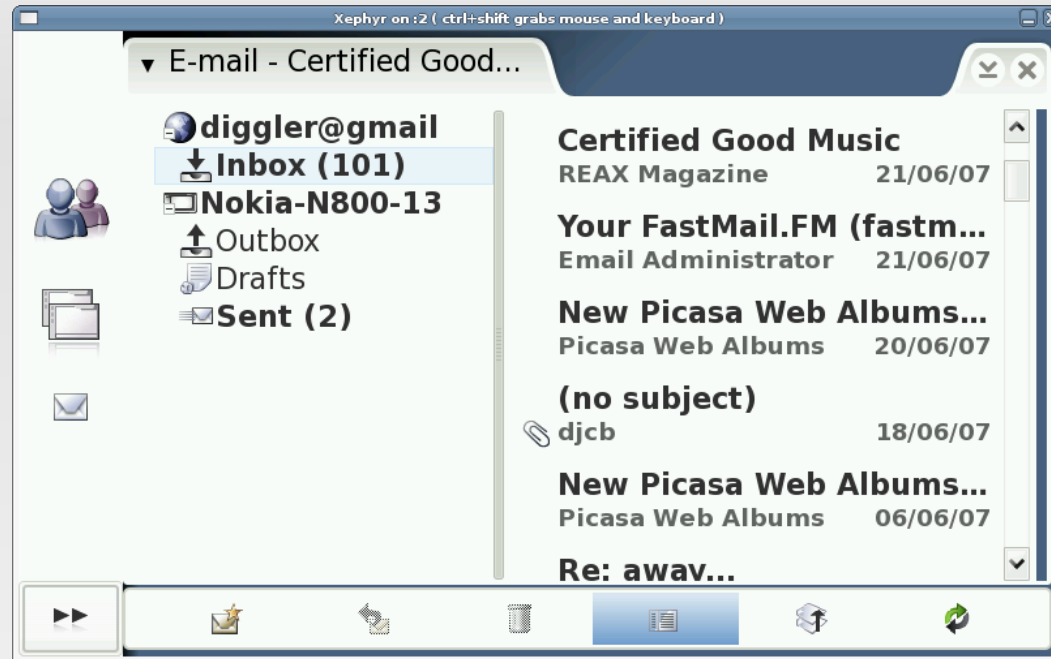


modest



a modest e-mail client

<dirk-jan.binnema@nokia.com>

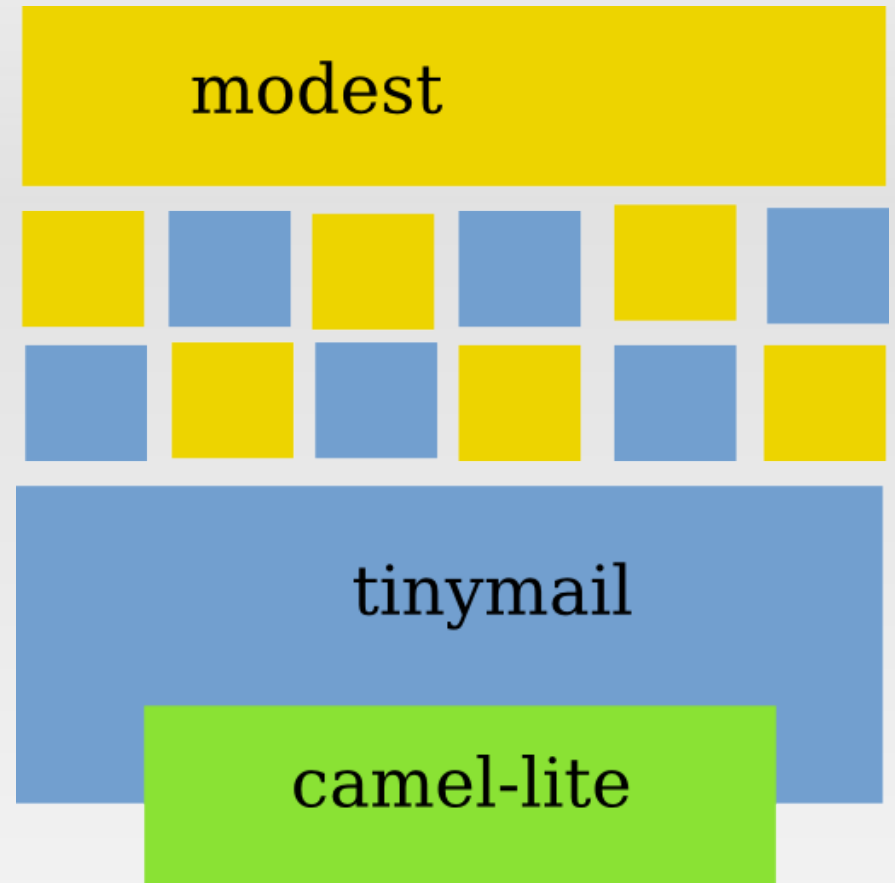
overview

- modest, the free mobile mail client
