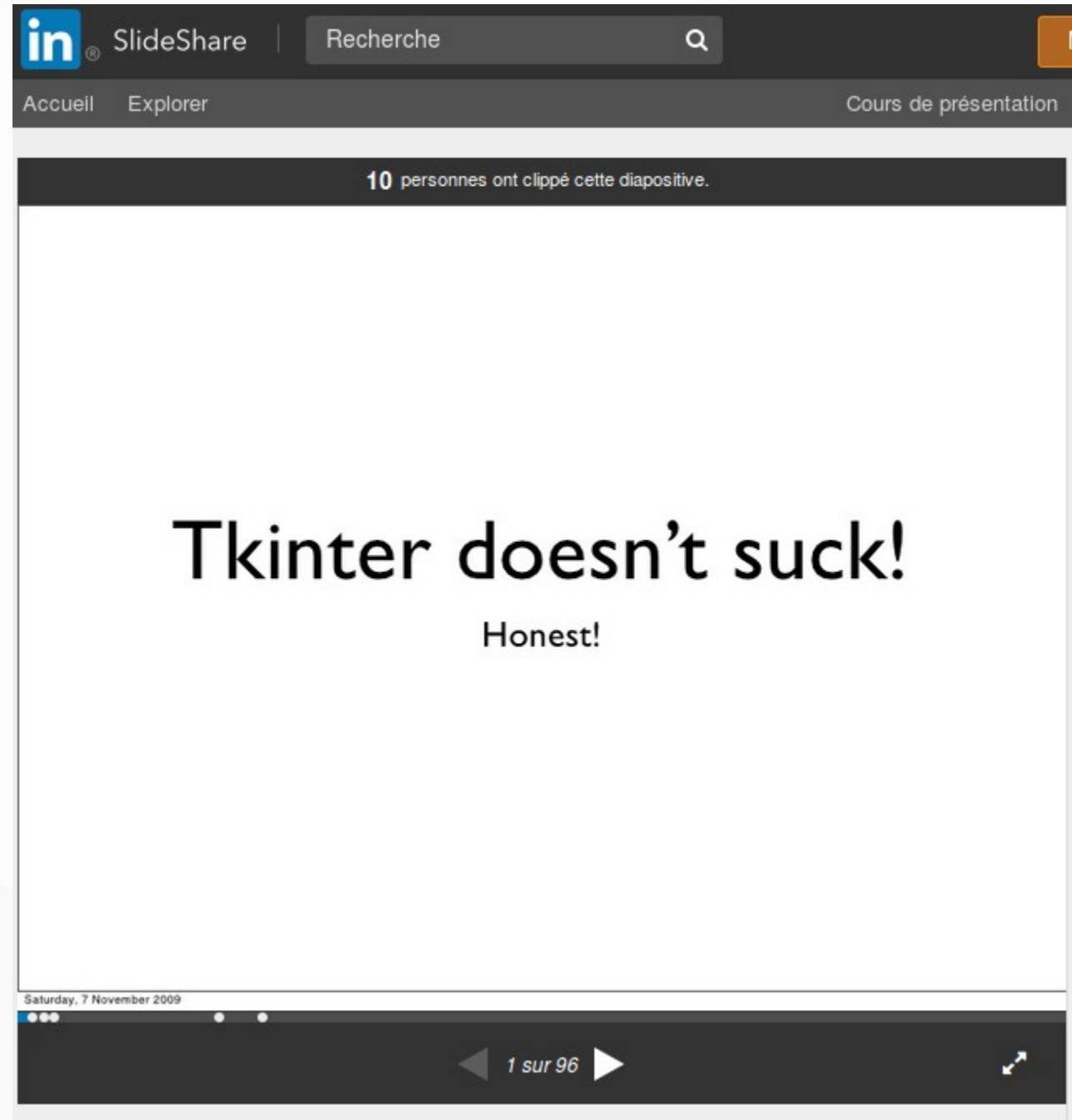
# **Introduction : TkInter en 2018 ?**

***“C’est vieux !”***

***“C’est moche !”***

***“Il y a mieux depuis !”***

**Déjà en 2009 ...**



<https://fr.slideshare.net/r1chardj0n3s/tkinter-does-not-suck>

**UX et Design**

***Crash Course***

# UX is not UI

<http://www.uxisnotui.com/>

## HOW UX WANTS TO BE SEEN

- Field research
- Face to face interviewing
- Creation of user tests
- Gathering and organizing statistics
- Creating personas
- Product design
- Feature writing
- Requirement writing
- Graphic arts
- Interaction design
- Information architecture
- Usability
- Prototyping
