Python on Mobile Phones

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Topics

- My Journey to Python on Mobile phones
- Why Python?
- Bootstrapping
- Future
**Motivation**

- ShakerRacer
- Mobiwiki
- Scribble
- Lottomat
Python on Mobile Phones

- Linux
  - Maemo - PyMaemo
  - Fremantle SDK
  - Diablo(OS2009) SDK
  - OpenMoko
- Android – **SL4A**
  - Makezine article
- iPhone OS
  - Cydia Packager
  - Telesphoreo Project
- Symbian - PyS60
  - Phone Supported
Open Source python on Symbian OS
Initial version is based on Python 2.2.2

Advantages
- Rapid applications development
- Access to lot of phone features

Drawbacks
- Limited UI capabilities of core libraries
Bootstrapping

* Download Files
  * Python S60 SIS files
    * Nokia
    * Samsung
  * SDK
    * Platform SDK for Symbian S60
    * Symbian i8910 Dev Pack

* SIS Files
  * PIPS for S60
  * Python S60 Interpreter - Python_2.0.0_symbian_signed
  * Python Shell - PythonScriptShell_2.0.0_unsigned_devcert_signed
Bootstrapping

- Emulators
  - Nokia
  - Samsung
- Symbian IDE – Carbide
- Interfacing to Phone
  - PC Suite
  - USB Console
  - Wiki Console
  - Bluetooth Console
- Configuration used for Demo
Writing Applications

- Hello World (First Application on PyS60)
- Demo
  - Standard Python Modules
  - Phone Info(sysinfo)
  - Input/Output/UI Components
  - SMS(Receive/Send SMS)
  - Telephone functionality
  - Camera(Picture/videos)
  - Network
## PyS60 Libraries

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<th>audio</th>
<th>calendar</th>
<th>camera</th>
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<td>sensor</td>
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<td>socket</td>
<td>sysinfo</td>
<td>telephone</td>
<td>topwindow</td>
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Deploying Apps

- Creating SIS Files
  - Self Signed
  - Symbian Signed

Source: PyS60 Documentation
Tools

- PyS60 Application Packager
- UnSIS
- DevCertRequest
- CreateSIS – MakeSIS, MakeKeys, SignSIS
- extSIS – Create/Browse SIS contents
Future

✿ What Next?
✿ For Developers
  ✿ Flash Lite + Python
  ✿ Qt for S60
  ✿ Python Extensions

✿ In Practice
  ✿ Project Phone sat
  ✿ Niime Project
    ✿ Industrial automation
    ✿ Motion controlled gaming
  ✿ Cellbots
Resources

-* Tutorials
  - Python on Symbian

-* Blogs
  - www.croozeus.com
  - http://gargidas.blogspot.com/
  - http://www.sajisoft.net.ms/

-* Forums
  - Nokia Forum

-* S60 Module Reference
Thanks

Journey Continues…