- optimized for humans
- technical background
- UI innovations



high level design

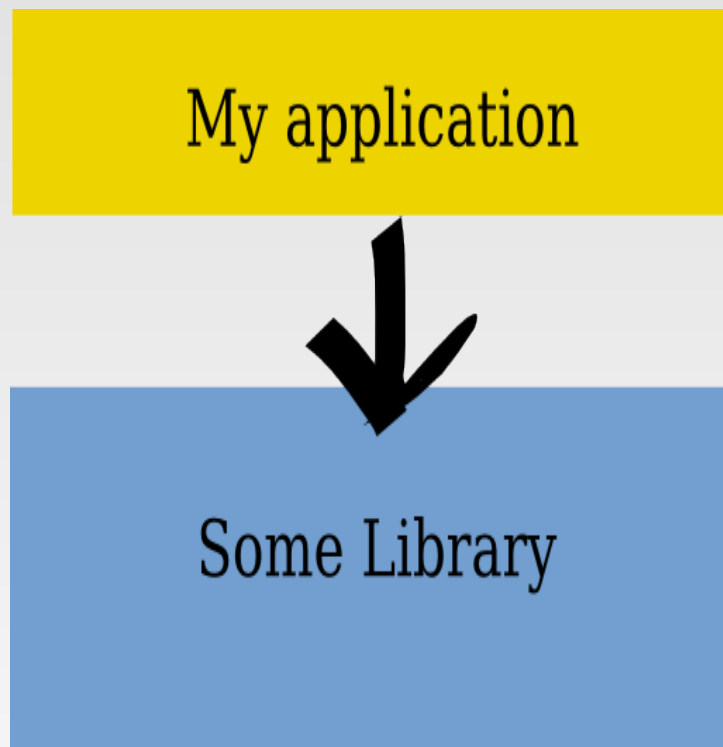
- Hildon¹/GTK+
- tinymail
- libcamel, camel-lite



