

Templates & guidelines

# 4ourth mobile design elements

## Stencils and components

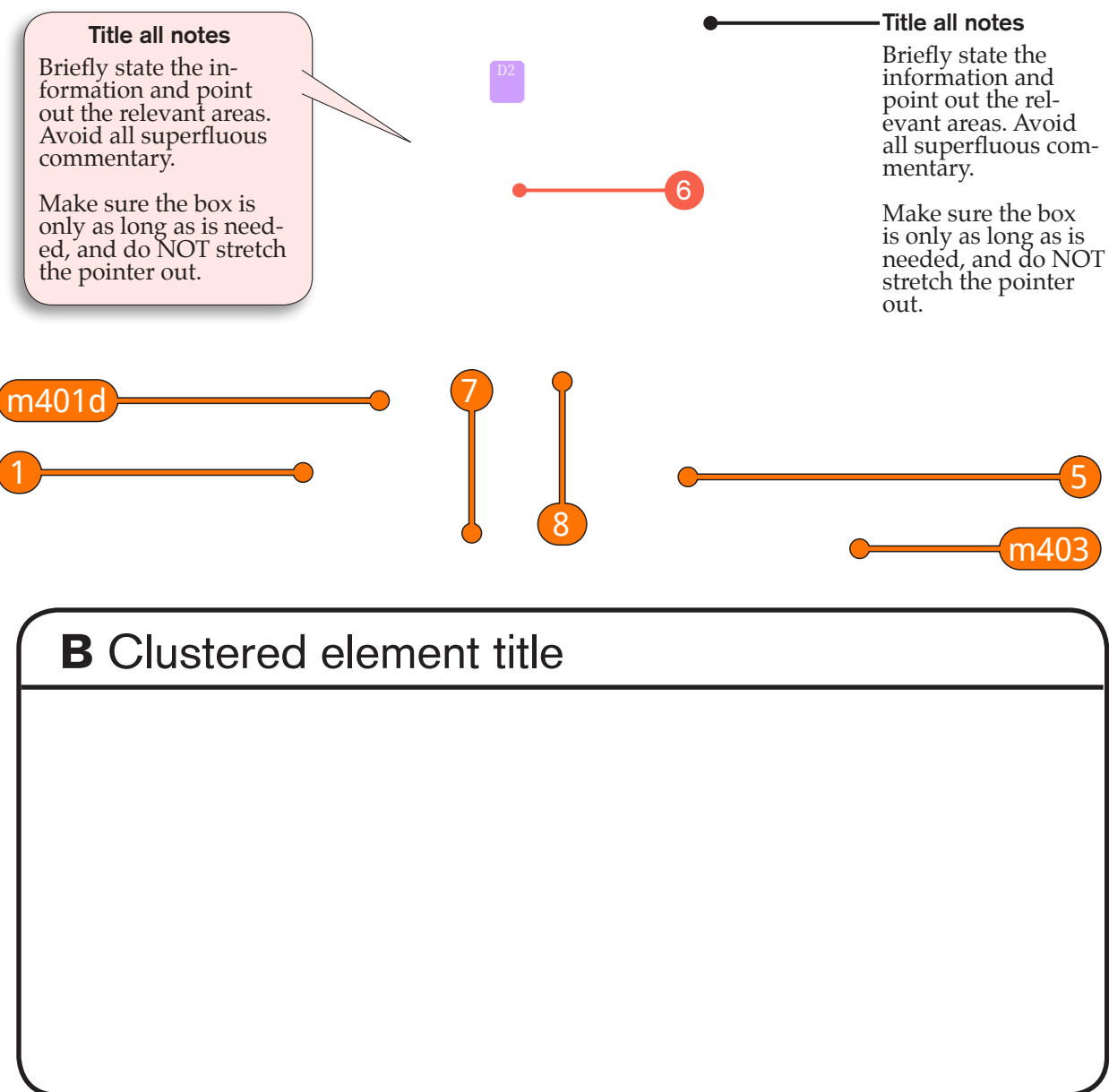
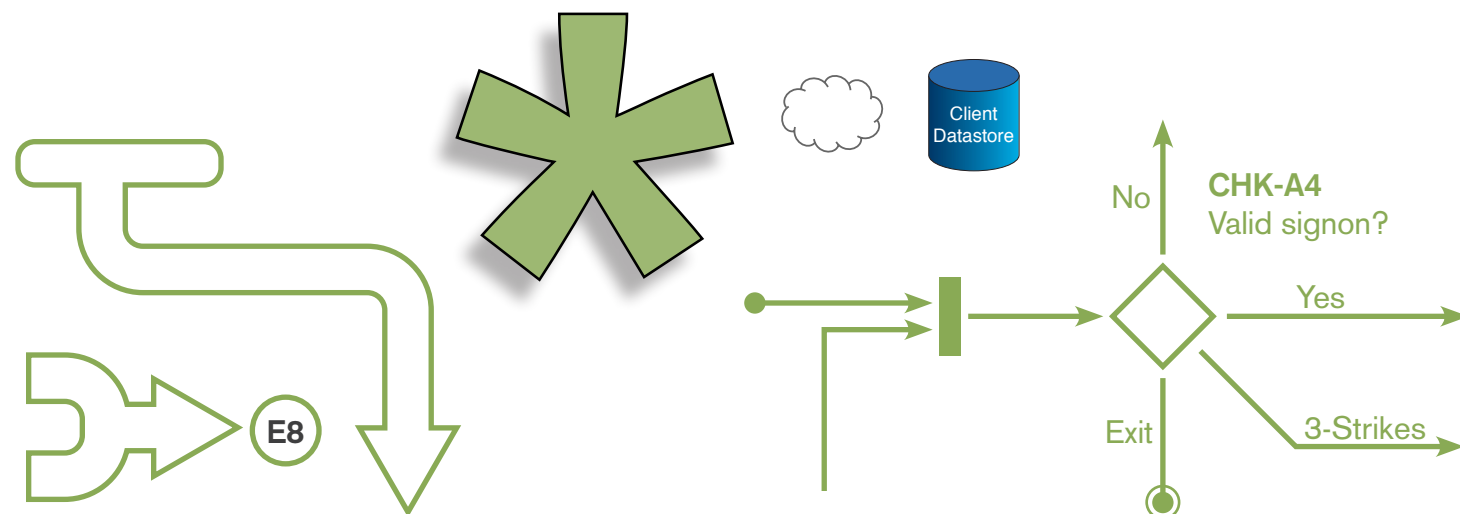
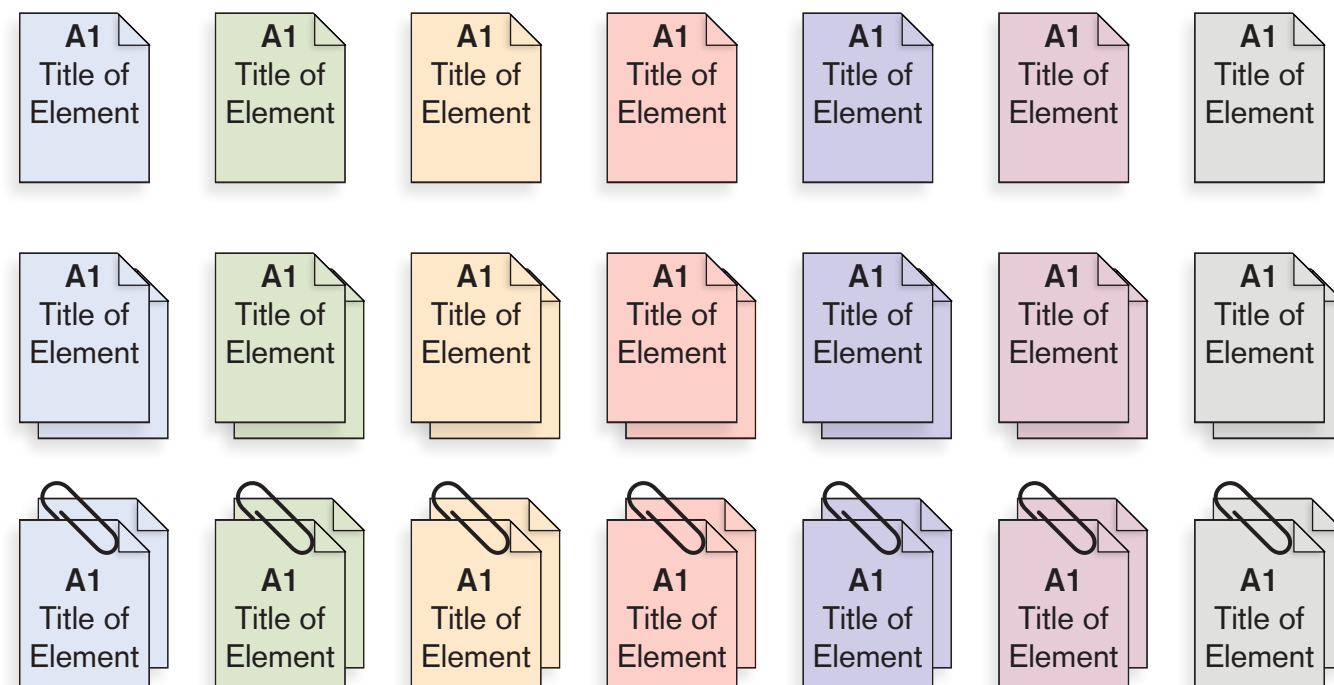
Prepared by **Steven Hooper** with contributions from  
Clayton Beese, Eric Berkman, Laura Fisk, Brian Mason, France Rupert & Jana Silverman

*30 March 2012*



# High Level Diagramming

## 1 Flow Charting & Annotation





# High Level Diagramming

## 2 Information Boxing

High level diagramming involves describing the entire interaction set of the product, without drawing elements or developing interface designs. Generally, flow charts are followed by the boxes to the right detailing all display and interactive elements for each state of the system.

Each element is described in order; items may be added or removed as needed:

### Title block:

Unique element number, descriptive title of the element. When applicable or needed, requirement numbers, domain and/or users.

### Information:

All items displayed on the screen are described in detail. Conditional display items include the conditions.

### Interaction:

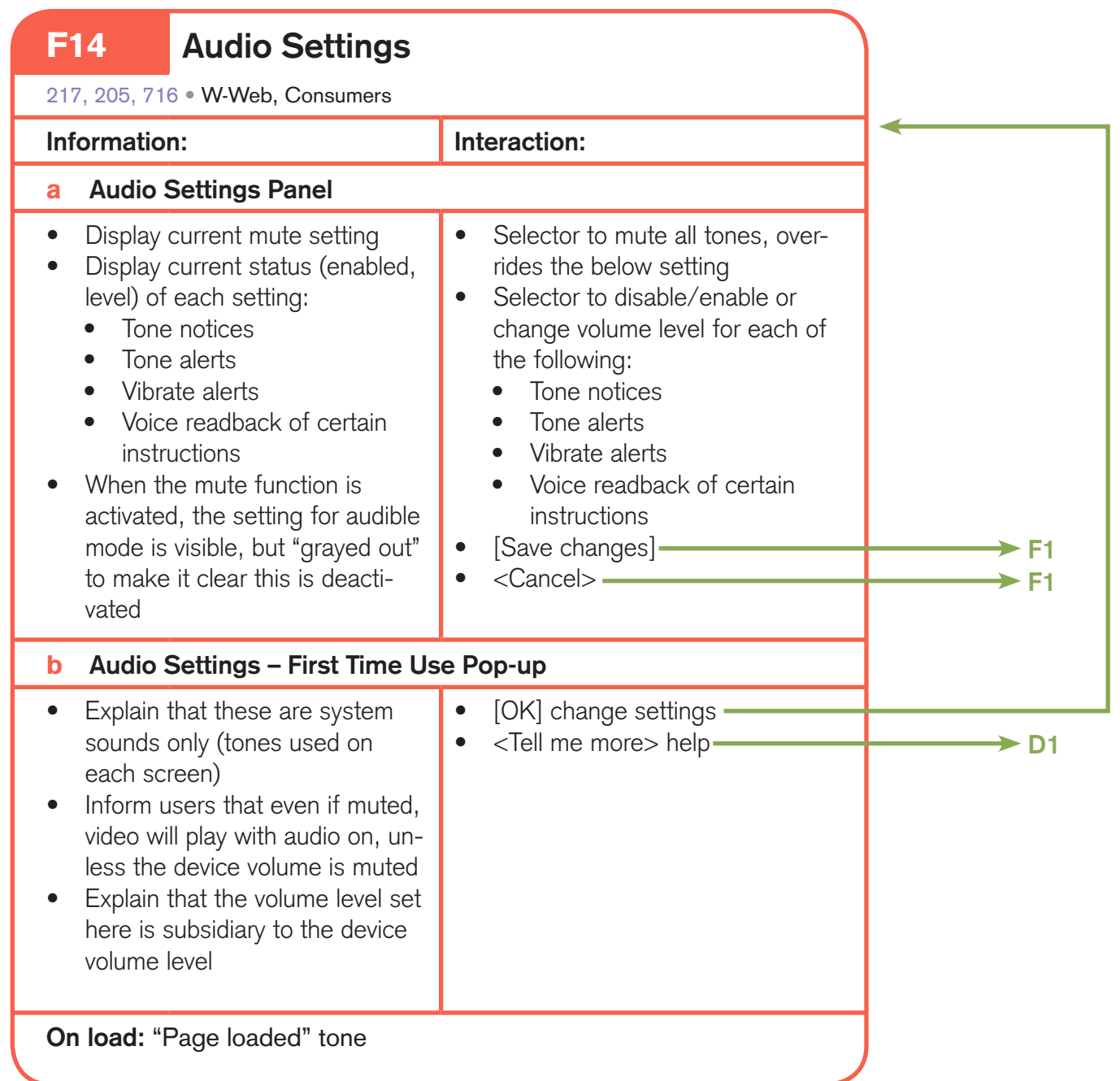
Controls (including links, buttons, scrollbars and anything else) that the user can interact with. The result is described and external links or refreshes are shown as arrows. External links are labeled with the element number. Links are surrounded by greater-than/less-than signs, buttons are surrounded by square brackets.

### Variations:

Variant displays of a particular frame may be displayed within the box as shown, or may be broken out among several boxes, mostly depending on the space available.