- Interface layout
- Interface design
- Visual design
- Taxonomy creation
- Terminology creation
- Copywriting
- Presenting and speaking
- Working tightly with programmers
- Brainstorm coordination
- Design culture evangelism

## HOW UX IS TYPICALLY SEEN

- Field research
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## Et si on tenait compte des utilisateur·ices dans les projets libres ?

par framasoft | 2 OCT 2018 | 26 min

<https://framablog.org/2018/10/02/et-si-on-tenait-compte-des-utilisateur%C2%B7ices-dans-les-projets-libres/>

**Design**

***Le “bon” design ...***

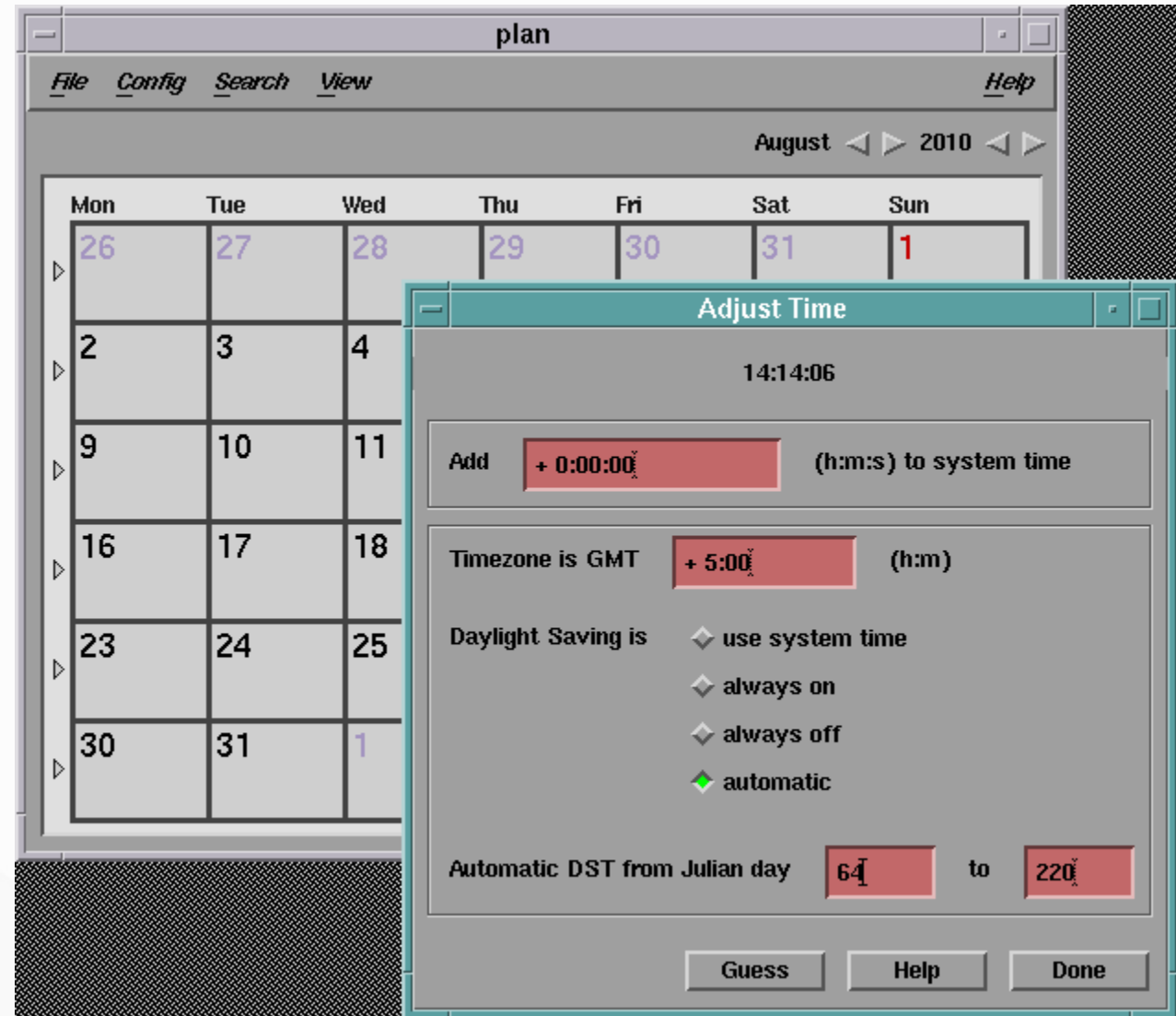
# Aux origines ...