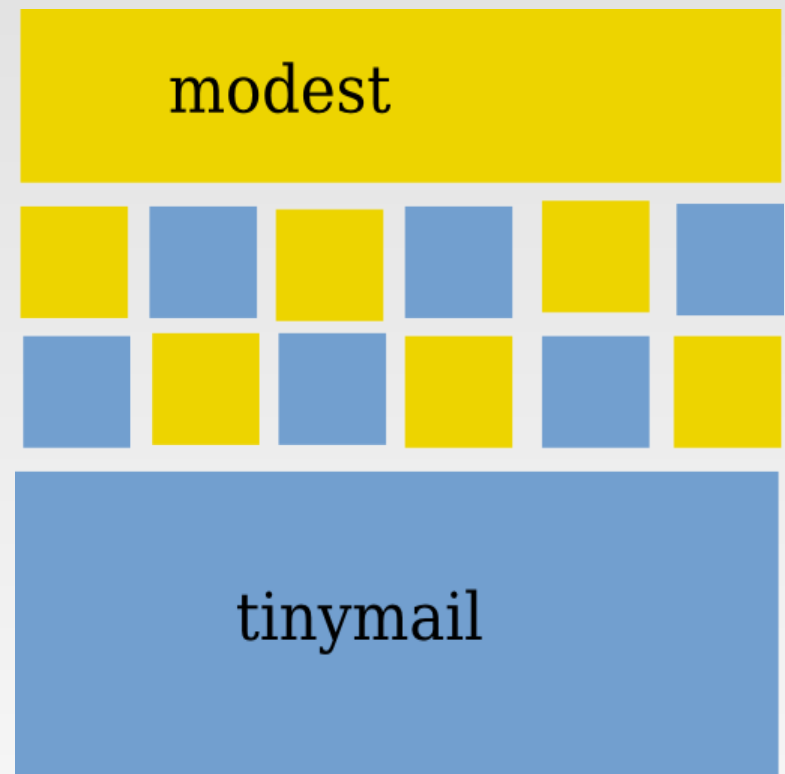
1: "**Hildon**" is a GTK+ extension library for Internet Tablets. Cfg. gnome-ui

tinymail: not a library

- classical library



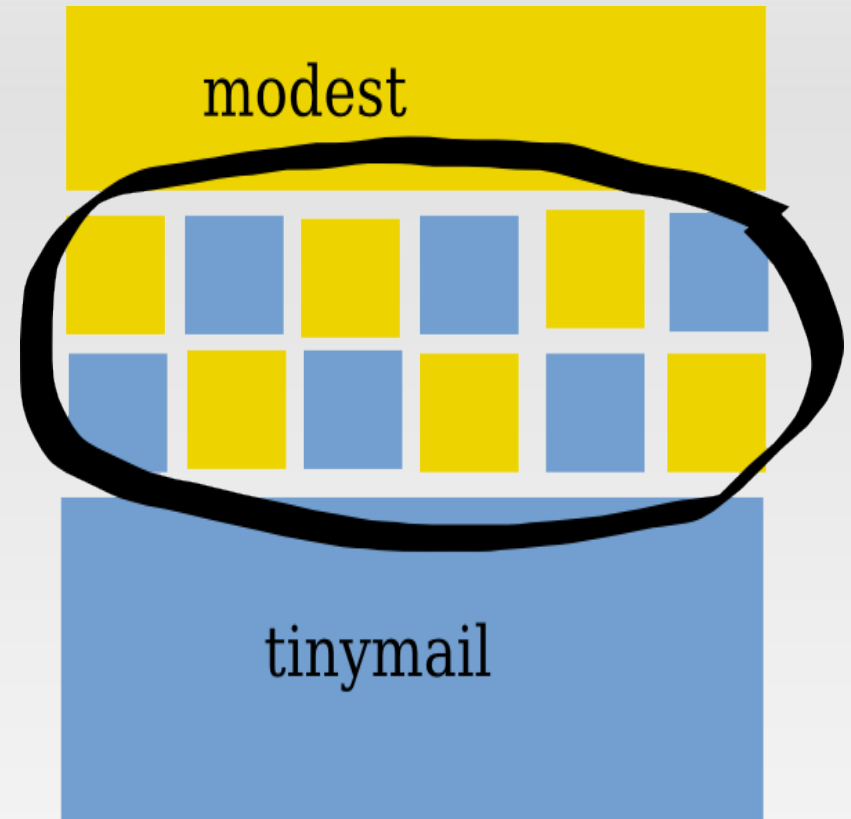
- framework / interfaces



<http://www.tinymail.org>

tinymail is a framework

- tinymail specifies interfaces
- your app implements these interfaces
- you call tinymail, tinymail calls back



example: the account store

- an account store is an object that holds email accounts
- modest implements its own 'account store'
- tinymail is happy with that, as long as modest implements:
 - `tny_account_store_get_accounts`
 - `tny_account_store_alert`
 - ...

