concept of design document

Mobile Widget
Alarm Clock

little springs design

September 12, 2008

Versions

Only published versions are listed in this log. Numerous internal revisions are created to carry out changes between published versions, but those changes are not tracked individually.

12 September 2008	Initial release

A Design Guidelines > i Problem Statement

The user seeks a mobile widget alarm clock.

Why?

Alarm clocks are generally difficult to use, have varying UI models, and often are difficult to read.

Mobile phone alarm functions are difficult to set up, often inducing errors (wrong time or no notification sounds for a set event).

Generally, built-in mobile functions such as alarms are becoming more hidden as the featureset increases. Finding, much less using, an alarm function on a modern mobile often involves resorting to the manual.

Local news radio is set up to support user needs by broadcasting important news, weather, traffic and other items that may be important to carrying out immediate-on-waking tasks.

Mobiles cannot generally present this information and cannot fire it based on alarms. Additionally, the spoken-word format requires waiting for the complete cycle (often15 minutes) to get a single set of information.

A Design Guidelines > ii Morphology

The widget should be:

Coherent & discoverable	Users must be made aware of the boundaries, scope and meaning of the widget, the information presented by the widget, and the functions and controls of the widget.

A Design Guidelines > iii Design Objectives

- The widget will be visible on the idle screen whenever in any active state, including set and waiting to fire (within a certain time)
- Setting times and dates for alarms should be as easy as possible, with assistance, predictive default values and immediate feedback of change
- Setting recurrance should be easy
- Multiple alarms can be set, but it should not replace the functions of a calendar
- Alarms have one time only; no “end time” for the event is set
- Errors should be avoided whenever possible; disable or disallow functions (including value selections) that are out of range and will cause errors
- When sounding, visible components of the alarm must be viewable to the user without other actions (aside from physical manipulation of the device); no button pushes should be required to load the news crawler or weather icon
- Data to be shown with the alarm should be loaded sufficiently in advance of the alarm that they are available for use without delay
- Fields with limited entry modes (e.g. numeric-only) will be locked to that input mode
- When not in conflict with specific widget functions, device standards (such as entry mode indication and switching) will be available
- When sounding, the screen should be high contrast but have overall low light output. It must be read in all conditions, but especially in dark rooms, without glasses, etc.
- When changing time zones (travelling) the user will be offered a choice of original absolute time, or same time in the new time zone

A Design Guidelines > iv Key Features

Setup
- No personal information should be gathered about the user during installation or setup
- If available, use location to determine the user's time zone, and likely daylight-saving/summer time offsets that may be applied
- Allow easy user selection of time zone (e.g. country and zone name, not just GMT offset) and daylight-saving/summer time application
- The user may choose to have the alarm go off alone, or add other services to be presented with the alarm
- Additional services may be built as related widgets, instead of being contained within the alarm widget; within this document, included features will be referred to as a single widget, however.
- The user may set whether local weather is their home weather or weather at the device's current location
- The user may choose several "favorite" audio sources to be played on alarm: built-in alarm sounds, device alarm sounds, device-resident audio files (e.g. MP3) or feeds (podcasts, streaming audio)
- Podcasts and streaming audio may be selected from a list of common national sources (e.g. NPR), from location stations via an existing repository listing (last.fm?) or may be entered by the user as a feed URI
- Set the effect (dismissal of audio and visible notifiers) of snooze and wake

Set or change alarm
- An immediate facility for adding a new event will be provided
- An easy method of setting the alarm time will be provided
- Alarms can be labeled to differentiate them, but labelling is not required
- Additional reminders can be entered, and marked as one-time or kept for all subsequent alarms
- Alarm times will be preset to the last used time; if none, select a likely time
- Recurrance will be easily set; assume weekdays, but allow others as well
- The alarm type will be pre-set to the last one used, but any can be picked from a "favorites" or pre-configured list (see setup)