1987 : X11



# Aux origines ...

## 198X : Motif



Aux origines ...

1990 : Tcl/Tk

Booster Orbit Correction Control Panel

File Programs Help

Vertical Horizontal Both Plot Timing Get Timing

Get Timing

Duration Turns: 256  
M: 64  
Averager Turns: 4  
BPM Time: Inconsi  
N: Inconsi  
PSCU Time: 223.000  
PSCU Ramp Time: 233.660

RampStartOffset: 26.73  
BoosterTrigger: 300  
BPM Offset: 0.29588  
RampStartCorrectorDelay: 16.07  
DipoleZeroRef: 7.07  
Inj. Energy: 0.450  
Calculated Inj. Time: 4.540  
Calculated Inj. Energy: 0.316

Set Power Supplies

On  
Off

Vertical  
Horizontal  
Both

Fast  
Raw Only

INIT/AUTO/ACTIVATE Procedure

Set Corrector Values

Value: 0.0

Vertical  
Horizontal  
Both  
Xorbit

Set BPM Duration

Turns: 1024

Set PSCU Sample Time

Time After IP: 223.

Set Averager Weight

Averager Turns: 1024

Set Corrector Ramp Start Delay

RampStartDelay: 16.07

Set BPM Time

Time After IP: 2.

Set Force Free Run On  
Set Force Free Run Off

Get DeltaP/P

Calculated Snap: booster.hsnap  
Configuration File: booster.config  
Specified DeltaP/P: 0.0

Plot Orbits  
Make Calculated Snapshot  
Use configuration File  
Use Specified DeltaP/P

Save Ramp Table

Old Name: booster.v.ramp  
New Name: b1999-11-02.01.v.ramp

Vertical Horizontal

Plot Ramp Tables

Ramp Files:  
booster.v.ramp

Correct Orbit Make Configuration File Full Corbit Interface Corbit Help

Main Options

Apply Fraction of Correction  
Use Configuration File  
Use Weight File  
Match Snapshot File  
Match BPM Setpoints  
Preview  
Verbose

Settings

Response Matrix File: booster.vrm  
Fraction of Correction: .5  
Configuration File: booster.config  
Snapshot File: booster.vsnap