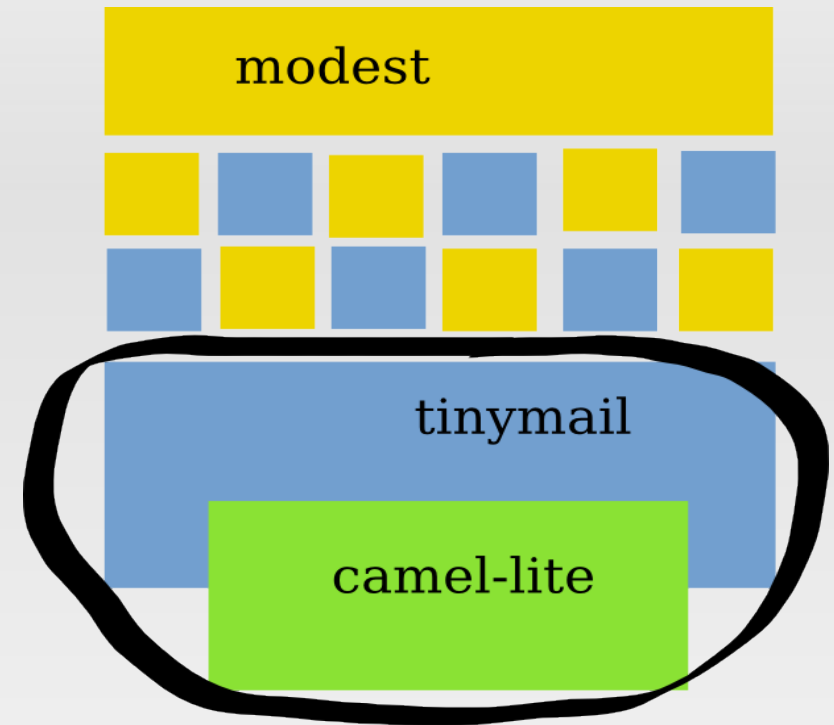
interfaces: hmmm...

- powerful and flexible
- require more learning time
- with gtk+ and threads, it's not easy...

```
(gdb) thread apply backtrace
```

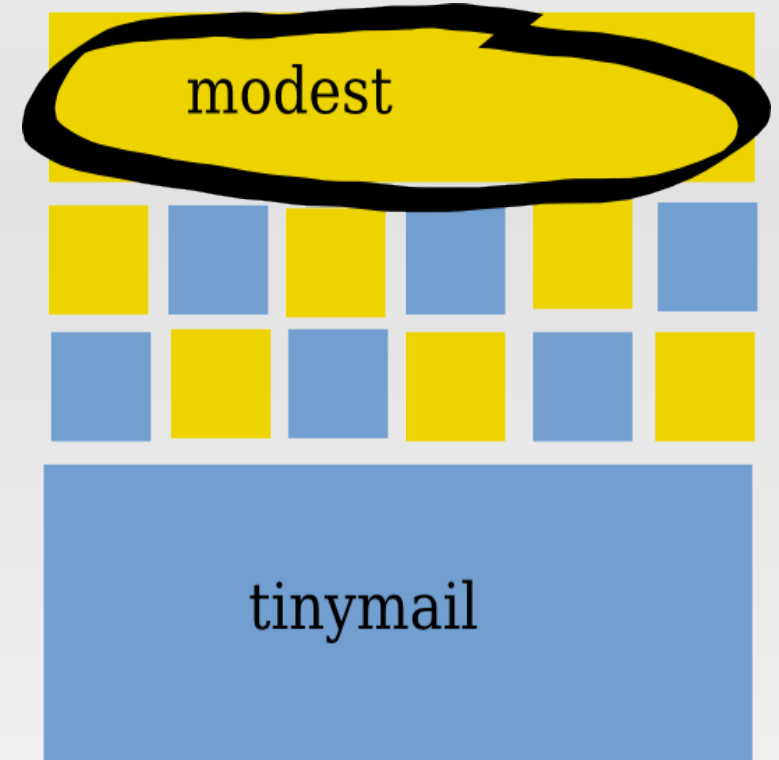
tinymail as protocol library

- camel-lite
- uses much less memory
- headers-only
- imap-idle
- attachment purging