### Automated actions:

Used for items such as audio cues that appear when the page loads, or to describe automatic behaviors that cannot be covered in the Information side above.

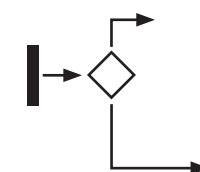
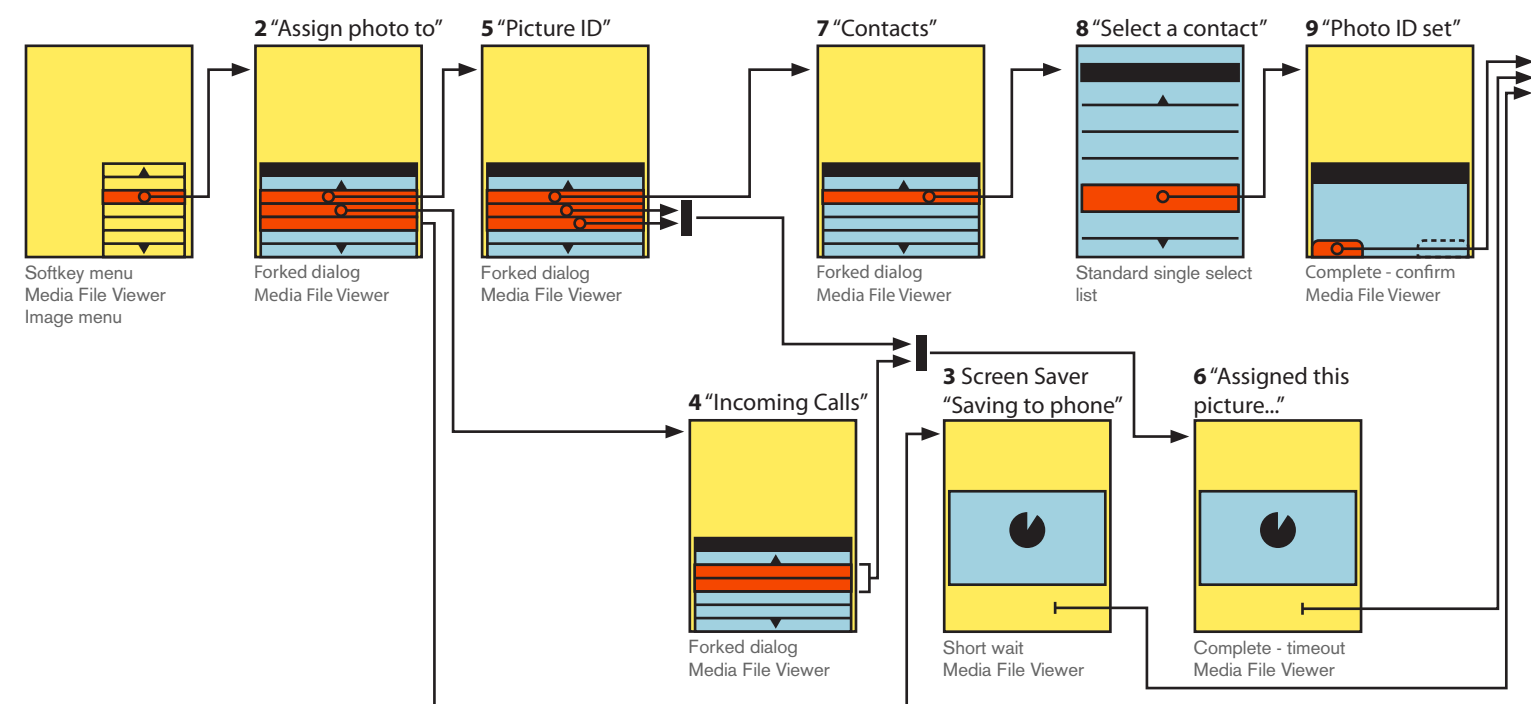
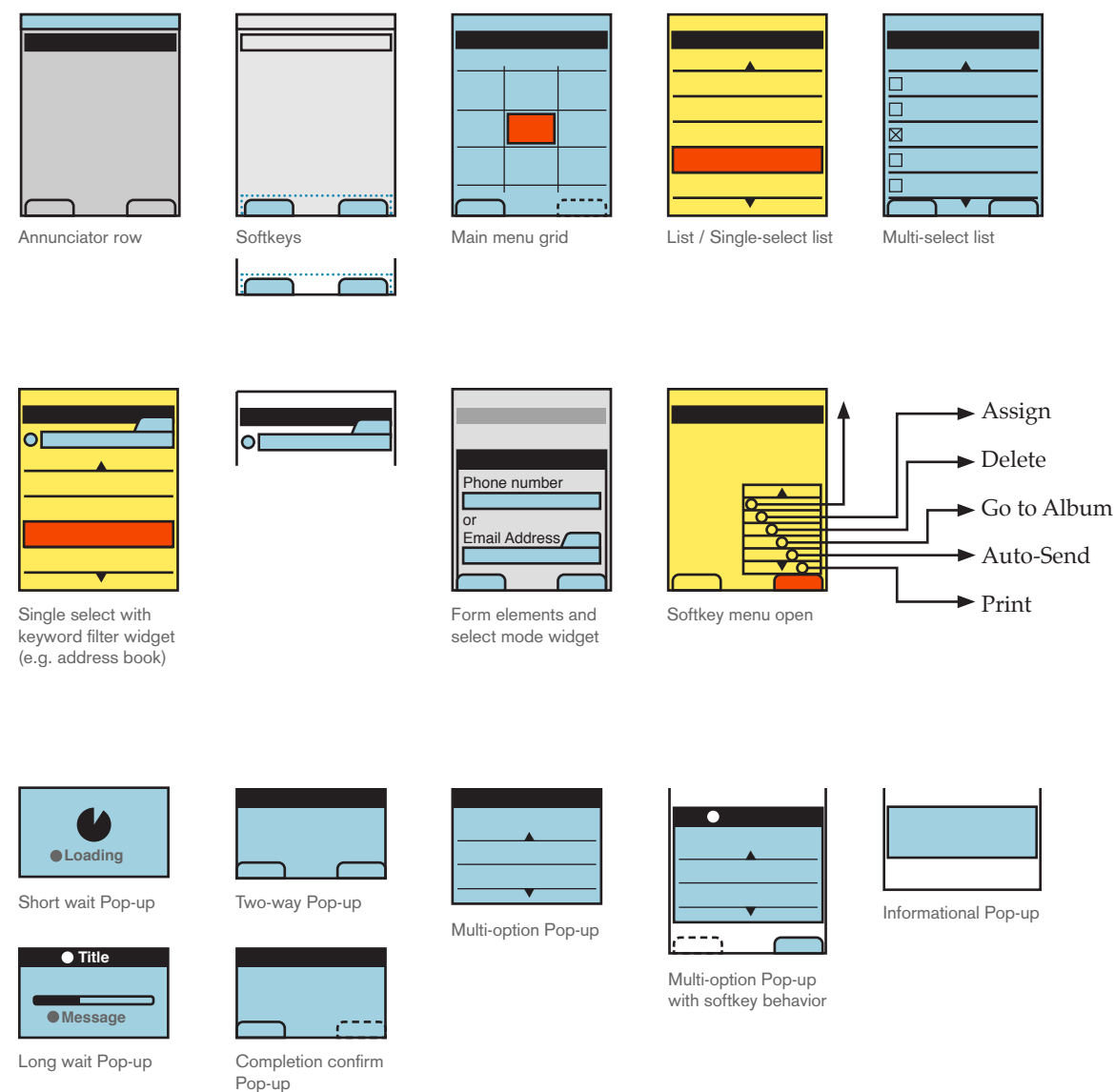




# Mid-Level Diagramming

These are valuable for developing and defining interaction – especially for flow charting – and for defining components to be used throughout an application.

They specifically do not express the graphic or brand look of a service, so can be used to abstract the discussion, or to define a common set of behaviors for several looks (e.g. vendor specifications).



The diagram above is an example use of the Mid-level diagram as a flow charting tool. Each link is defined, color codes (similar to those in button behaviors, later) are used to define active and inactive regions, and each frame is labeled with re-usable components contained within.