Booster Specific Options

Set Ramptables from A0 Afterward

Save Snapshot

Snapshot Name: b1999-11-02.01.v.snap

Vertical Horizontal

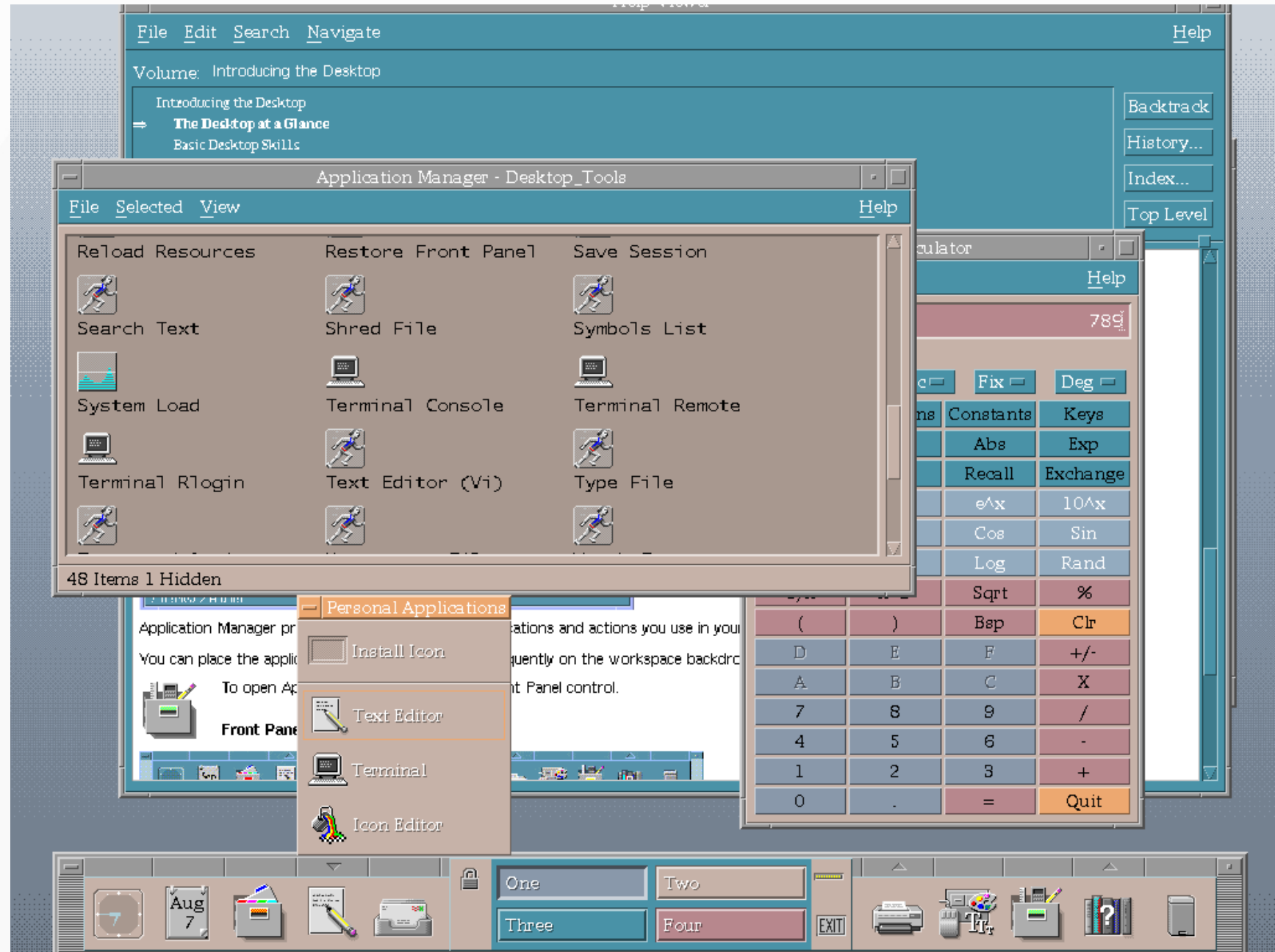
Make Combined Ramp File

Ramp File Name: b1999-11-02.v.ramp

Snapshots to Combine:  
b1999-11-02.{01}.v.snap

# Aux origines ...

## 1993 : CDE





# 2018 : Flat Design

ApplicationsEmplacementsLibreOffice Impress

1234MemSwp

2.70G/3.74G779M/3.88G

PID	USER	PRI	NI	VIRT	RES	SH
22992	francois	20	0	26304	4120	315
13839	francois	20	0	453M	84652	3558
8139	francois	20	0	2478M	503M	6907
8078	francois	20	0	2925M	395M	8888
13016	francois	20	0	2738M	413M	5584
8444	francois	20	0	2275M	291M	6560
8408	francois	20	0	2203M	301M	9382
8106	francois	20	0	2925M	395M	8888
13873	francois	20	0	453M	84652	3558
13892	francois	20	0	453M	84652	3558
1826	francois	20	0	385M	97812	6514
13028	francois	20	0	2738M	413M	5584
13573	francois	20	0	1893M	147M	4346
8455	francois	20	0	2275M	291M	6560

F1HelpF2SetupF3SearchF4FilterF5Tree

FichierÉditionAffichageRechercherTerminalAide

1234MemSwp

2.70G/3.74G779M/3.88G

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Aux origines ...

1299 X: Modif

Aux origines ...

1399 0: TclTk

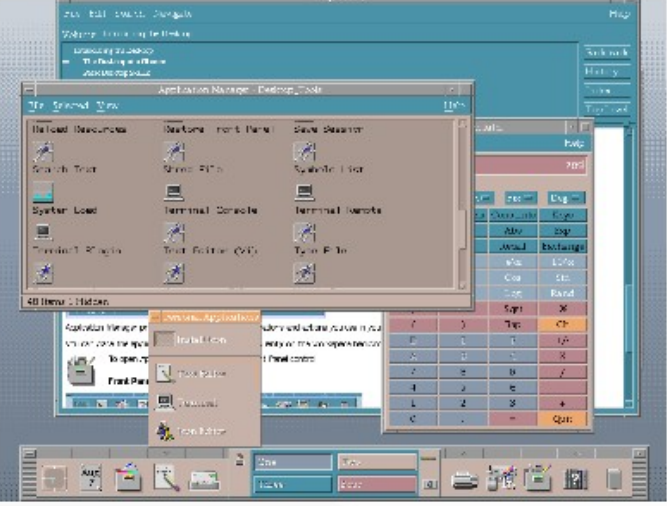
Aux origines ...

1499 2: CDE

15

Aux origines ...

1993 : CDE



Diapo 14 de 15

xinxinli-black-edges1

9,58 / -1,98

0,00 x 0,00

Français (France)