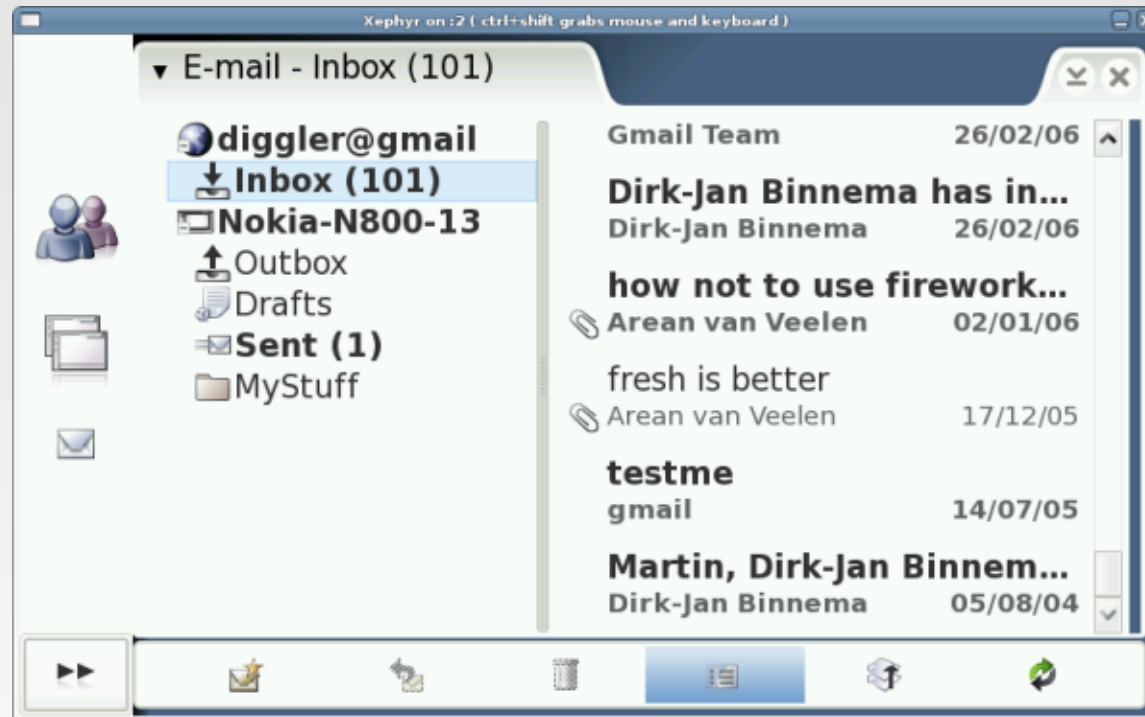
modest itself

- mobile email is hard
- screens are small
- data entry is hard
- bytes are expensive



thumbs up

- don't require stylus
- make it big



account setup is hard

- Example: **gmail**
- server name (hmm...
pop.gmail.com?)
- ssl? tls?
- port number? 995?
- #*\$^&?!?
- now repeat for smtp
- smtp?!?
- **i give up!**



account setup for dummies people with better things to do (1/4)

Account setup : Welcome



Account setup wizard allows you to define e-mail accounts for use on your device.
Tap 'Next' to continue.

Finish

Previous

Next

Cancel

account setup for dummies people with better things to do (2/4)

digg | **Inbox**

Account

Select your country below

Country: AIM
AOL
Gmail
Lycos Mail
Hotmail
Yahoo Mail Plus
Other...

Service provider: Other...

Account title*:

account setup for dummies people with better things to do (3/4)

Account setup : User details

Name:

User name*:

Password:

E-mail address*:

account setup for dummies people with better things to do (4/4)

Account setup : Complete



Account setup is complete.

Tap 'Finish' to save or 'Cancel' to discard the settings. You can edit these settings via 'Tools > Accounts...' from the menu.