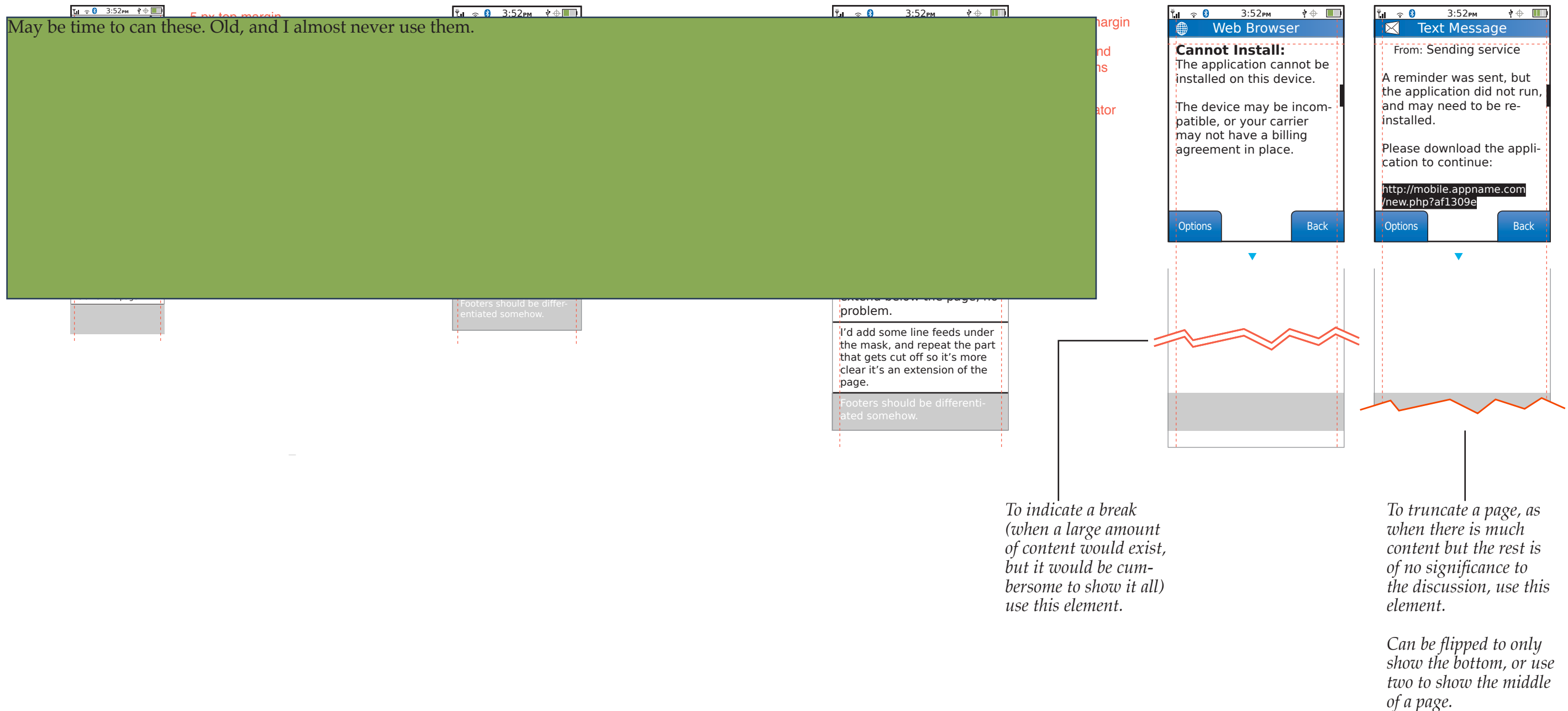
# Handsets, Screens & Frames

## 1 Small Screens (50% - 1pt = 0.5px)

128 x 176 px

176 x 220 px

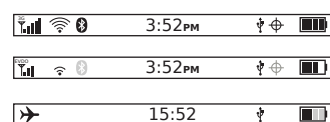
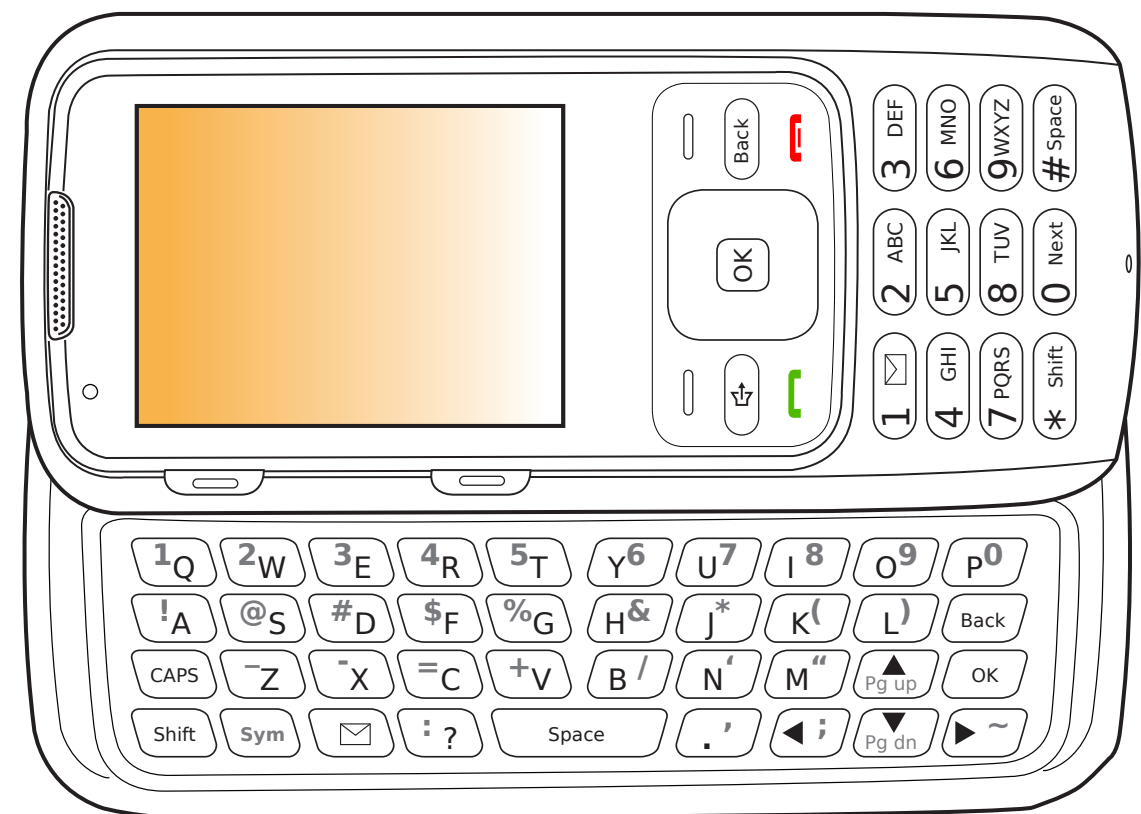
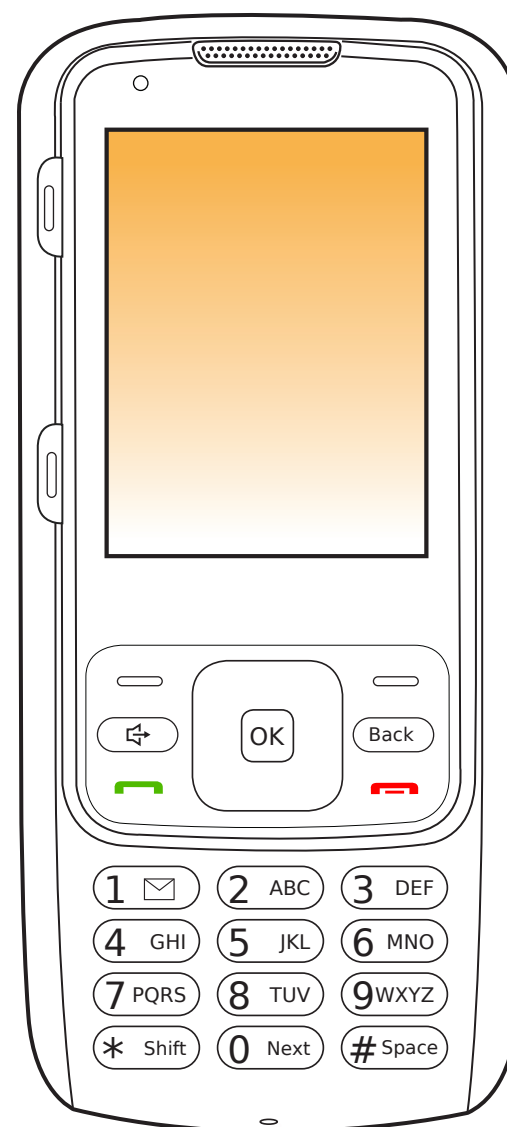
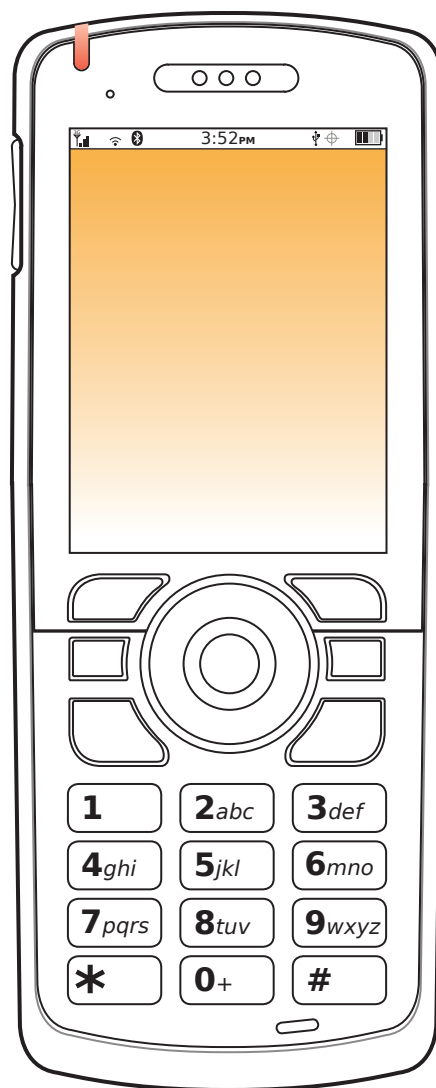
240 x 320 px





# Handsets, Screens & Frames

## 2 Scaled Handsets - Featurephones



Icons in annunciator bar drawn by 4ourth Mobile except the Bluetooth icon; see [Bluetooth.org](http://Bluetooth.org) for use of this outside of comps.

The USB logo was traced by Little Springs, but it's use outside of comps should be cleared at [USB.org](http://USB.org).

All these handsets were drawn by 4ourth Mobile. The candy featurephone to the left is a sort of compsite device, if you were wondering. The sliding message phone is based on the Samsung Rant, but has been modified and simplified.

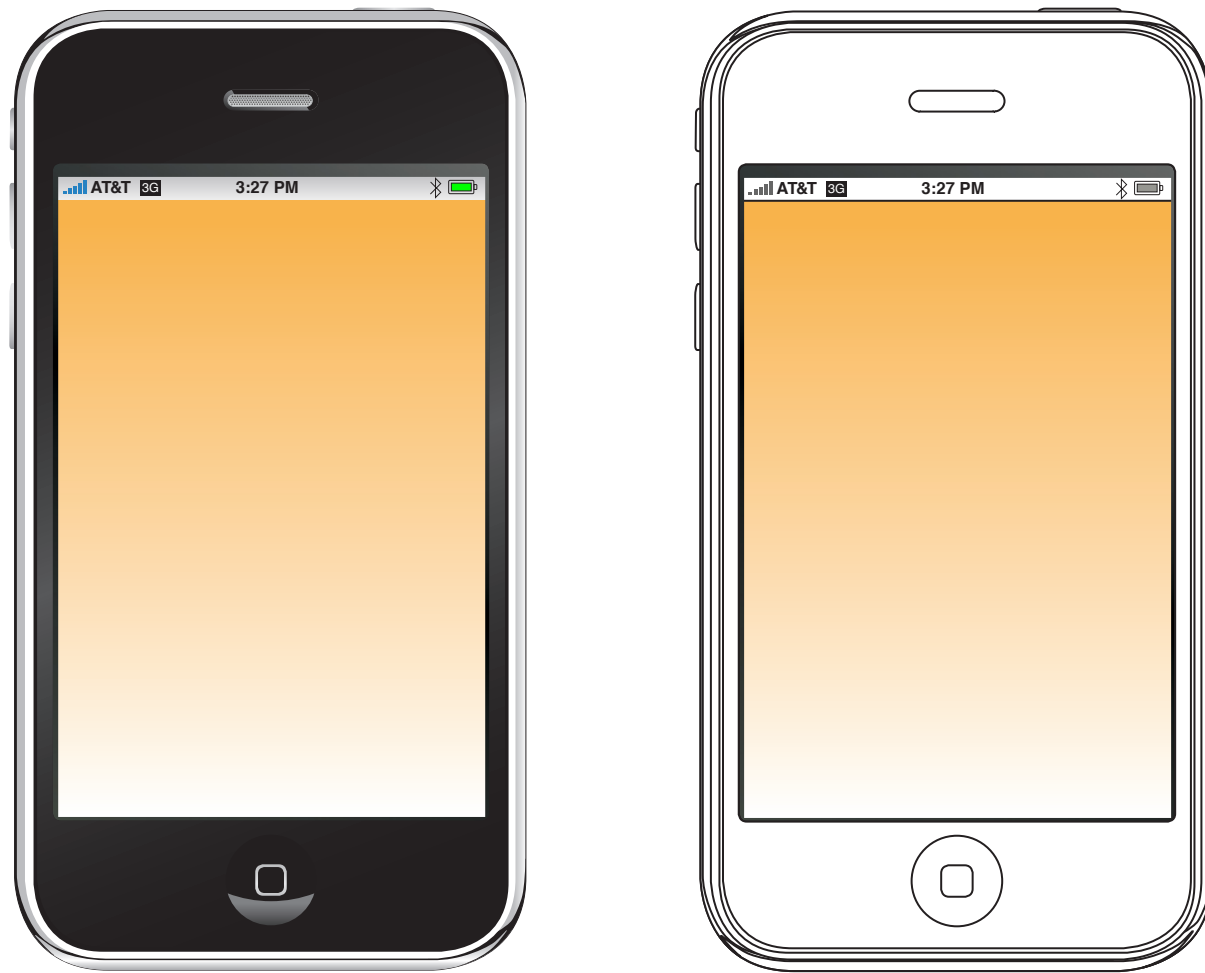
Each device is at the true resolution, but of course can be re-scaled for new or other resolutions as needed.



# Handsets, Screens & Frames

## 3 Scaled Handsets – iOS

iPhone 2 @ 50% - 1pt = 0.5px



*The iPhone was drawn by 4ourth Mobile and is free for your use. Each device is at the true resolution, but of course can be re-scaled for new or other resolutions as needed (especiall the featurephone).*

iPhone 4 @ 33.34% - 1pt = 1/3px





# Handsets, Screens & Frames

## 4 Scaled Handsets – Android



*This is basically an HTC Evo Shift 4G, but some features are made generic or simplified, so it has no manufacturer or operator naming. This is 100% drawn by me, so is free for your use.*

*This can be used in either orientation as a touch-only device, or the keyboard is provided (as a separate group) as a reminder there are hardware keyboards and 5-way keys, as well as forced landscape orientation on around 1/3 to 1/2 of all Android devices. Plan for it.*





# Handsets, Screens & Frames

## 4 Scaled Handsets – Blackberry OS



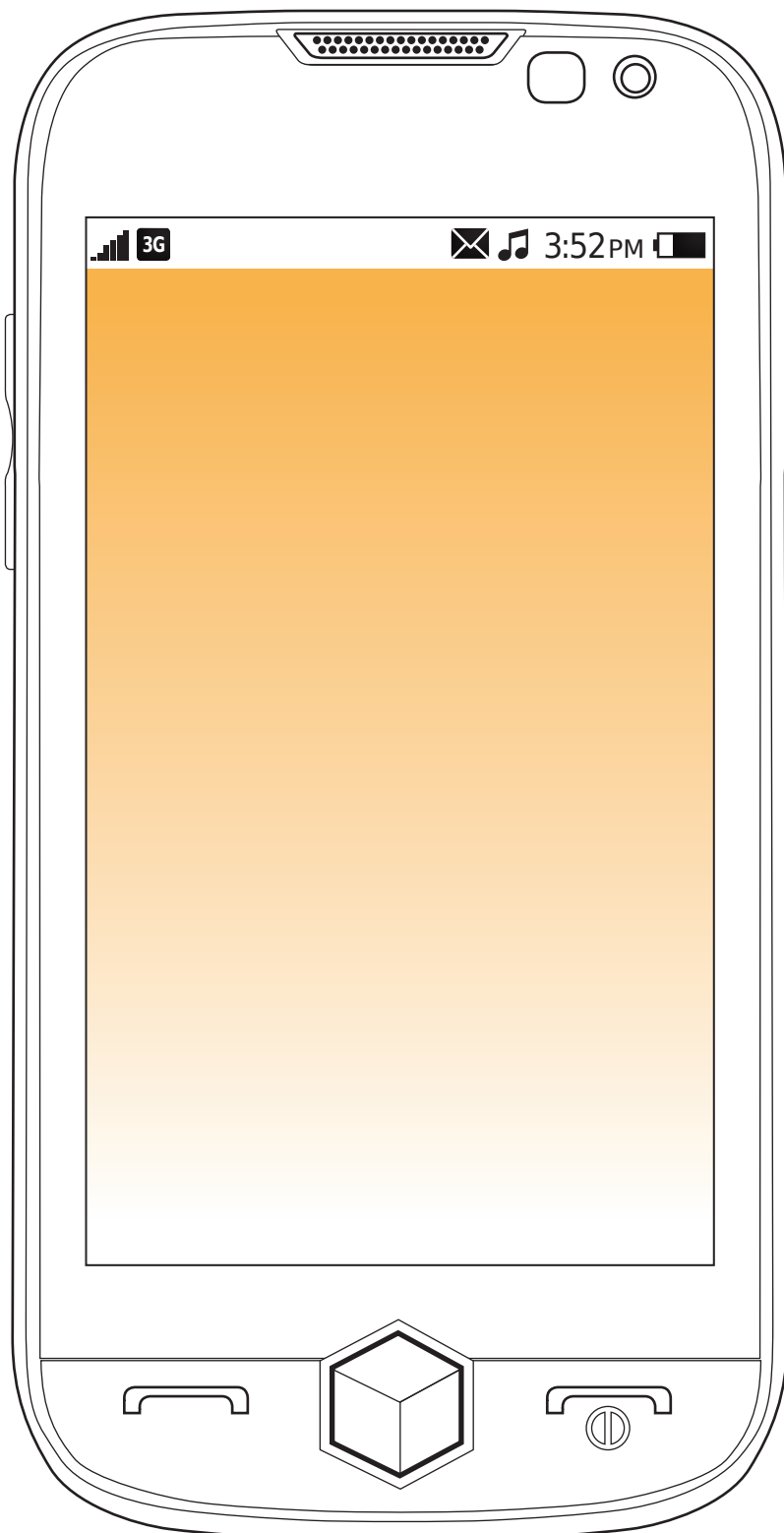
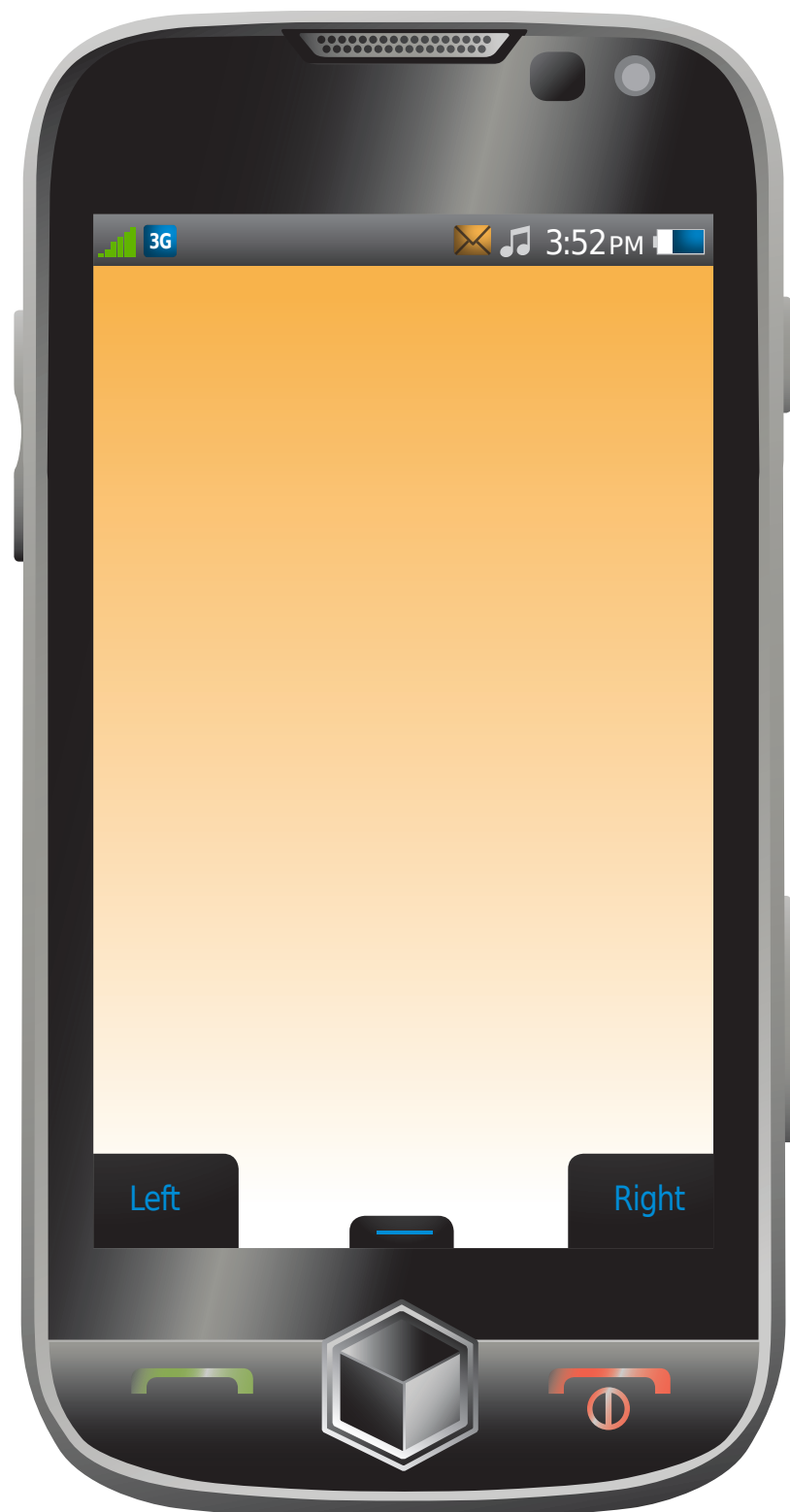
*This is a Blackberry Torch 9810, traced by me into a vector device. Well, except for the keypad for now, since each one is different, and it'll take forever to draw them, that's a vector shape.*

