

# Kivy

**Python RAD per lo sviluppo di  
applicazioni mobile e non solo**

Firenze - 04.07.2013  
EuroPython 2013

# <http://www.kivy.org>



# Perchè Kivy

**Diversi OS**

**GPU sempre più potenti**

**Input/Output/Sensoristica disomogenei**

# Cross Platform



# Cross Platform

OpenGL ES 2

**TUIO**

(Tangible User Interface Objects)

# Stato dell'arte

Kivy 1.8.0-dev

1. Win/Mac/Linux == OK
2. Android == abbastanza OK
3. iOS == in sviluppo ma usabile

# Android

<https://github.com/kivy/python-for-android>

<https://github.com/kivy/pyjnius>

<https://github.com/kivy/buildozer>

<http://kivy.org/docs/guide/packaging-android.html>

# Android

## PYJNIUS

```
>>> from jnius import autoclass  
>>> autoclass('java.lang.System').out.println('Hello world')  
Hello world
```

# iOS

[\*\*https://github.com/kivy/kivy-ios\*\*](https://github.com/kivy/kivy-ios)

[\*\*https://github.com/kivy/pyobjus\*\*](https://github.com/kivy/pyobjus)

[\*\*https://github.com/kivy/buildozer\*\*](https://github.com/kivy/buildozer)

[\*\*http://kivy.org/docs/guide/packaging-ios.html\*\*](http://kivy.org/docs/guide/packaging-ios.html)

# iOS

## PYOBJJUS

```
import ctypes  
ctypes.CDLL('/System/Library/Frameworks/AppKit.  
framework/Versions/C/Resources/BridgeSupport/AppKit.dylib')
```

```
from pyobjus import autoclass
```

```
NSAlert = autoclass('NSAlert')  
NSString = autoclass('NSString')  
ns = lambda x: NSString().initWithUTF8String_(x)  
alert = NSAlert().init()  
alert.setMessageText_(ns('Hello world!'))  
alert.runModal()
```

# Mac OSX / Windows

<http://kivy.org/docs/guide/packaging-macosx.html>

<http://kivy.org/docs/guide/packaging-windows.html>

# Hello World

(demo)

# Kivy Language

Linguaggio descrittivo

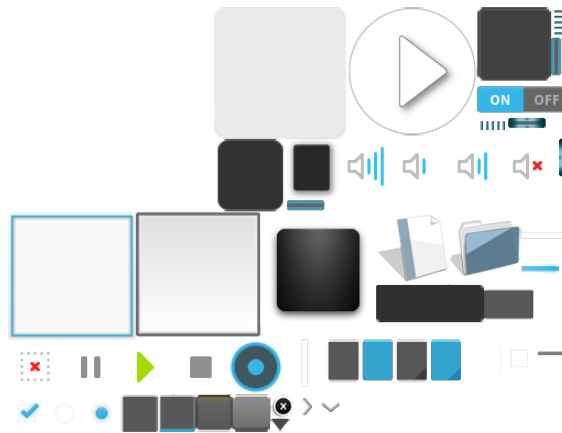
Separa design da logica

(demo)

# Atlas

# Texture Packaging

**(creazione temi)**



# Eventi

## Clock

`schedule_once()`, `schedule_interval()`, ...

## Input

`on_touch_move()`, `on_touch_down()`, ...

# Animazioni

## *Classe Animation()*

*Usata per variare le proprietà dei widget (pos, size, x, y, center, ...)*

*animazione = Animation(x=10)*  
*animazione.start(widget)*

**tip: AnimationTransition() = collezione di transizioni preimpostate (es: bounce)**

# Garden

<http://kivy-garden.github.io/>

Repository di widget e add-ons sviluppati  
dalla community

# Q&A

## Contatti

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