INTRODUCTION TO BEEWARE
(AND TOGA WIDGET DEVELOPMENT)

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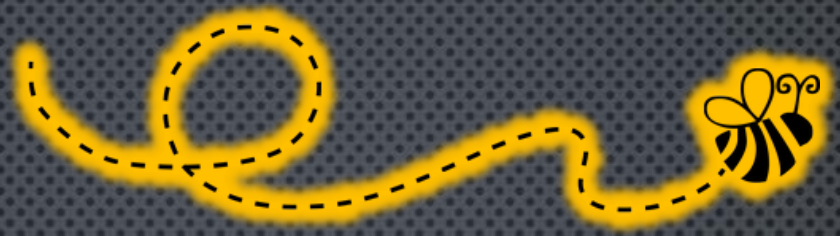
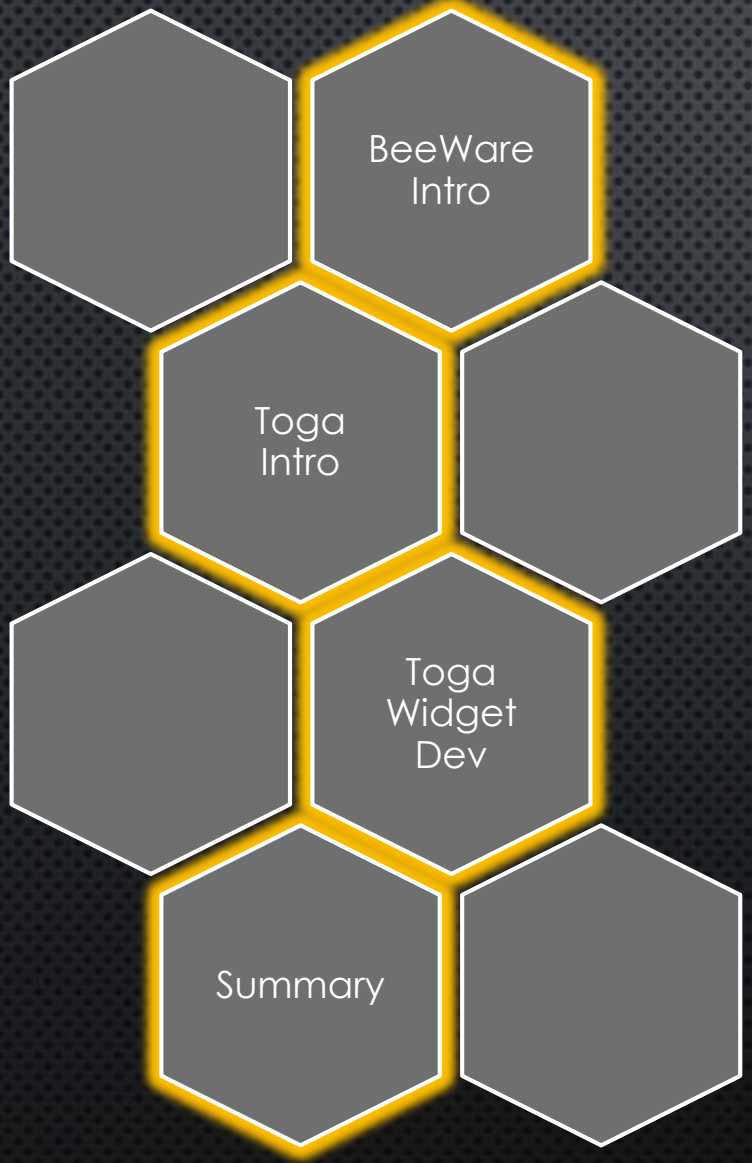
@WHATEVERGEEK

BEE PATH





A sharing based on my PyCon AU Sprint experience… ~ Paul

BEEWARE

collection of projects
that can be used to help
develop, debug and launch
Python software.

This includes:

- Tools to enable Python to run on different devices,
- Tools to package a Python project so it can run on those devices,
- Libraries to access the native widgets and capabilities of devices,
- Tools to help develop, debug, analyze and deploy these projects.

BEEWARE PROJECTS

Applications

Applications are standalone end-user application. Although applications are written in Python, this is an implementation detail - you shouldn't ever be aware of this fact. Applications are installed and run the same way as any other end-user application on your computer.