*This can be used with the keyboard folded as a touch-only device, or with it extended to remind everyone that keyboard entry exists still.*



# Handsets, Screens & Frames

## 5 Scaled Handsets – Bada



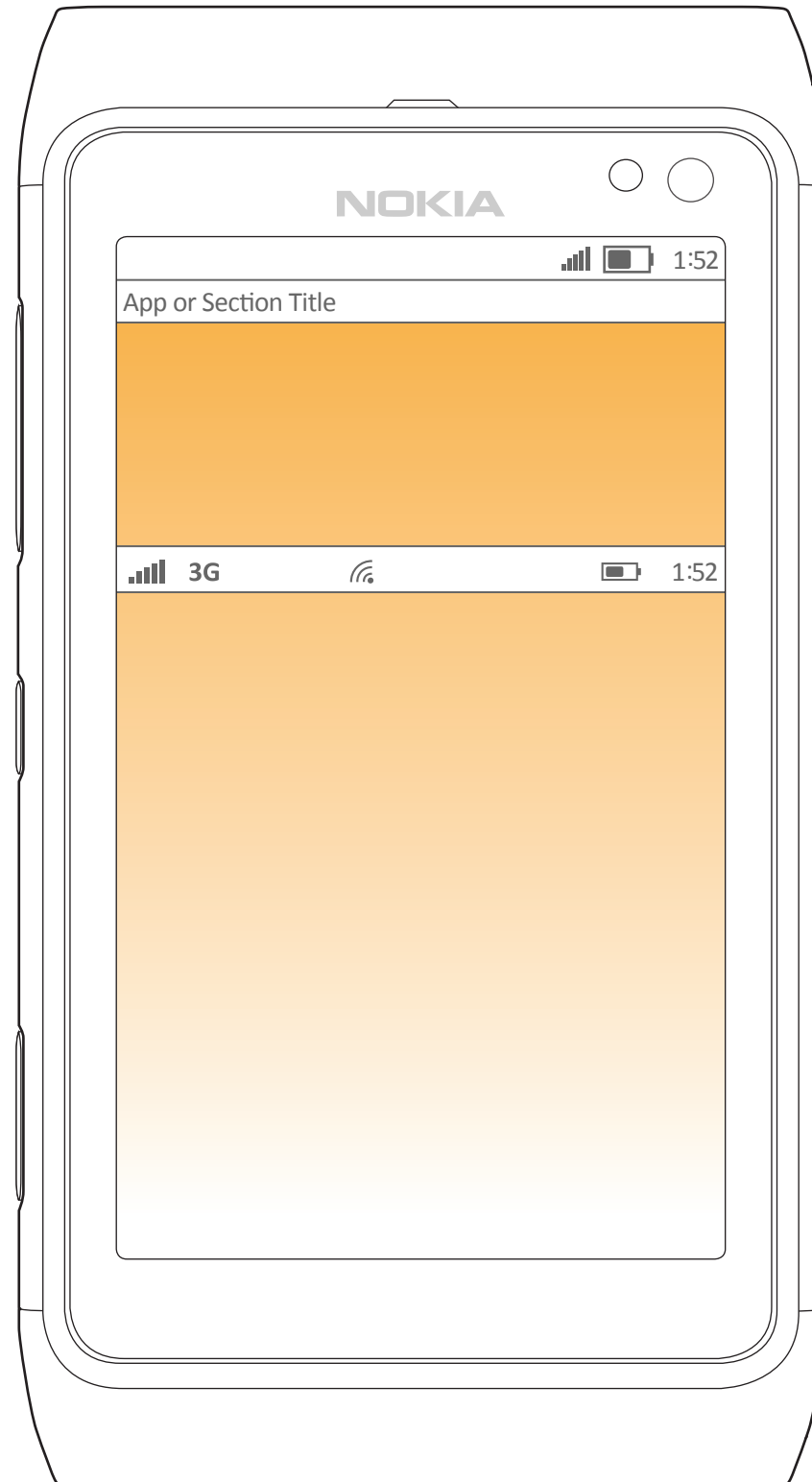
*This device is a Samsung Omnia-2, more or less. Changing the funny 5-way key for one from another device, remove it, or make your own, to make it stand in for another device or be more generic.*

*The softkeys and annunicator row are pure Bada, so you are set if you have to design for that platform.*



# Handsets, Screens & Frames

## 6 Scaled Handsets – Nokia Symbian & Windows Phone



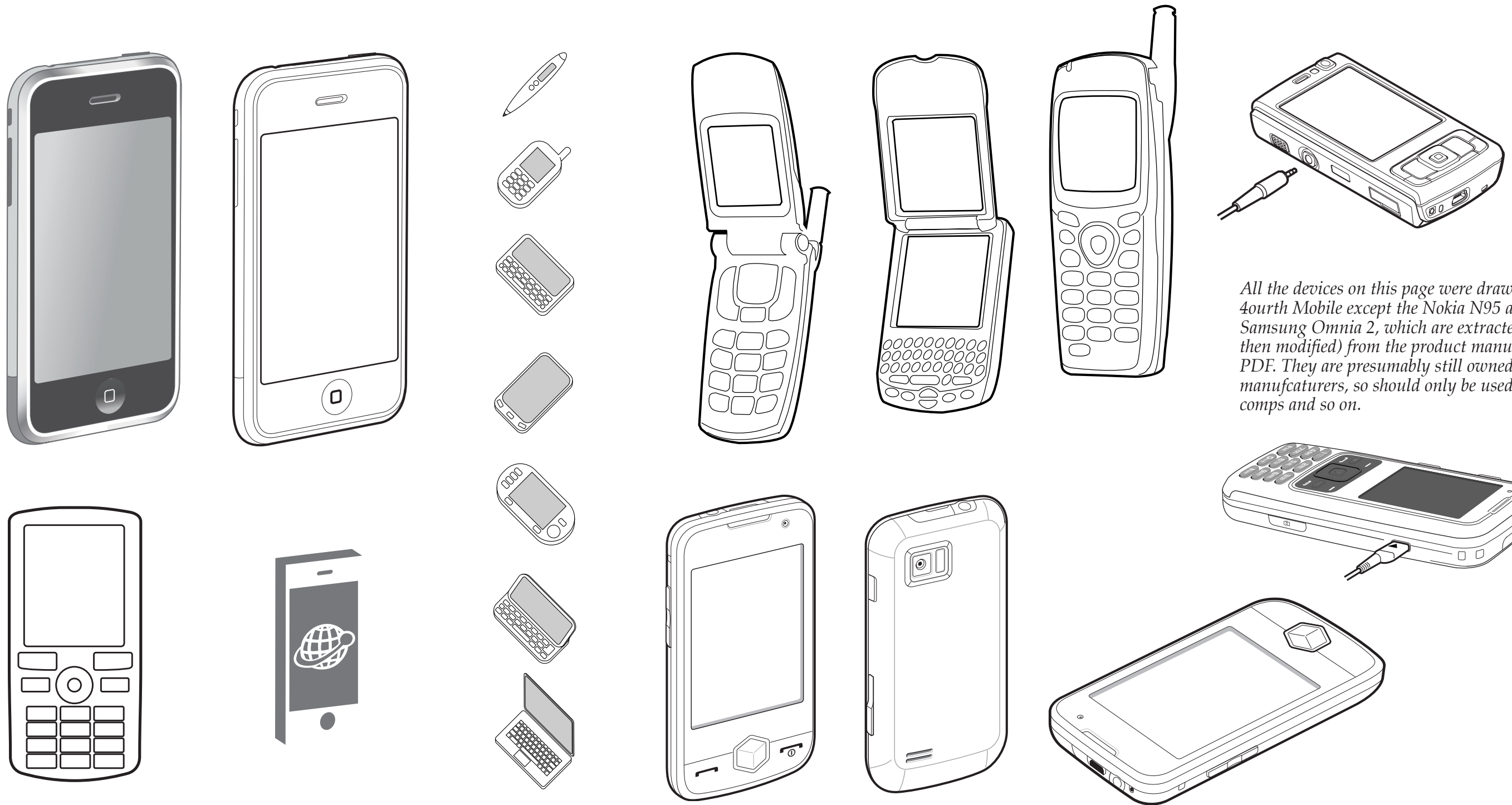
*This device is a Nokia N8, just without the nameplate, so it can function as any of the current or forthcoming Symbian or Windows handset. Remove the Nokia name to make it even more generic.*

*Two annunciator rows are provided. The top one is Symbian Belle, the bottom (just move it so it lines up right) is Windows Phone Tango.*



# Handsets, Screens & Frames

## 7 Un-scaled Handsets





# Handsets, Screens & Frames

## 8 Handsets in Context



Photo reference lost to the mists of time, but the art above hand-drawn by 4ourth Mobile.



Reference photo and art above by 4ourth Mobile.

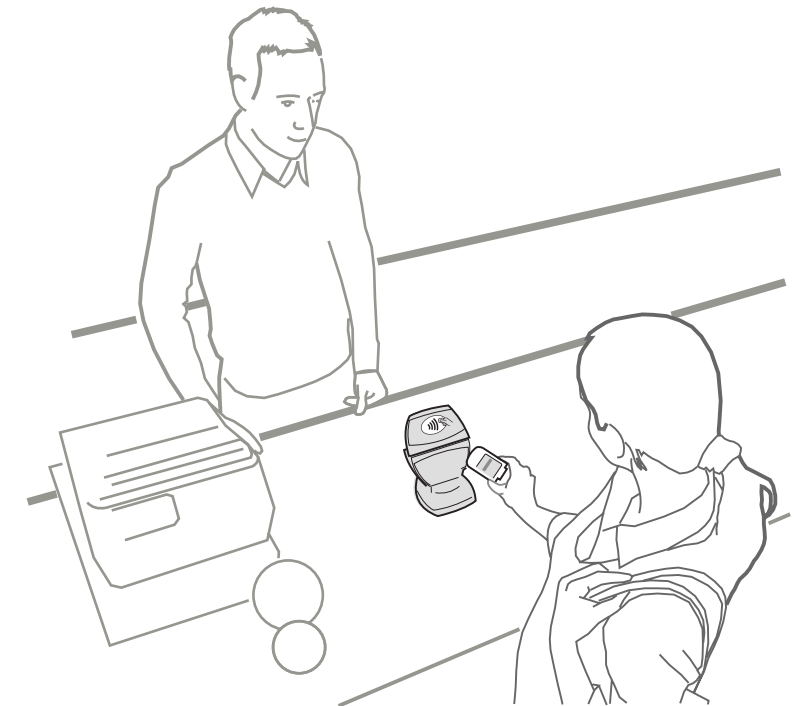


Photo reference lost to the mists of time, but the art above hand-drawn by 4ourth Mobile.

This is an NFC transaction. The device logo is for ViVoTech. If you are not working on a project for them, you might want to get rid of it.



# Links, Forms & Buttons

## 1 Inputs & Selectors (50% - 1pt = 0.5px)

### Text entry

Hint text in the field

**City**  
  
No abbreviations Hint text below the field

**City**  
 Abc  
**City**  
 Abc  
**City**  
 Abc  
**Entry type indicators:**  
ABC (caps)  
Abc (initial cap)  
abc (lower case)  
T9 (predictive)  
123 (numeric)  
!@# (symbol)

**Home phone number**  
    
Include area code Multi-field phone entry

**Email address**  
 @   
name@domain.com Multi-field email entry

**Email address**  
 @  
  
name@domain.com

**Describe your issue**  

Text areas may need scrollbars and should only be as long as needed. Be sure to put a counter on most of them

21 characters remaining

 Text area with counter

**Pick a user name**  
   
Not unique Live field validation indicators display onblur

**Pick a user name**  
   
Must be unique  
**Pick a user name**  
 \*  
Must be unique Required field indicators.