Finish

Previous

Next

Cancel

limit thy bytes

- headers-only
- limit number
- limit size



just what i want

POP account settings for diggler@gmail

Account User info Incoming Outgoing

Select your country and service provider from the list below

Account title*: diggler@gmail

Retrieve*: Headers only

Retrieval limit*: Last 50 messages

Leave messages on server*:

so far so good so what

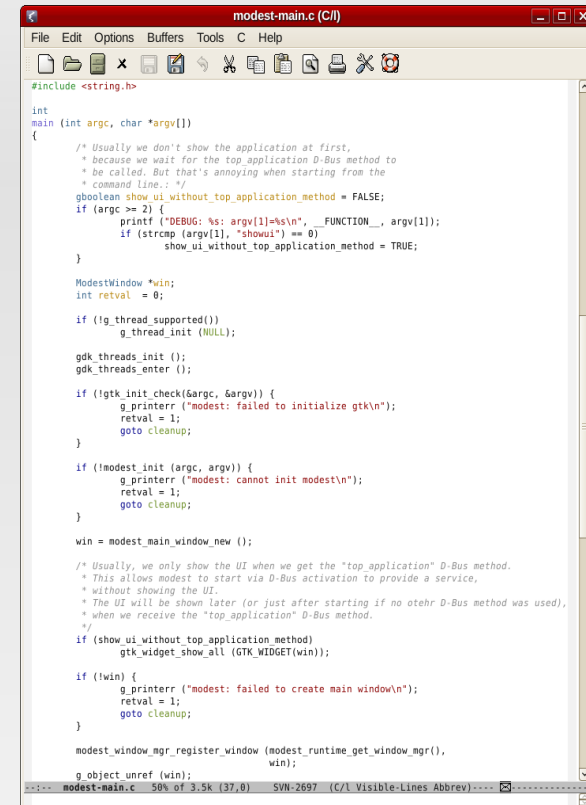
- feature complete
- POP3, IMAP4, SMTP, SSL/TLS
- headers-only
- IMAP folders, IDLE, ...
- rich text editor
- UI for N800¹ and Sardine²