45 %

varies greatly; different programs may present

# Flat Design

## Bonus

- **Fin des repères de guidage skeuomorphiques (conduite du changement)**
- **Simplification des affichages**
- **Mise en valeur des contenus plutôt que des contenants**

## Malus

- **Pertes des repères acquis**
- **“Découvrabilité” affaiblie**



# Implémenter le Flat Design

- **Typographie : une “belle” police ou couple de police**
- **Palette de couleurs autorisant des aplats sans agressivité visuelle**
  - <https://flatuicolors.com/>
- **Iconographie “sobre”**
  - <http://www.defaulticon.com/>

# Themed Tk

- **Conçu à l'origine pour compléter l'intégration native des applications graphiques**
- **Inclut des widgets manquants à Tk : combo arbre / grille de données**
- **“Détournable” pour implémenter le “Flat Design”**
- **Donc prêt pour des interfaces modernes et utilisable :)**

# Styliser les applications TkInter

- Utiliser les widgets *ttk*
- Créer un Style
- Créer des “classes” pour les widgets
- Cas pratique

# Documentation

- **Tkinter 8.5 reference: a GUI for Python**
  - <http://infohost.nmt.edu/tcc/help/pubs/tkinter/web/index.html>
- **EffBot**
  - <http://effbot.org/>
- **ActiveState**
  - <http://code.activestate.com/recipes/langs/python/tags/meta:requires=tkinter/>
  - <https://github.com/ActiveState/code/tree/master/recipes/Python>

***That's All Folks !***