**Set up a reminder:**  
Take   
(dose?) (unit?)  
(how frequently?)  
(on what day?)  
(at what time?)  
(add a note?) Forms to direct creation of natural-language submissions.

**Set up a reminder:**  
Take   
 capsule  
  
at .  
Stop taking on    
(add a note?)

### Selectors

**Country:**  
 Pulldown

Pulldown, empty

United States  
Canada  
United Kingdom  
-----  
Afghanistan  
Akrotiri  
Albania  
Pulldown, open, with scrolling. In long lists, likely entries are repeated at the top.

Cars:  
- Coupe  
- Sedan  
- Station wagon  
Trucks:  
- Sport-utility vehicle  
Even web pulldowns can have indents, spaces, sections and use some symbols.

**Internet:**  
 Google  
 Yahoo!  
 Amazon  
 Answers  
 eBay  
More choices...  
**Local:**  
My history  
Application pull-downs can include graphics and other formatting.

**Select one of these:**  
☒ Option one  
☐ Option two  
Radios are for selecting one of several options.

**Receive emails about new products and so on?**  
☒ Yes  
Checks are for selection/deselection of individual items, whether in a list or not.

**Select all that apply:**  
☒ Smoke  
☐ Fire  
☐ Earthquake

w|  

www

www2

wap

 Fields convert to progressive multi-form selection/entry to assist with formatted data.

go  

google.com

google.com/news

google.com/docs




googlefight.com



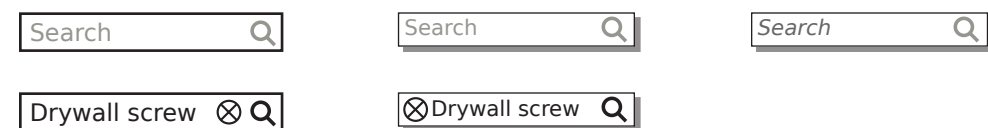
# Links, Forms & Buttons

## 2 Actions (50% - 1pt = 0.5px)

### Links

- A **highlighted link** in text → **D1** *Scroll & select, on hover*
- a non-highlighted link in text → **D1** *Scroll & select, on blur*
- a **clickable link** in text → **D1** *Stylus or touch*
- [Take action: Protect yourself from fraud](#)  (commerce.gov)
  -  [October Checking Statement](#)  (74kb PDF)
- Link with target labels*

### Search



### Tooltips & auto-complete

- Tool-tip describing this link, up to two lines long.  
a **clickable link** in text → **D1** *On hover, can offer tooltips for links or other items.*
- City**  
|  
Lawrence  
Mission  
Kansas City  
*When in focus, or once typing has started suggestions may be offered in a box below the field.*

### Buttons

- Picked up** → **D1** *Mini-button, for inline effects, etc. - In focus.*
- Picked up** → **D1** *Not in focus.*
- Picked up** → **D1** *Unavailable (grayed out).*
- Save changes** → **D1** *Normal button, page level submissions - In focus.*
- Save changes** → **D1** *Not in focus.*
- Save changes** → **D1** *Unavailable (grayed out).*
- ⇒ Save changes** → **D1** *Optional (but suggested) html-entity "graphic" labels.*
- |   | meaning        | name     | dec     | hex      |
|---|----------------|----------|---------|----------|
| ⊕ | add            | &oplus;  | &#8853; | &#x2295; |
| ⊗ | cancel/ remove | &otimes; | &#8855; | &#x2297; |
| ✓ | okay           | &radic;  | &#8730; | &#x221A; |
| ⇐ | back/ prev     | &lArr;   | &#8656; | &#x21D0; |
| ⇒ | continue       | &rArr;   | &#8656; | &#x21D0; |
- ✓ Save changes** → **D1** *True graphic labels, also suggested. Devise items as needed.*
- ✕ Cancel** → **D1**



## Text lists

1	The Internet Movie Dat...
2	Google
3	Tabular WX - Mission
4	Netflix: Queue
5	Design for Mobile 2010
	My Delicious
	Blogger
	Bloglines
	Gmail
	CNN Science News

Numbers to the left are accesskeys. Iconic labels may be used instead.

1	 The Internet Movie...
2	 Google
3	 Tabular WX - Mission
4	 Netflix: Queue
5	 Design for Mobile 2...
	 My Delicious
	 Blogger
	 Bloglines
	 Gmail
	 CNN Science News

Small circles represent icons (here, favicons) associated with each listed item.

1234567890#\* You can replace text accesskeys with graphics. Depends on the situation.








1234567890#\*

## Block lists

1	My Reminders 8🔔6
2	View next alert 7:15am
3	My Neighbohood 2
4	Add a location
5	Search
	Settings
	Security information

Especially useful for settings or other places you want to associate values with a listed item.

## Nested text lists

15	Recently viewed
41	Yesterday afternoon
	 Thunderbird home
41	Blogger
	 Blogger: Mobile C...
	 Blogger: Blogger ...
	 SILVA Outdoor Profe...
	 Silva model-25 com...
	 BattleLab Olive Dra...
	 PROFESSIONAL INST...

Numbers indicated items within the branch. Selecting a branch reveals subsidiary branches and leaves.

## Fisheyes & linelets

Local results:
Press # to see on map
Party America 1441 W 23rd Street Lawrence, KS 66046
Macelli's
Anderson Rentals
Sunflower Rental
Party America
Party City
Bittersweet Floral and Des...

Fisheyes reveal additional information when hovered, as when scrolling through a list.

Optionally, a click (as for touch devices) can reveal this information, allowing a second click to link away.

## Accesskey assignments

Accesskeys should be assigned in a logical method. For QWERTY keyboards, short-cuts are the best guidance, and following principles of desktop shortcuts work well. Abide by desktop heuristics whenever possible (e.g Cut, Copy, Paste as X, C, V).

For numeric (10-key) accesskeys, we have a few suggestions and best practices we like. Individual key suggestions are listed in the table to the right, but some principles are:

- Scrolling-related functions assume the keypad is a 4-way pad, and assign up/down/left/right with 5 at the center.
- Use mnemonics if available, such as \* for favorite (star).
- Exercise bilateral symmetry. Note that zoom is 1 and 3, never (say) 1 and 2.

Key	Suggested Functions
1	Zoom out
2	Scroll up
3	Zoom in
4	Scroll left
5	Home, re-center, switch view
6	Scroll right
7	none
8	Scroll down
9	none
*	Mark as favorite (star!)
0	Get help
#	none

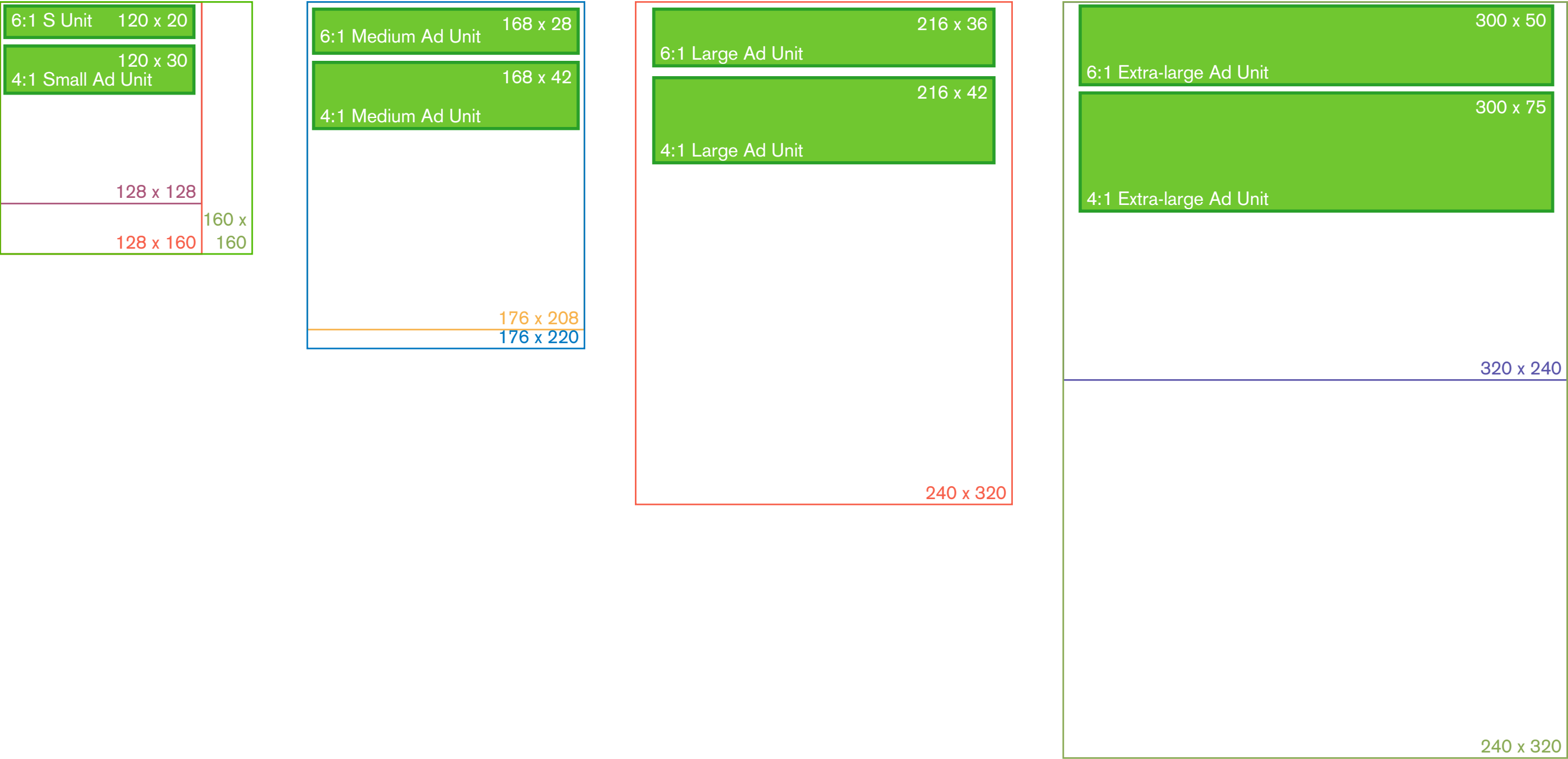
## Nested Lists, Naming

<input checked="" type="checkbox"/> Default Folder ▼
<input checked="" type="checkbox"/> List 1
<input type="checkbox"/> List 2
<input checked="" type="checkbox"/> List 3
<input checked="" type="checkbox"/> Name the list
<a href="#">+ Add a list</a>
<input type="checkbox"/> Folder 2 ►



# Advertising

## 1 Mobile Marketing Association standard banner ad sizes

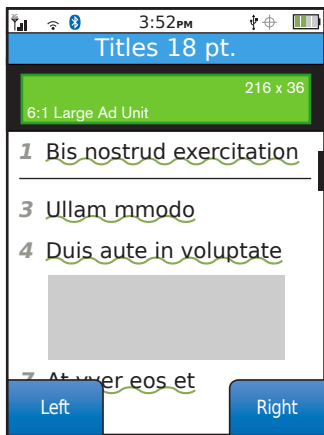




# Advertising

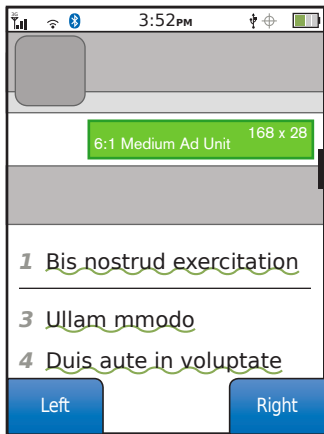
## 2 Banner ad implementations

### Banners



Advertsing must be broken out from the in-teraction in some manner so it does not add cognitive load to the user. There should never be confusion as to whether an item is advertis-ing or part of the site or application.

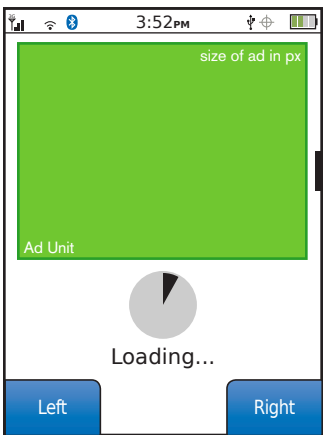
The example to the left is the most typical example, where the ad unit is at the extreme top or bottom of the screen, and is on a full-width background different from the app or page itself.



Another option, especially useful if contrac-tual requirements mandate the advertising be integrated into the site, is to differentiate with alignment. This requires, as shown to the left, that the next-smaller MMA ad size is used, so there is spare room.

Since all other elements will be centered or left-aligned, a right-aligned image will be notably different, and can be scanned past without confusion.

### Ads on Interstitials



The interstitial is primarily a loading process screen. Whenever there is a sufficient delay and no suitable information that should be presented on the bulk of the screen, advertising can be added to it.

The advertising should not interfere with the user's understanding of the application. Adver-tising should never animate, while the loading indicator will, to imply activity.