Pending alarms
- Any alarm pending in the next 24 hours (time TBD) should be visible on the idle screen, and selectable to view details and modify it

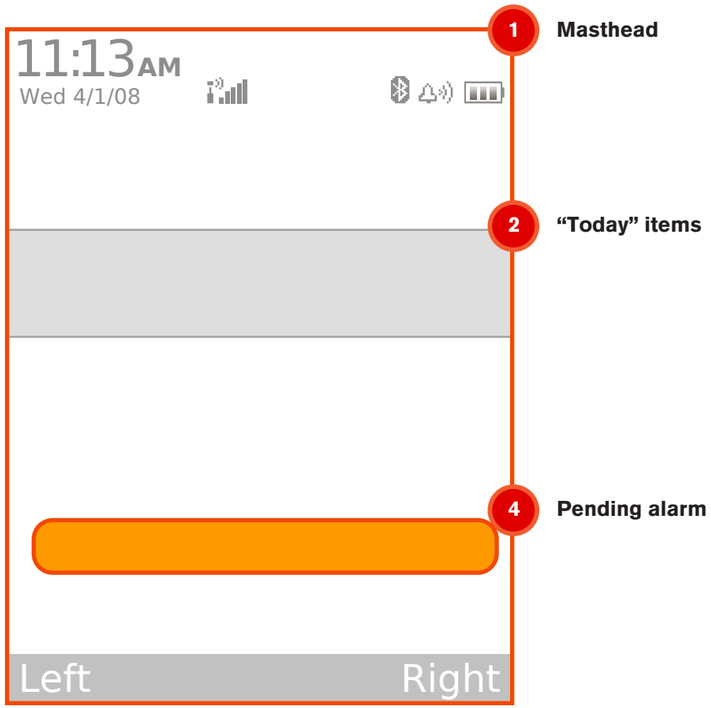
Alarm firing
- Data required for display at alarm time will pre-load, based on estimated or past size
- Visible display elements will load shortly before the alarm time
- At alarm time, the device will wake (light up) and sound the seleted alarm tone

Options on wake
- Snooze, with rapid scroll through pre-set times (10, 20, 30, 60)
- Cancel alarm – with optional cancelguard and method to un-cancel
- Change alarm – default focus on time
- A link to view/edit the alarm. Selecting this will silence the alarm notice. On softkey devices, this will be in focus
- View information in detail – depends on user selection, weather, calendar items, etc.
- When dismissed, items remain on screen and a softkey allows exiting the widget display
- When snoozed, items remain on screen, and available for glancing

B High Level Interaction Design > i Information Design

1 Pending alarms

- Pending alarms are visible on, and selectable from the idle screen
- When available and practical, the alarm item will be visible in the “today” items,
- Otherwise, an independent widget display item will be present on the screen, and may be selected

