

Babiloo

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1 Intro

The objective of this module is creating a graphics user interface that emphasizes simplicity and lightness. As development focuses on keeping weight down to a minimum, only the most essential features are implemented. It should be simple to use, requires few libraries and starts up quickly.

The main target is the openmoko Freerunner cellphone (<http://www.openmoko.org>) and secondly the netbook.

If you need a full-features program, you have to use the QT interface.

2 Installation

2.1 Neo frerunner

- Download from the Web a dictionary (e.g. <http://sourceforge.net/projects/stardict/files/stardict-dictionaries-dictd/>)
- Unzip the dictionary (e.g. `bunzip2 stardict-longman-2.4.2.tar.bz2` then `tar xvf stardict-longman-2.4.2.tar`)
- Optionally, download and unzip a sound dictionary (e.g. from <http://sourceforge.net/projects/stardict/files/> the WyabdcRealPeopleTTS section)
- `opkg install babiloo_xxx_neo.ipk`
- Adjust the configuration file `/usr/share/babiloo/efl/config.cfg`, following the examples inside the file

2.2 Desktop

2.2.1 Ubuntu 9.04

- Configure the opengeu repository:
http://opengeuwiki-en.intilinux.com/index.php?title=How_to_install_Opengeu_9.04_Alpha_from_packages
- Install babiloo (it requires `python-efl-elementary`)
- Launch `babiloo -e` (e switch launches the EFL interface, QT is the standard interface for desktop)

2.2.2 Elive

- Install babiloo in Elive (<http://www.elivecd.org/>)
- Launch `babiloo -e` (e switch launches the EFL interface, QT is the standard interface for desktop)

2.2.3 OzOs

- Install `python-elementary` from SVN
`svn co http://svn.enlightenment.org/svn/e/trunk/BINDINGS/python`
- Install babiloo
- Launch `babiloo -e` (e switch launches the EFL interface, QT is the standard interface for desktop)

3 Source code

bzr branch lp: vaudano/babiloo/efl

3.1 Package

Make a package, create the debian directory with the correct files, then:

```
dpkg-buildpackage
```

4 Changelog

4.1 First milestone

Babiloo version 2.0.9

Bazaar revision: 272

Release date: 16 September 2009

- GUI fits for Neo freerunner and EFL desktop (especially Netbook)
- Dictionaries configuration in a file (efl/config.cfg)
- Voice capability

4.1.1 Screenshots

Figure 1 SHR main screen, with SHR-simple theme and SHR-Simple elementary theme.

4.1.2 Performance

Rev	Dictionary name	Dict type	Size	Words	PC	Neo
272	stardict-longman-2.4.2	stardict	6.8 Mb	43K	4.22 sec	452.63 sec
272	Oxford English Collocation	stardict	2.0 Mb	8K	0.75 sec	76.07 sec
272	Collins Cobuild advanced...,4th	sDictionary	9 Mb	40K	0.65 sec	93.91 sec
272	Wikipedia en 2007-01-03 (simple)	sDictionary	9 Mb	18K	0.54 sec	74.57 sec
272	Englis-italian dictionary	sDictionary	2 Mb	33K	0.49 sec	70.74 sec