# Other In-Screen Elements

## 1 Small Elements

### Ratings & reviews

3.1 rate it: 1 ★ 2 ★ 3 ★ 4 ★ 5 ★

User reviews (459)

★★★★★

User reviews (459)

★★★★★

★★★★★ 379 reviews

Your rating:

😊 😊 😐 😞 😡

User ratings (459)

[Read user reviews](#) (27)

### Icons and sets with specific meanings

List or menu

Bookmarks

Book

Friend

Group

Highlight

Map View

Home

Tools or settings

Settings

Search

View

Location or compass

Unread or priority message

Message or message services

Write, or compose a message

Send message

Message or similar

**Note:** MANY additional dialog/ thought bubbles off page to the right...

Display modes

Sports & Outdoors

Shopping

Store

Weather

Season (fall)

Tornado alert

Ringtones

Games

Screen savers

Favorite or popular

Search

Car (V70)

Camera, video, photo

Mail

Calendar

Address book

Browser

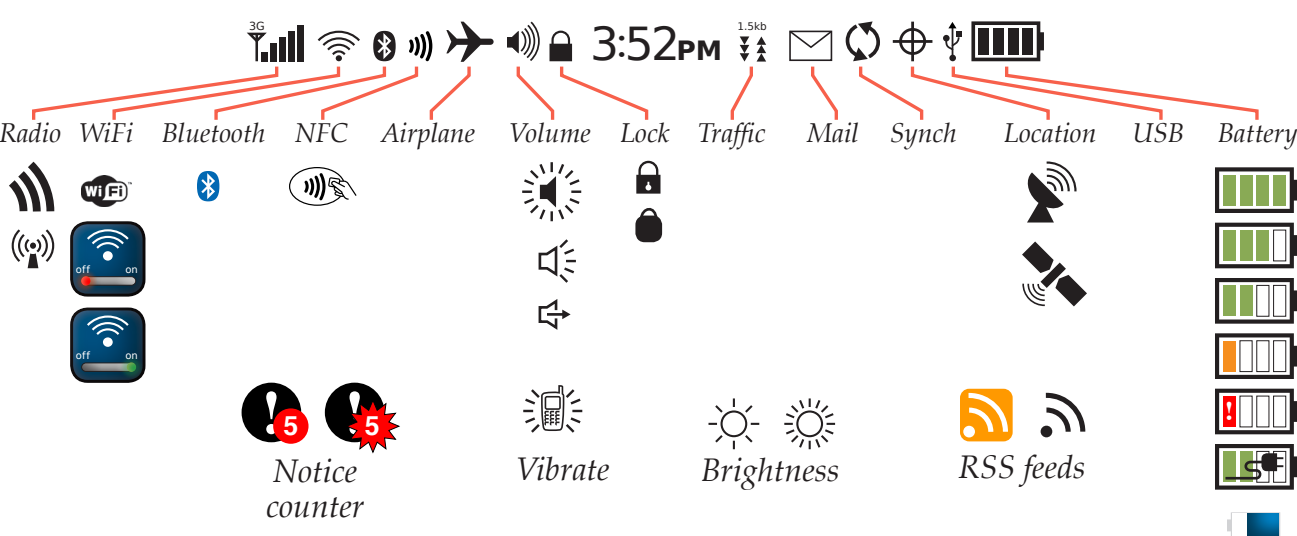
Motorola RAZR V3 idle screen icons



# Other In-Screen Elements

## 1 Small Elements (Continued)

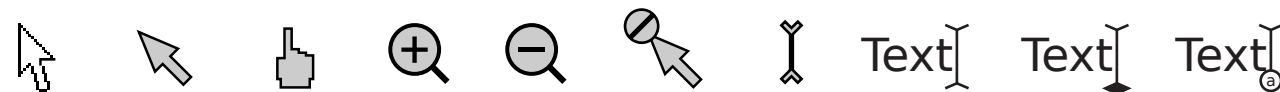
### Technical & status (Annunciator row)



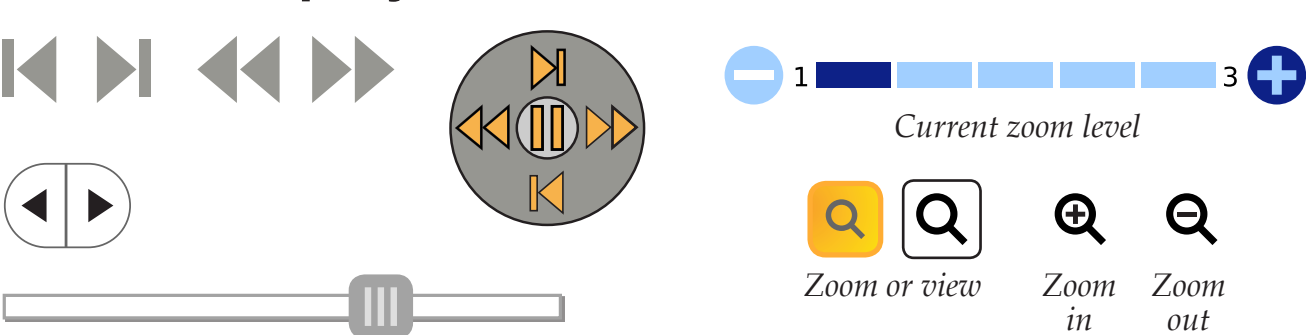
### Time & environment



### Pointers and Cursors



### Direction, playback, view



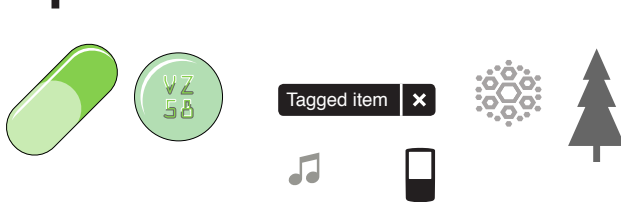
### Interaction controls



### Charts and graphs



### Special-use items



### Alert, help & information





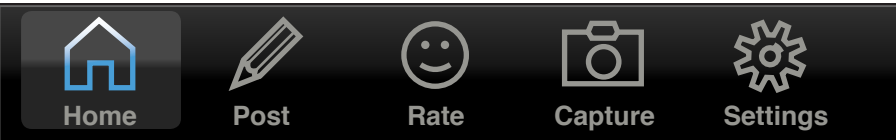
# Other In-Screen Elements

## 2 OS-specific Items

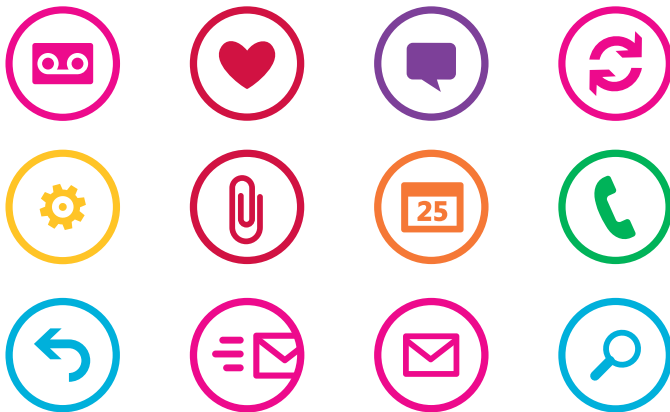
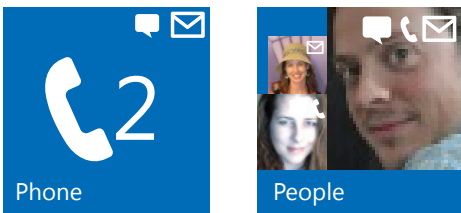
### Bada



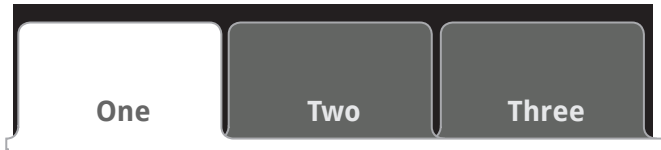
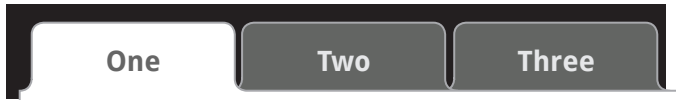
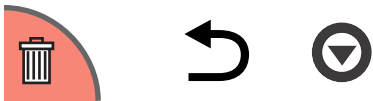
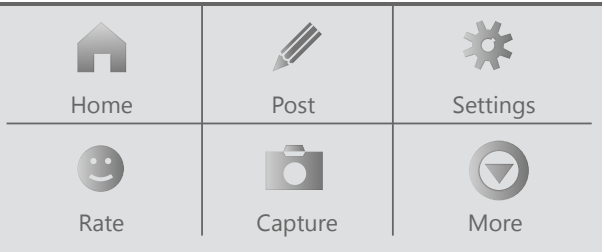
### iOS



### Windows Phone



### Android

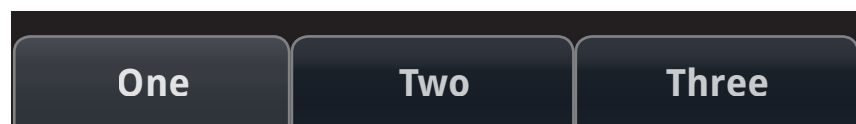




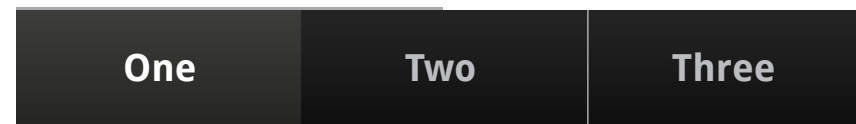
# Other In-Screen Elements

## 2 OS-specific Items

### Blackberry OS (7.1)



### Symbian (Qt)





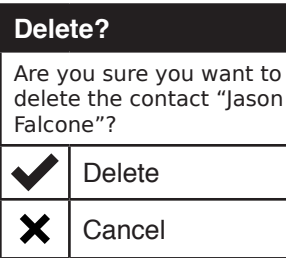
# Other In-Screen Elements

## 3 Pop-ups (50%)

### Guards



Destructive actions (application exit, discarding user-entered data, cancelling important processes) should be protected by guard conditions.

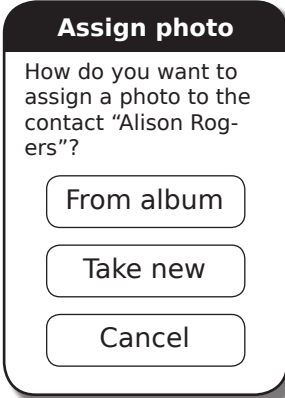


Cancel-guard, Delete-guard, and Exit-guard will display a Pop-up with a clear title, and explicit explanation of the consequences. Buttons will have labels indicating their precise actions; never use "yes" or "ok" or others that can be misinterpreted.



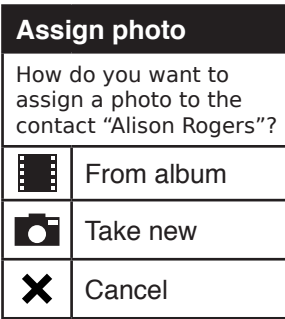
An alternative guard condition is to allow conditions to be staged, notify of the impending action and allow cancelling.

### Select from a few

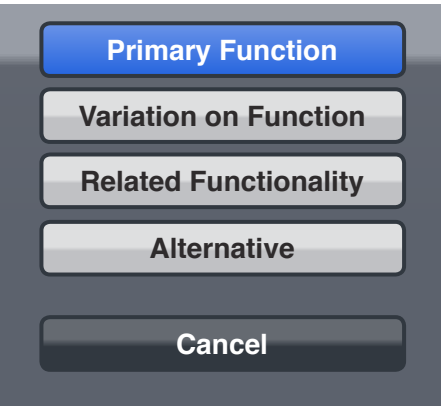


One to three selectable options should present the options as buttons within the Pop-up itself.

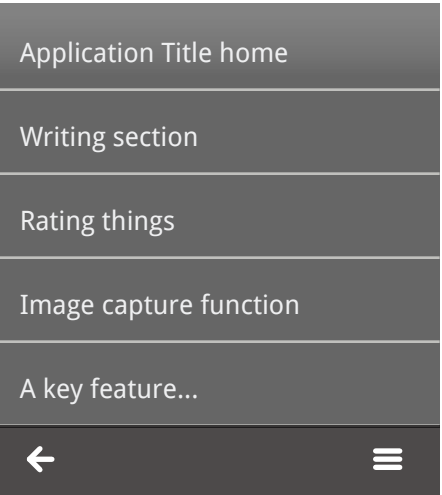
Informational dialogues will use the same layout, with more information and only a dismiss button.



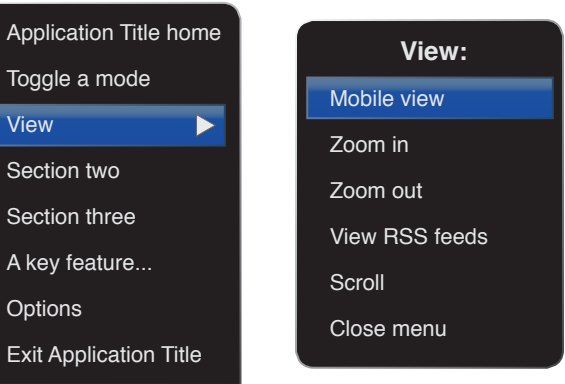
### iOS Menu



### Symbian (Qt) Menu



### Blackberry (7.1) Menus



For any of these, one or two primary conditions may be attached to **softkeys** instead of buttons within the Pop-up itself, if that is the preferred OS method of interaction.



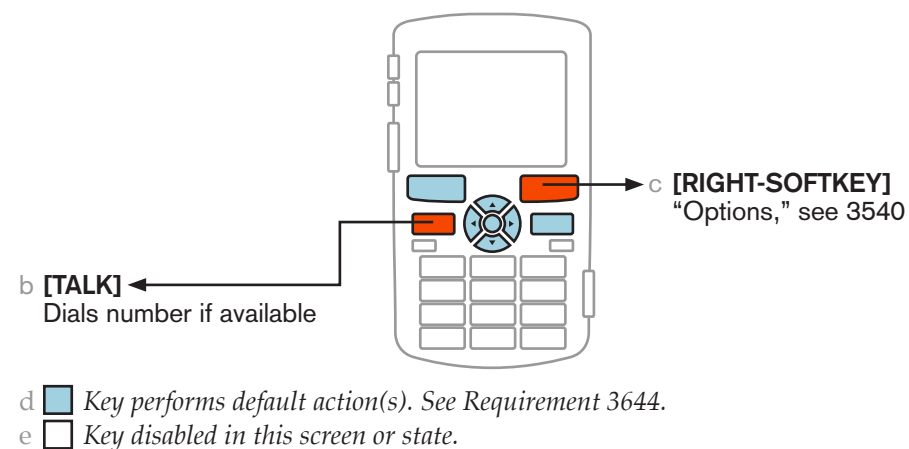
# Actions

## 1 Physical Key Input

### Available Key Behaviors

To define all behaviors available from a particular screen or element in a particular state, this can be added to an area adjacent to the drawn element, or alongside written requirements.

