PHP Bindings to the GNOME Platform

Deliverables

Required

1. Creation of the 'gnome-php' package that will provide PHP language bindings to the following libraries: GConf, Gnome, and GnomeCanvas.

2. Creation of the 'gnome-php-extras' package that will provide PHP language bindings for the following libraries: libEgg (trayIcon only), libGDA, GnomeApplet, GtkSpell, GTop, NautilusBurn, WNCK, GtkMozembed, GtkSourceView and libGKsu.

3. Integrate PHP-GTK 2 (along with the new bindings, excluding the non-GNOME platform bindings, i.e. gnome-php-extras) with the upcoming GNOME bindings release set as a separate module, proposed to be included in GNOME 2.18

Optional

1. PHP bindings to GnomeVFS. An attempt will be made to bind GnomeVFS, including the async API.

2. Non-Code deliverables will include usage example scripts and documentation for all the libraries mentioned above.

Justification for the choice of packages and more information about this proposal can be found at: http://www.kix.in/soc/gnome-php.html

Project Details

The project will be based on PHP-GTK 2, the existing PHP language binding to Gdk, Gtk, Pango and Atk. Although PHP-GTK 2 is currently based on Gtk+ 2.6, I will undertake upgrading it to 2.8 as required.

PHP-GTK 2 has has the ability to support extensions that add some functionality to it. This feature will be used to develop bindings to the various libraries mentioned in the deliverables.

I have already developed bindings for GtkMozembed and GtkSourceView as extensions to PHP-GTK 2:

http://cvs.php.net/viewcvs.cgi/php-gtk/ext/sourceview/
http://cvs.php.net/viewcvs.cgi/php-gtk/ext/mozembed/

The libraries listed in the required deliverables will be attempted first. GnomeVFS is listed as an optional deliverable because it has a huge API and it may not be possible to completely wrap it within the Summer of Code time-frame.

The packages will conform to the GNOME platform bindings and release cycle requirements and will integrate PHP-GTK 2 with the GNOME platform bindings release set for the

upcoming version of GNOME. Although, this proposal may not be in time for the TwoPointFifteen schedule (since the last date for a new module proposal was April 24th), an effort to include the project's result in GNOME 2.18 will be made in accordance to the TwoPointSeventeen schedule.

Project Schedule

The project is planned to be split across 6 major Phases:

1. **Analysis** (May 23 - May 31):
    This phase involves interaction with the mentor and the key people involved in similar projects (maintainers of pyGTK, gtkmm etc) in order to exactly understand the requirements. The GNOME Platform binding rules and release cycle requirements will also be studied in detail during this phase. Project infrastructure (CVS Repository, Website etc.) will also be setup.

2. **Development Part I** (June 1 - June 15):
    This phase will involve the up-gradation of PHP-GTK 2 to bind Gtk+ 2.8, instead of the current version (2.6).

3. **Development Part II** (June 16 - July 10):
    The core development phase where the bindings to the primary GNOME libraries will be implemented. This includes GConf, Gnome, and GnomeCanvas.

4. **Development Part III** (July 11 - July 25):
    Implementation of bindings to the non-gnome platform libraries: libEgg (trayIcon only), libGDA, GnomeApplet, GtkSpell, GTop, NautilusBurn, WNCK, and libGKsu. Although the GtkSourceView and GtkMozembed bindings have already been prepared, they will be reviewed again at this point.

5. **Packaging** (July 26 - August 5):
    Prepare PHP-GTK 2 along with the newly developed bindings for inclusion as a module in the GNOME platform bindings release set for GNOME 2.18

6. **Testing and Wrap-Up** (August 6 - August 21):
    Thoroughly test every aspect of the finished package. This phase will also include the development of non-code deliverables: example scripts and documentation. Small feature requests may also be added at this stage in addition to fixing any bugs that may be reported/encountered.