4.2 Second milestone

Babiloo version 2.x.x

Bazaar revision: xxx

Release date: ??? 2009

- Bug fixing
- Configuration via GUI
- Performance improvements

4.2.1 Screenshots

TODO

4.2.2 Performance

TODO

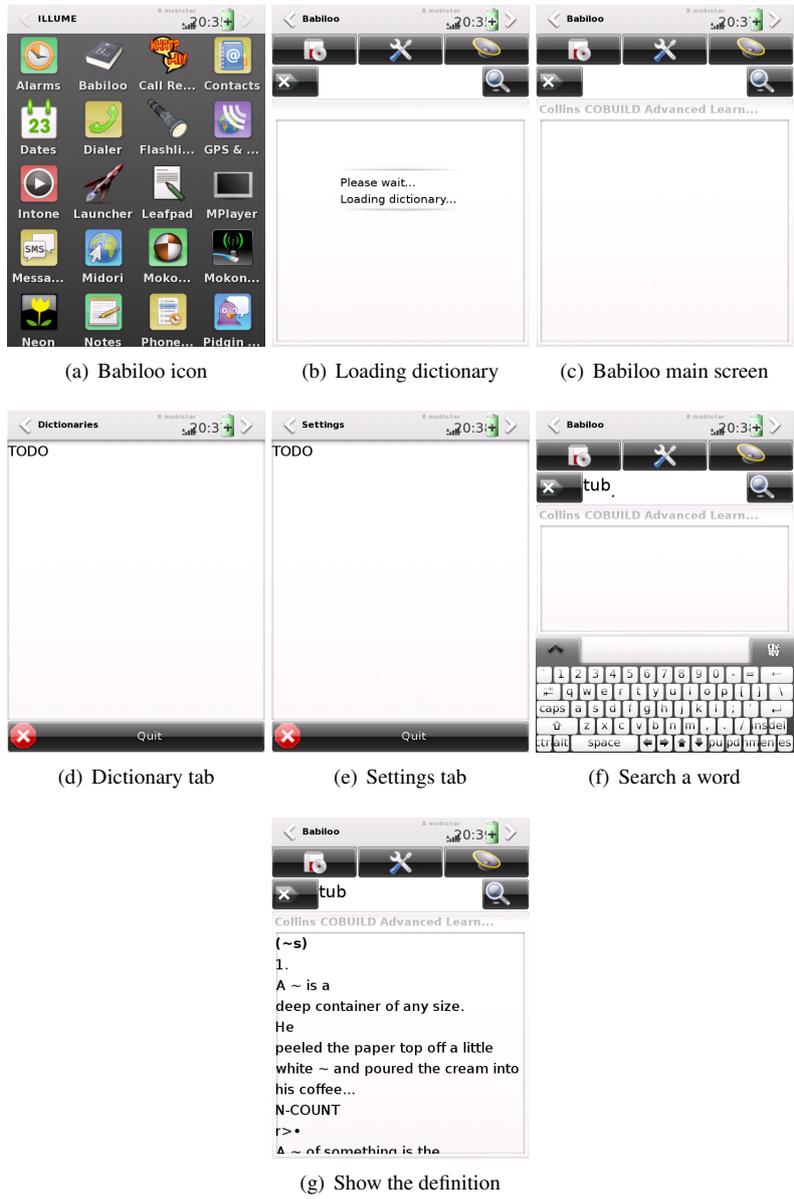


Figure 1: Babiloo EFL first milestone

5 Planning

5.1 Library

The first thing to choose is the python GUI library. Finally my decision is to use the Enlightenment Foundation Library (EFL) due his performance and because it fits very well with the embedded devices.

But also in the EFL world there are many choice:

1. Evas / edje
(<http://trac.enlightenment.org/e/browser/trunk/BINDINGS/python/python-edje>)
2. python-elementary
(<http://trac.enlightenment.org/e/browser/trunk/BINDINGS/python/python-elementary>)
3. python-terra
(<http://code.openbossa.org/projects/python-terra>)
4. guarana
(<http://profusion.mobi/node/10>)

Among these solutions I discarded guarana because it doesn't have python bindings and evas / edje because python-elementary is born on top of it just for rendering the things simpler and it's more embedded devices oriented, especially touch screen.

Therefore after the reply in the e-devel mailing list

(<http://www.mail-archive.com/enlightenment-devel@lists.sourceforge.net/msg21290.html>)

I decided to use:

- elementary as a widget set
- python-terra if I need some MVC logic (for e.g. for the file selector not implemented yet in the elementary library)

5.2 Milestones

5.2.1 First milestone

- Improve the GUI
- text size
- adjust the interface for working well on Neo and on desktop
 - enable / disable Illume keyboard on Neo, do nothing on desktop
 - scaling correctly the icon on Neo and on desktop
 - wrap line different constant value for Neo and desktop
- Empty windows for Settings and Dictionaries
- Link babiloo core:
 - EFL switch in the command line
 - Install all the babiloo core dependencies in Neo
 - * python-compression: gzip, zipfile, tarfile

- * python-misc: platform, user
- * python-netclient: mimetypes
- Message popup for babiloo-core error (like error during perform the search)
- Nicer file structure (gui, controller, model)
- Load database
 - constant in a configuration file
 - Configuration file not present error
 - Dictionary file not present error
- Link the GUI to the word search logic
- Voice capability
- Openmoko package
 - Same process than deb package (we can skip qt and s60 directories and use the correct command line switch for launching it)

5.2.2 Second milestone

- Improve the GUI
 - Entry lost input data when switch between application
- Start the program without database, it should show warning not error
- Change configuration format: use cPickle
- Set SINGLE database:
 - he user clicks on the dictionaries icon
 - the user changes the dictionary value via file selector widget and confirms
 - the program in the 'Dictionaries tab' shows the selected dictionary
 - after the user confirm the choice:
 - * the program sets the dictionary in the config file
 - * the program closes the 'Dictionaries tab' and shows the 'loading dictionary...' frame
 - * the program calls babiloo core passing the file
 - test on Neo
- Set sound dictionary:
 - like single database
- Settings, player
 - like single database
- About page

- Performance problem for StarDict dictionary (due to the auto sorting feature)

```

Loading /home/root/babiloo/stardict-longman-2.4.2/longman.dict.dz ...
(Stardict) type detected
Dictionary loaded in 452.63 sec

```

- Desktop package (merge trunk repositories with efl branch then add efl directory in the control file)

5.2.3 Third milestone

- Load MULTI databases:
 - the user clicks on the dictionaries icon
 - the program shows a table with all the available dictionaries and the default one
 - the user can change the default one -> program saves it on the config file
 - the user clicks on add icon
 - the program opens a file selector widget
 - after the user selected a dictionary the program calls babiloo core passing the file
 - if everything go smoothly, returns to the dictionary table with a new row and selected as default
 - the program adds the dictionary to the config file
- Try to take off python-misc dependency ?
- HTML rendering ?
- GUI localization
- Progress bar (need Enlightenment rev43106)

5.2.4 Out of target

- Multi dictionaries capability
- Word search filter (using elementary hover)