The legend should always be included. Note there are Object Styles used to quickly redefine each of the keys.

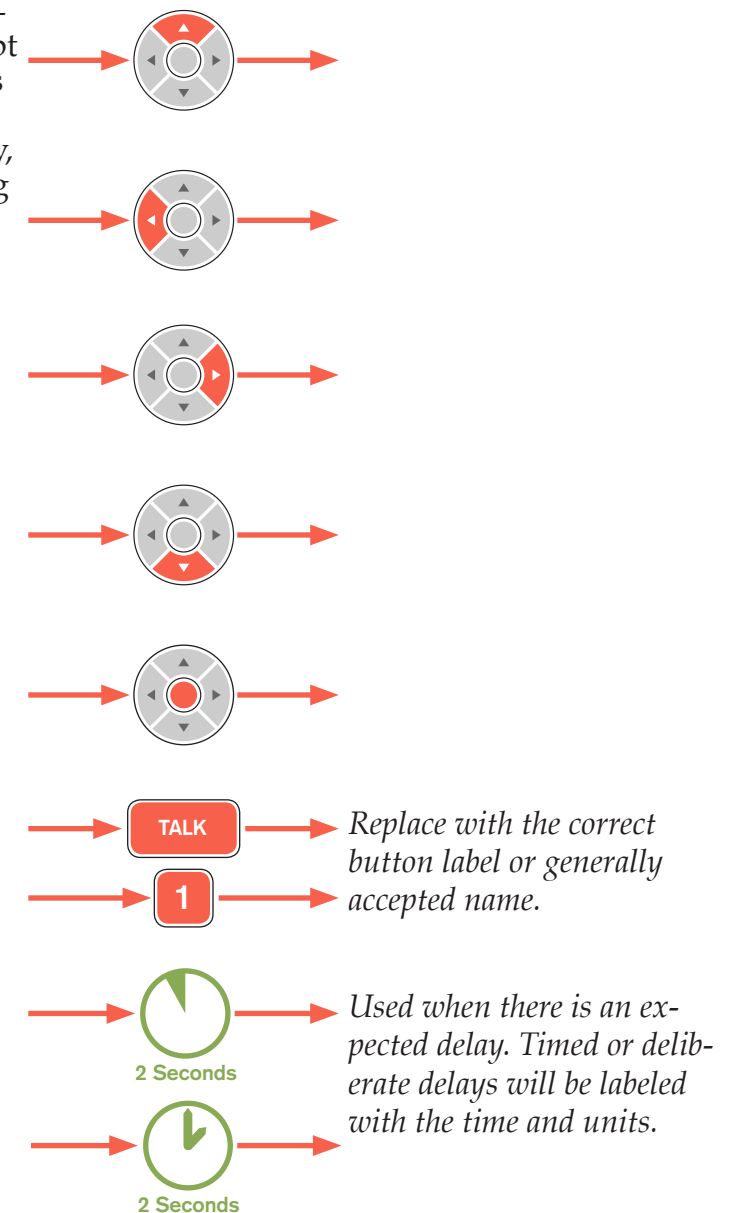


Exceptions should be defined inline as shown.

Basic key behaviors should be defined at the front of the document. An example of this is shown off the printed page to the left, if you have the InDesign document.

### Inline Key Actions

Used when flow charting or otherwise depicting a process diagrammatically. Interrupt the process line to indicate which key was used to cause the action. When selecting from lists, etc. this is usually not necessary, and the behavior of scrolling and selecting is obvious.



### Directional Input Methods





# Actions

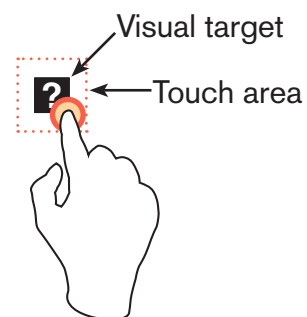
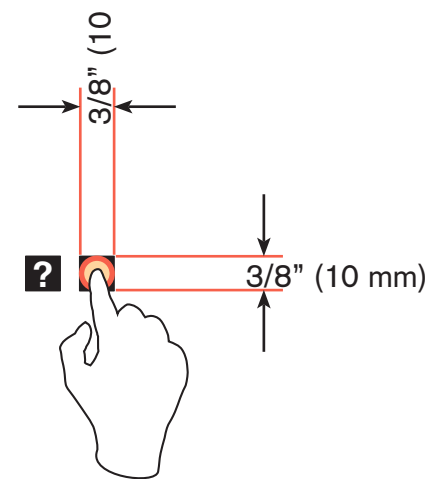
## 2 General Touch Design Guidelines

The **minimum** area for touch activation, to address the general population, is a square  $3/8''$  on each side (10 mm). When possible, use larger target areas. Important targets should be larger than others.

There is no distinct preference for vertical or horizontal finger touch areas. All touch can be assumed to be a circle, though the actual input item may be shaped as needed to fit the space, or express a preconceived notion (e.g. button).

The **visual target** is not always the same as the **touch area**. However the touch area may never be smaller than the visual target. When practical (i.e. there is no adjacent interactive item) the touch area should be notably larger than the visual target.

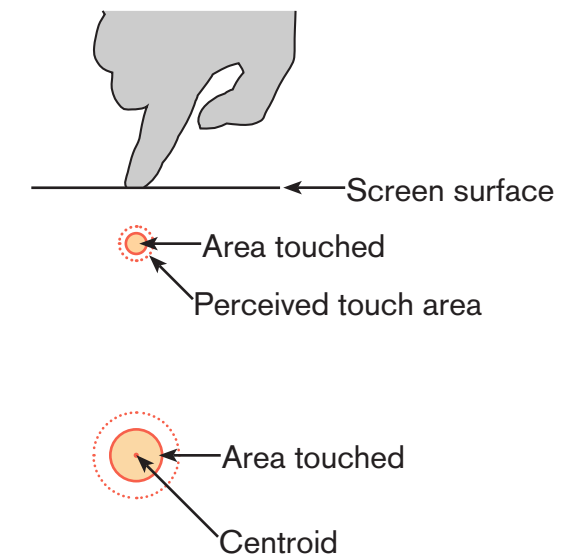
See the example to the right; the orange dotted line is the touch area. It is notably larger than the visual target, so a missed touch (as shown) still functions as expected.



The point activated by a touch (on capacitive touch devices) is the centroid of the touched area; that area where the user's finger is flat against the screen.

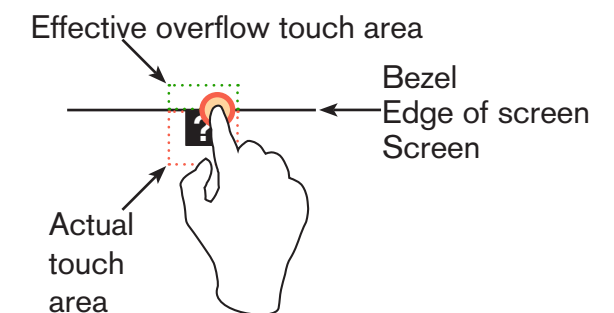
The centroid is the center of area, whose coordinates are the average (arithmetic mean) of the co-ordinates of all the points of the shape. This may be sensed directly (the highest change in local capacitance for projected-capacitive screens) or calculated (center of the obscured area for beam-sensors).

A larger area will typically be perceived to be touched by the user, due to parallax (advanced users may become aware of the centroid phenomenon, and expect this).



Buttons on the **edges of screens** with flat bezels may take advantage of this to use smaller target sizes. The user may place their finger so that part of the touch is on the bezel (off the sensing area of the screen). This will effectively reduce the size of their finger, and allow smaller input areas.

This effective size reduction can only be about 60% of normal (so no smaller than 0.225 in or 6 mm) and only in the dimension with the edge condition. This is practically most useful to give high priority items a large target size without increasing the apparent or on-screen size of the target or touch area.





# Actions

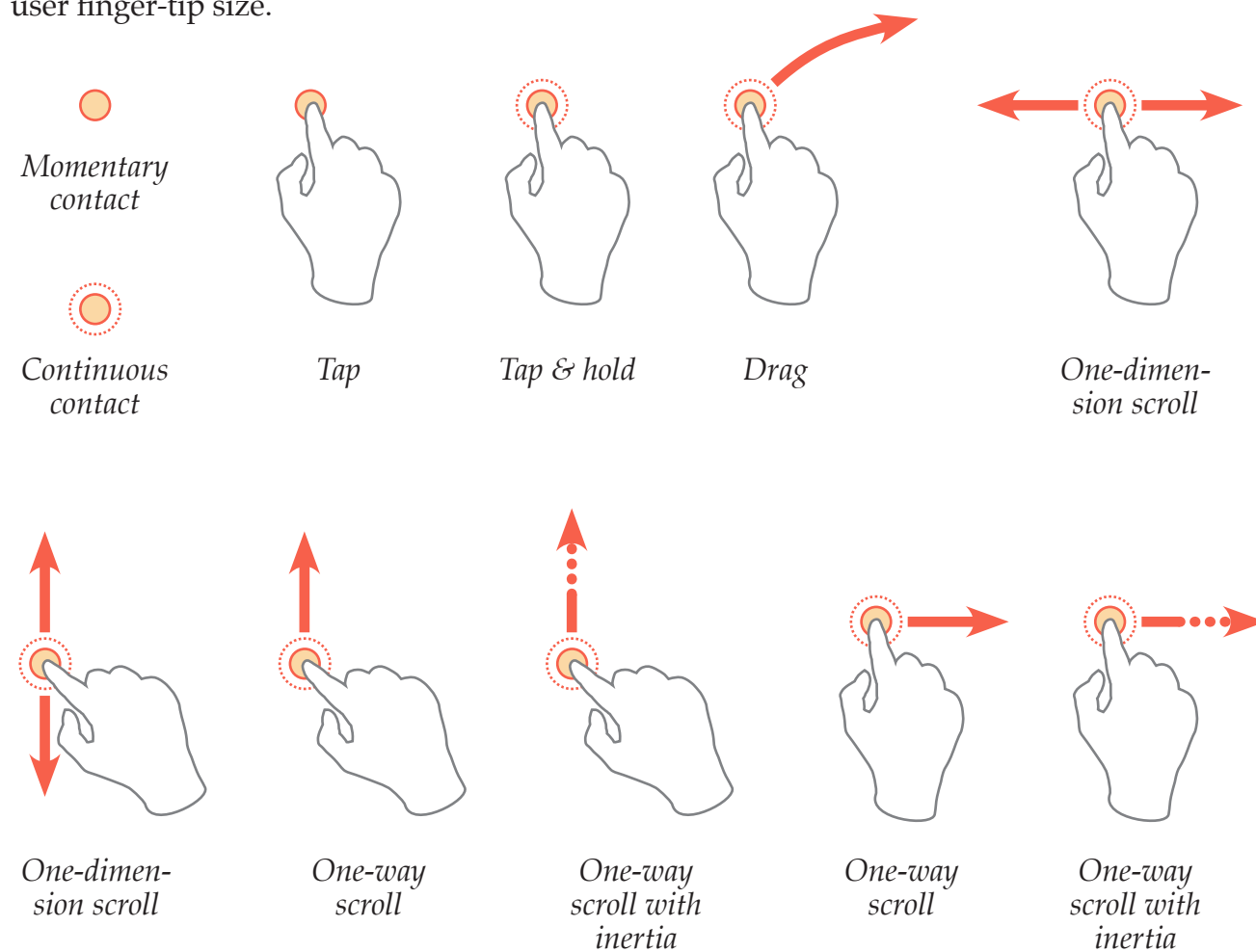
## 3 Gesture

### Finger or styus (on-screen) gestures

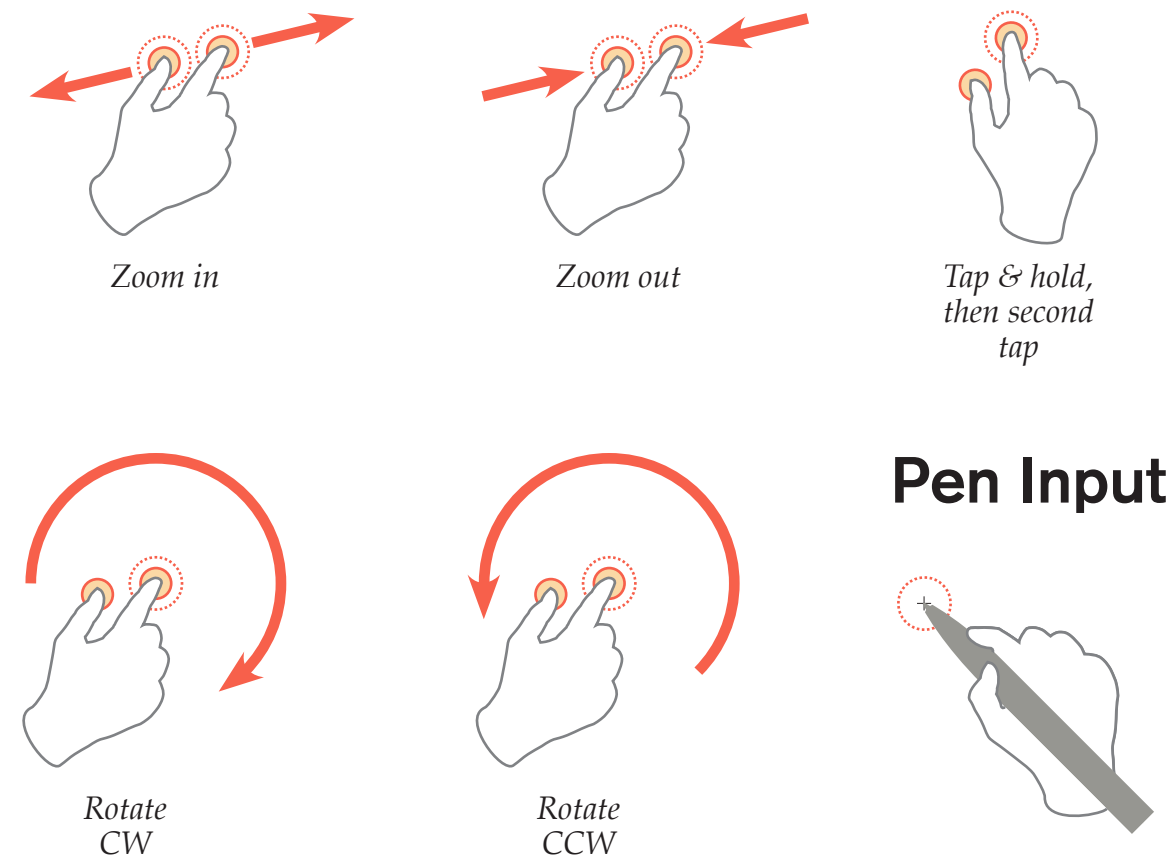
Used on a wireframe or between frames of a flow-charted UI diagram (with the darker arrows as in the one example) to indicate the action undertaken.