Tools

A tool is a special class of application that is installed into a Python virtual environment. Tools are used to assist when developing standalone applications, in roles from debugging and testing to packaging.

Libraries

Libraries are re-usable blocks of code that can be used in a project. Libraries will usually be installed as dependencies of tools, applications, or other libraries.


Bridges

A bridge is a combination tool & library that is used to run Python code where the CPython runtime cannot be used. The bridge provides the mechanism to run Python code in a different runtime environment.

Templates

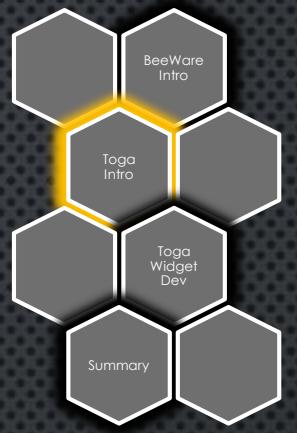
Templates are Cookiecutter configurations to generate the boilerplate code needed to get a Python project running as an application on a particular platform.

Support

Support projects are pre-packaged bundles of compiled artefacts that are needed to run Python on a particular platform.

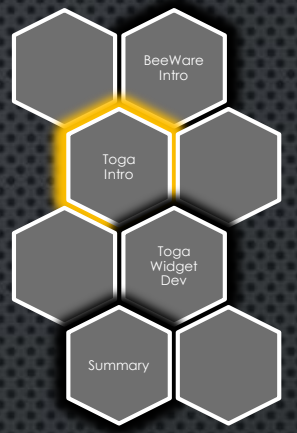
TOGA

A Python native,
OS native GUI toolkit.



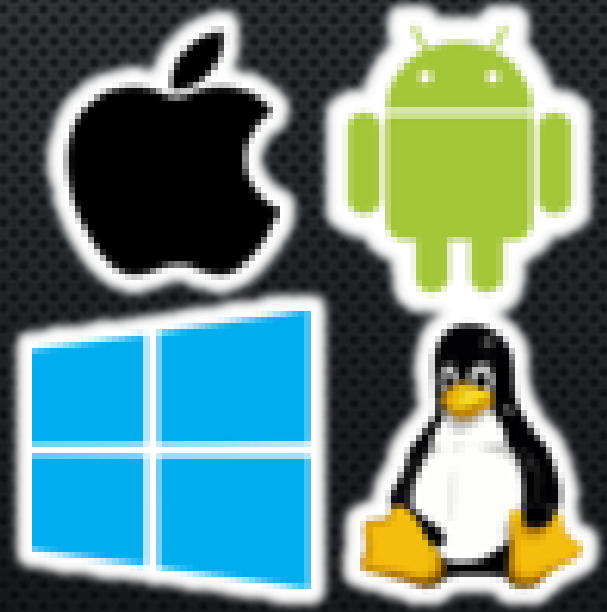
- *Native widgets - not themes*
- *Abstract the broad concepts*
- *Python native*
- *Embrace mobile*

TOGA



Supported Widgets by Platform

Component	iOS	win32	web	django	cc
`toga.interface.widgets.optioncontainer.OptionContainer`					✓
`toga.interface.widgets.numberinput.NumberInput`		✓			✓
`toga.interface.widgets.textinput.TextInput`	✓	✓		✓	✓
`toga.interface.widgets.progressbar.ProgressBar`					✓
`toga.interface.font.Font`	✓				✓
`toga.interface.widgets.box.Box`					✓
Image					✓



Reference: http://tinyurl.com/togawidgets

https://toga.readthedocs.io/en/latest/reference/supported_widgets.html

TOGA WIDGET DEV

DEMO

Reference: http://tinyurl.com/togadev
https://toga.readthedocs.io/en/latest/how-to/contribute.html

SUMMARY

- BeeWare
  - collection of projects that can be used to help develop, debug and launch Python software.

- Toga
  - a project under BeeWare which provides a Python native, OS native GUI toolkit.

How can I help?
http://tinyurl.com/helpingbee

IF TIME PERMITS…

DEMO: BRIEFCASE PACKAGING

python .\setup.py windows -s