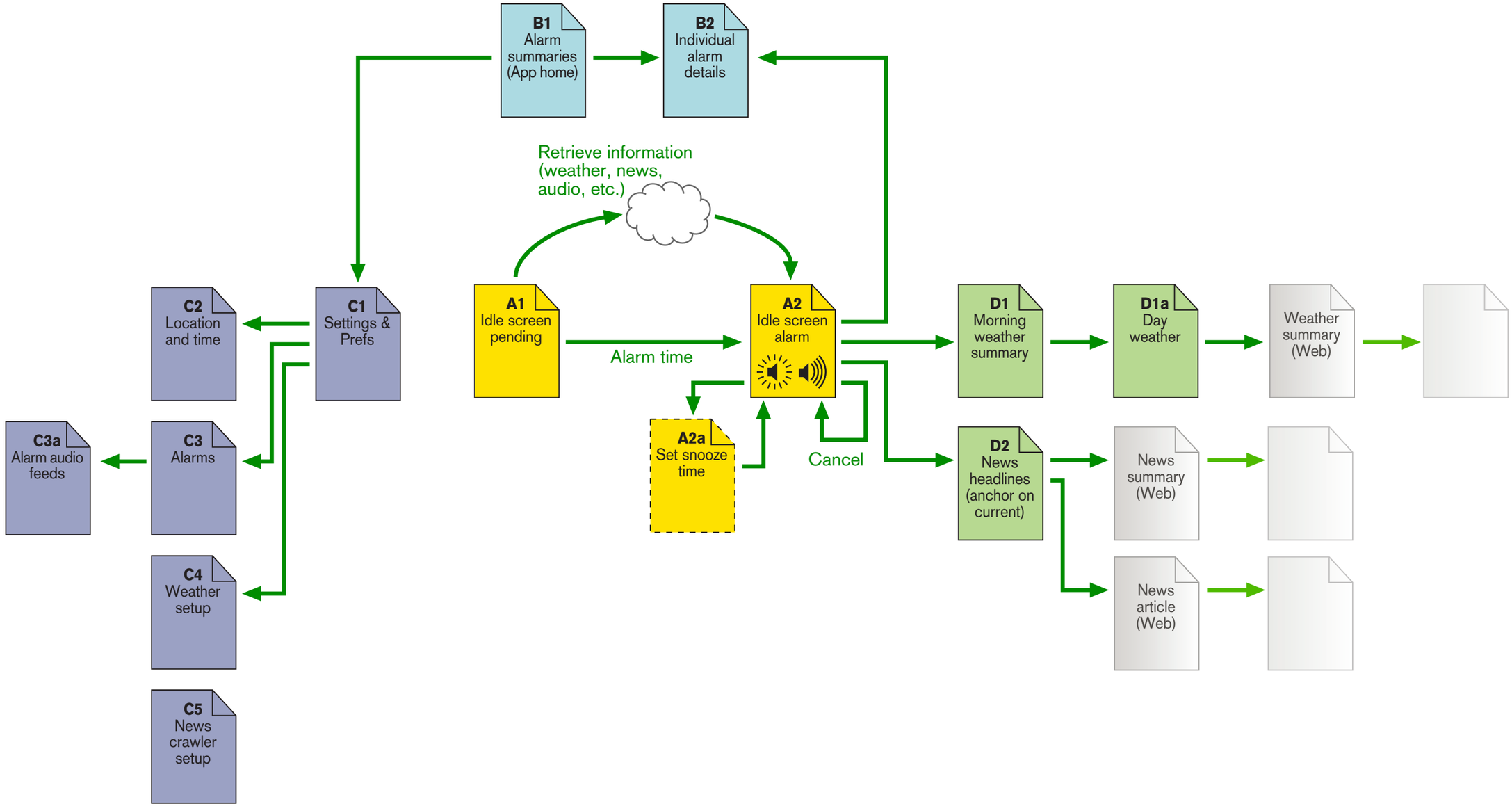


2 Alarm firing

- If selected by the user at setup, an icon will appear on the screen, showing the weather for the selected morning and location
- A text box will appear on the screen. It contains a link to the alarm details, and may contain information on any audio feed currently playing, and a news scroller, if either are selected at setup
- For softkey devices, the cancel and snooze functions will take over the default functions
- Non-softkey devices will offer the same functions in the text box