1: N800: most recent Nokia Internet Tablet, <http://www.nokia.com/n800>

2: Sardine: development version of the Internet Tablet SDK

development continues

- alpha-ready
- work to do
- </bugs>



```
modest-main.c (C/1)
File Edit Options Buffers Tools C Help
#include <string.h>

int
main (int argc, char *argv[])
{
    /* Usually we don't show the application at first,
     * because we wait for the top application D-Bus method to
     * be called. But that's annoying when starting from the
     * command line. */
    gboolean show_ui_without_top_application_method = FALSE;
    if (argc >= 2) {
        printf ("DEBUG: %s: argv[%d]=%s\n", __FUNCTION__, argv[1]);
        if (strcap (argv[1], "showui") == 0)
            show_ui_without_top_application_method = TRUE;
    }

    ModestWindow *win;
    int retval = 0;

    if (!g_thread_supported())
        g_thread_init (NULL);

    gdk_threads_init ();
    gdk_threads_enter ();

    if (!glib_init_check (&argc, &argv)) {
        g_printerr ("modest: failed to initialize gtk\n");
        retval = 1;
        goto cleanup;
    }

    if (!modest_init (argc, argv)) {
        g_printerr ("modest: cannot init modest\n");
        retval = 1;
        goto cleanup;
    }

    win = modest_main_window_new ();

    /* Usually, we only show the UI when we get the "top_application" D-Bus method.
     * This allows modest to start via D-Bus activation to provide a service,
     * without showing the UI.
     * The UI will be shown later (or just after starting if no other D-Bus method was used),
     * when we receive the "top_application" D-Bus method.
     */
    if (show_ui_without_top_application_method)
        gtk_widget_show_all (GTK_WIDGET(win));

    if (!win) {
        g_printerr ("modest: failed to create main window\n");
        retval = 1;
        goto cleanup;
    }

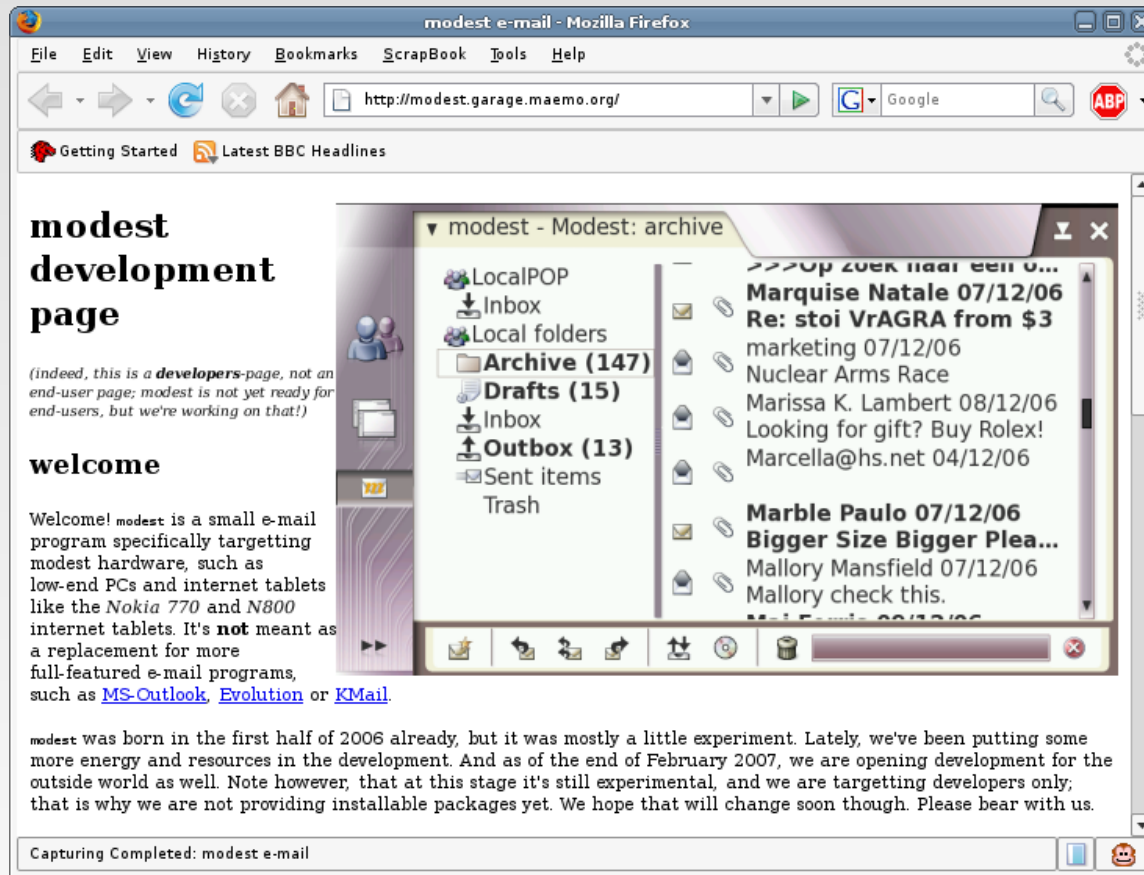
    modest_window_mgr_register_window (modest_runtime_get_window_mgr(),
                                       win);

    g_object_unref (win);
}
----- modest-main.c 50% of 3.5k (37,0) SVN-2697 (C/1 Visible-Lines Abbrev) -----
```

```
% find ~/src/modest/ -name '*.c' -exec grep -i FIXME \{\} \; | wc -l
```

show me the code

http://modest.garage.maemo.org



parting thoughts

- big thanks to all involved
- getting better every day
- free as in "Free Willy"
- works on Bora (N800), Sardine
- porting to other Hildon easy
- contains lots of interesting code

maemo » code in your hands



igalia
Free Software Engineering

Openismus

Tinymail

questions