Gray represenst items extant on the device, which are unaffected by this product

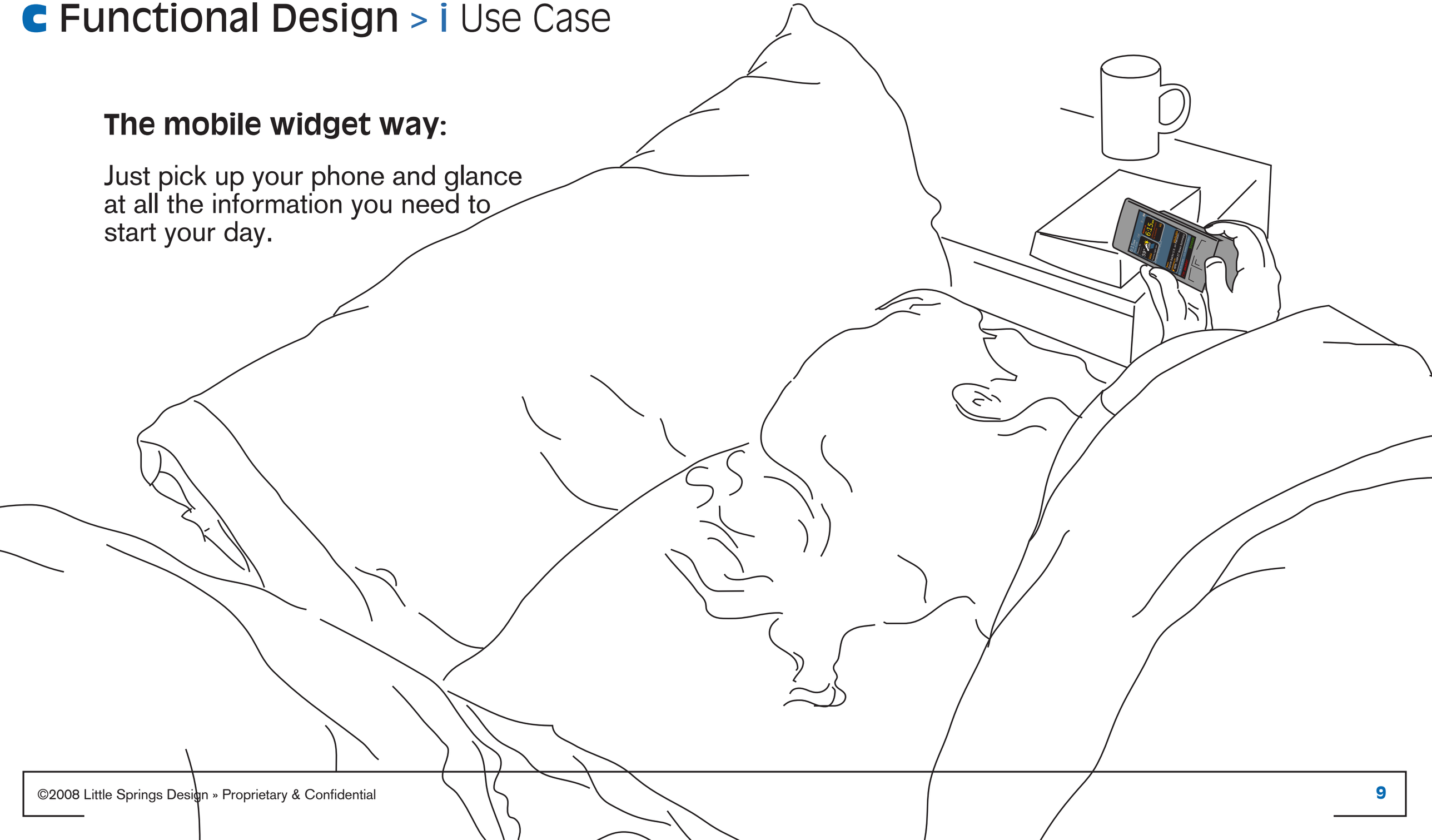
B High Level Interaction Design > ii Process



Functional Design > i Use Case

The mobile widget way:

Just pick up your phone and glance at all the information you need to start your day.



C Functional Design > ii Detailed Designs

1 Pending alarms

- Depicts the pending alarm not in the “today” area
- Branded sense is preserved, with color and shape similar to the alarm state
- When available, allow direct selection to edit alarm; if not, remove link to edit and user must find application themselves

2 Alarm firing

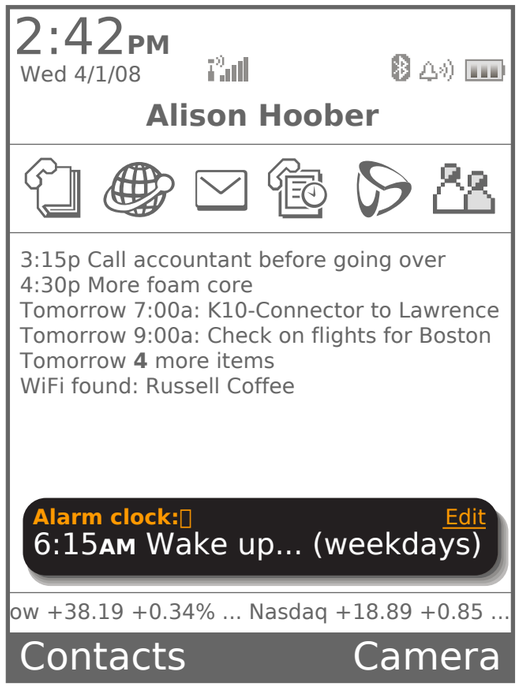
- Moments before the device emits sound (whether alarm tone or audio playback) all visible widget items will load, and then the screen will light up
- The screen is designed for maximum readability, even without glasses, in the dark; overall light output is as low as practical through use of dark backgrounds
- Individual elements are visually separated, but can be freely scrolled between; the default idle screen may be inaccessible (as shown) or these may share space with other widgets on the idle screen
- The two primary functions (cancel alarm and snooze) are immediately accessable; If softkeys are not available, use large, obvious buttons with similar labeling.

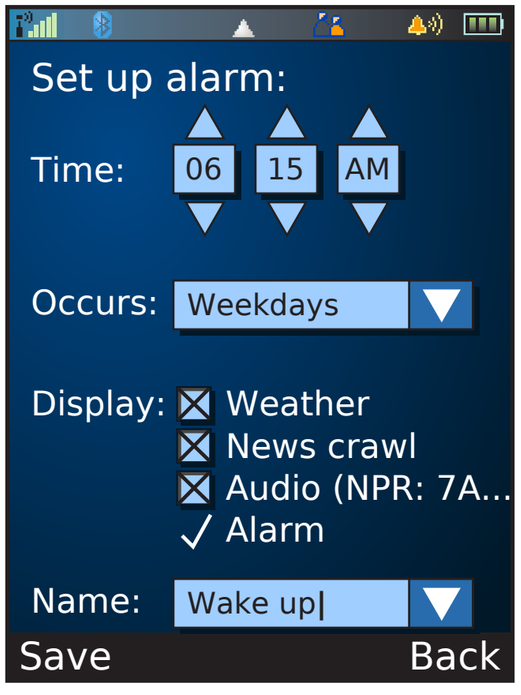
3 Detailed information

- Additional information should be available within the widget, though this will move to a full-screen display
- Back will return to the widget-laden idle screen
- More will load the associated detail page (e.g. Weather.com) for the selected information, in the default browser
- Text information, at least, should be pre-loaded so there is no delay in loading this information

4 Set up alarm

- Alarm setup will default to the most likely values, like 7am, weekdays, with a “wake up” label
- Time selection is via individual scroll and moving up and down (by 15 minute increments) or via direct typing
- Recurrance includes “just once” and will provide for a “pick days” option, which opens the days of week list in place
- Display items are selected on setup, and can only be disabled here
- Scrolling down the entire page is not required – a softkey or other mechanism will allow saving immediately upon change





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About Little Springs Design

Little Springs Design is a full-service mobile-design agency focused on helping the heads of marketing, product, and user experience optimally engage with their clients over mobile phones. We help operators, associations, manufacturers, and application & website providers with product, device and OS design, patterns, training, research and strategy.

We solve the user experience challenges of the mobile environment.

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