Action labels are often examples of the most common state. Clearly, pinch can perform actions other than zoom. Label appropriately.

When overlaid on a design, make sure the outer dot size corresponds to a 90th percentile user finger-tip size.



### Two-finger (multi-touch) gestures



Inspired by Kicker Studio, all designed and drawn by 4ourth Mobile.

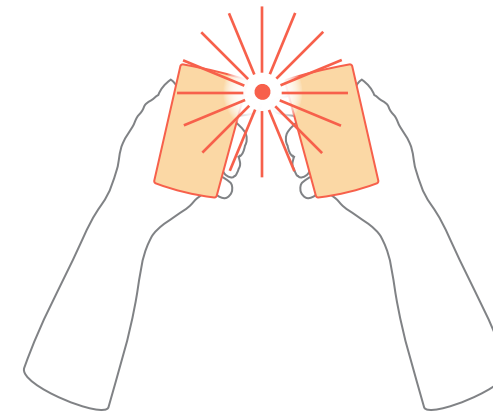


# Actions

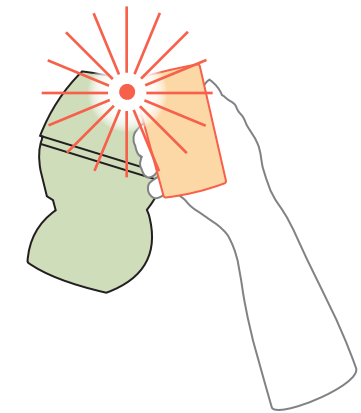
## 4 Gesture 2

### Hand, arm or device gestures

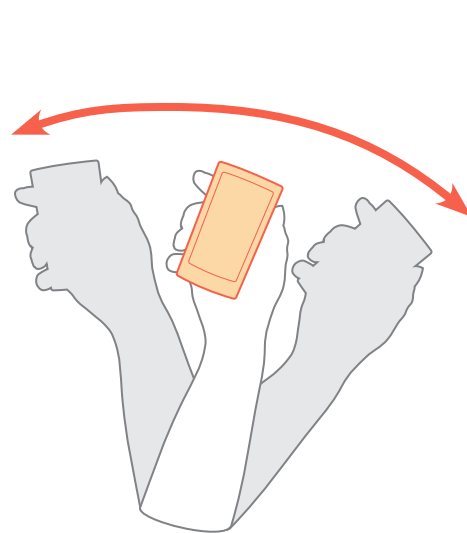
Building off the on-screen gesture language, and used the same way as part of a diagram or flow chart. These are just a few to start with. If you make a device that has lots of accelerometer gestures, add them to the library. And share them with us if you can.



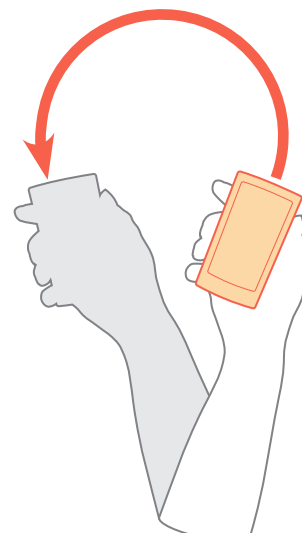
*Tap two hand-sets together*



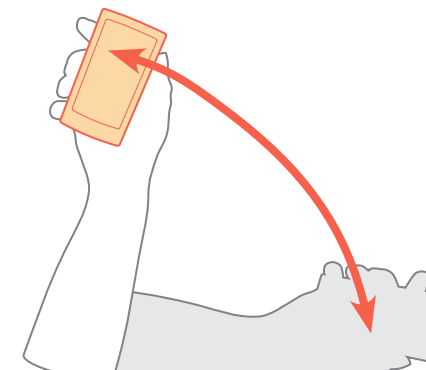
*Handset towards non-phone RFID detector*



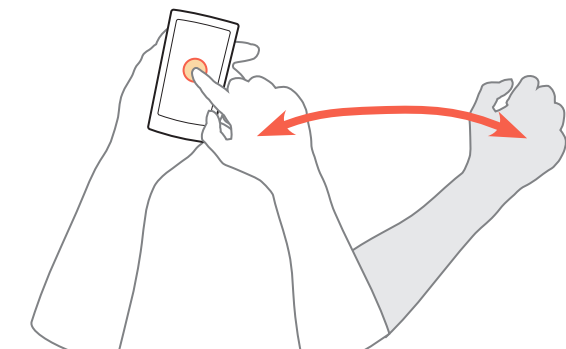
*Shake handset*



*Roll handset (face up to face down)*



*Raise handset (to face)*



*Gesture towards handset (non-handset hand moves)*

*All designed and drawn by 4ourth Mobile.*



# Actions

## 5 Text Entry

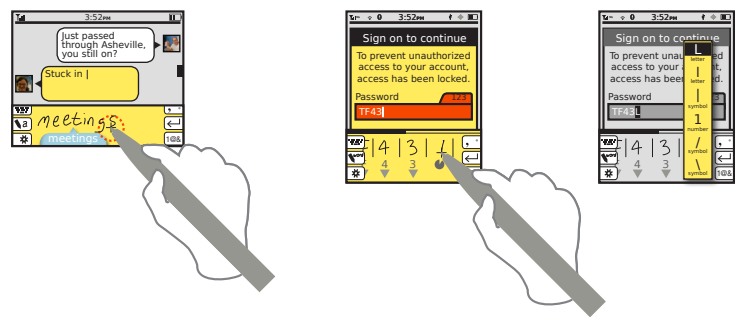
### Keypads



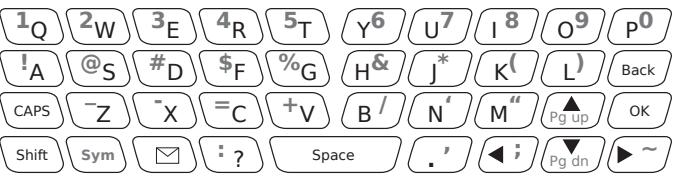
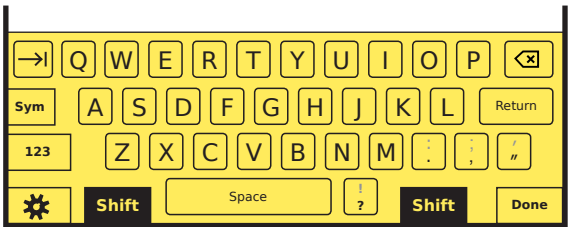
### Input Mode Indicators

ABC	(ALL CAPS)	
Abc	(Initial cap)	
abc	(lower case)	
123	(numeric)	
!@# or Sym	(symbol)	
T9 word	predictive lower case	
T9 Word	Predictive initial cap	

### Pen Input



### Keyboards (mostly virtual)





## 6 Audio & Vibration Output

This page is essentially a stub. We expect haptics and audio to become more important sometime – with the continued ruckus over distracted driving, and emerging worries about accessibility, maybe shortly.

Anyone with design standards around voice response or haptics is encouraged to submit them for inclusion here.

The design elements shown below are associated with a particular page, frame or state. They may also be used with process or flow-chart documentation.

The icon is accompanied by a description of the type of action, and the class or text of any output.

The elements to the right are inspired by 2009 work at Nearfield.org and modified to fit into the diagramming style. Still early. Likely to change. These work with an implied timeline, for use in process diagramming. The process is assumed to start at the device or contact, and move to the right.

These are sample conditions. The waveform and annotation may be added to any action indicator.



Error tone  
(2 s)

Audio tone  
or alert



"Now  
choose a  
time"

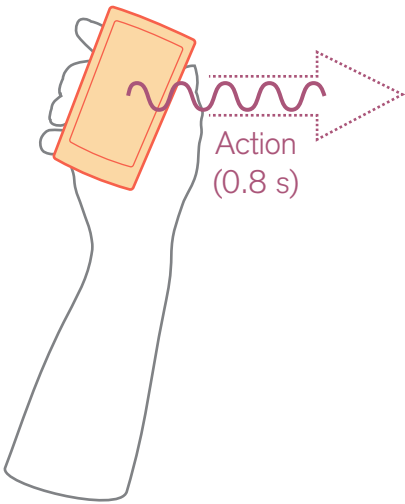
Audio read  
or played



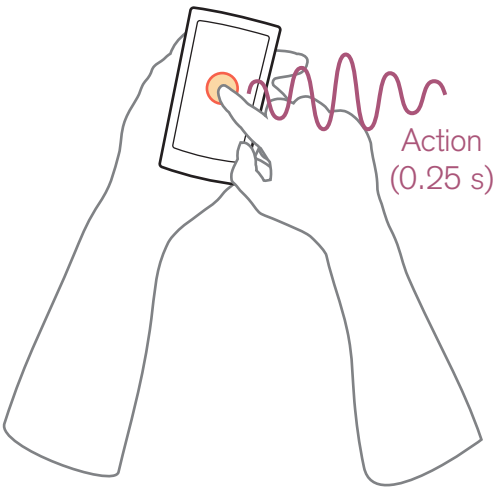
Complete  
(2 s)

Vibrate

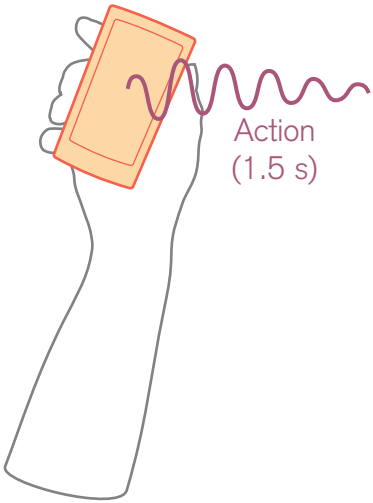
"Complete" here is the class or type of output. Somewhere in the document, these will be defined. "Complete" is different from "error" or "enter information" for example.



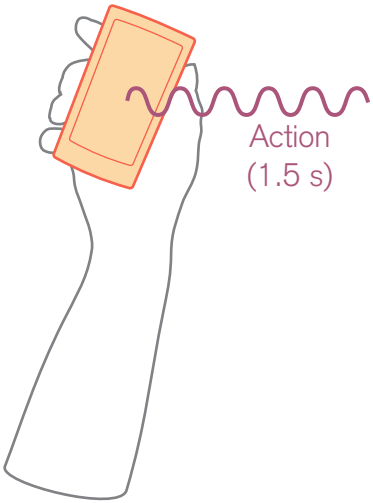
General  
vibrate



Variable  
amplitude



Directional



Response to  
touch



# 1 Typography for Mobiles

## Fonts for Prototyping Mobile UIs

This is the best summary yet, so I am just reproducing it word for word here. For examples of each (of you have installed the type located in the "LSD Basics" folder on the share drive) look to the right. Those in gray are not actually shown, and sometime we need to find a sample, or substitute for them.

I've seen many prototypes of mobile UIs that can't be built and if they could, would not be legible on a small LCD screen. So I thought I'd provide some pointers that might help those of you that is starting out. Often, people starting out prototyping mobile phone UIs get the size of the display right but the size of the font wrong. They try to stuff way too much in there, and they use a font size and font family that is not available in the phone.

If you design applications, you can make pixel perfect designs. If you design mobile web pages, you go for a rough estimate. Having the correct font is important if you design applications, less important if you make mobile websites.

Most current phones use anti-aliased fonts and many of these are available in TrueType versions that you can use on your PC. I've provided links to "official" sources, you may find more if you search the web, but quality may vary.

### Nokia Series 40 and S60

- \* Nokia BW fonts
- \* S60 Sans (Monotype Inc.)

You can get a TrueType version of the S60 Sans font by downloading and installing one of the Nokia S60 SDKs. The fonts currently used in Series 40 devices are the same (or close enough). Note that Series 40 and S60 does not use the same font size for the same screen size however.

Prior to 3rd edition, Nokia used BW fonts, one font for S60 and one font for Series 40. I handmade TrueType versions of these fonts 3 or 4 years ago. If you need them for the purpose of mobile UI prototyping, send me an email.

### Sony Ericsson OSE and UIQ

- \* Sans-Serif (Monotype Inc.)

You can get a TrueType version of this font by downloading and installing the UIQ 3.0 SDK from the UIQ website.

### Motorola (various proprietary OSes)

- \* SynergyBasic (Bitstream Inc.)

I have a Bold only version that I once found somewhere on the intertubes, but I can't locate it anymore. The font is similar to Univers and you might get by with that.

### Samsung and LG (proprietary OSes)

I don't have information on what fonts their feature phones uses. If you know, leave a comment or send me an email and I'll update it here.

The Symbian versions uses the S60 Sans font, the WM versions uses Segoe Condensed or Tahoma.

### HTC, Motorola, Samsung, etc running Windows Mobile 6

- \* Segoe Condensed (Monotype Inc.)
- \* Microsoft Nina for East Asian

Available in Regular, Bold, Italic and Bold Italic.

TrueType versions of Segoe and Nina are installed with Vista and Office 2007. If you don't have the Condensed version of Segoe, you can get it by downloading the Windows Mobile 6 Standard SDK. (Windows Mobile 6 Professional or Classic includes Tahoma and Courier.)

### Google Android

- \* Droid (Ascender Corp.)

The Droid font family has a sans, a serif and a monospace version. Strangely, the sans version does not have italics.

Sans (Regular, Bold)

Serif (Regular, Bold, Italic, Bold Italic)

Mono (Regular)

Sans Asian (This is also the fallback font. Meaning it in-

Morten Hjerde, 20 January 2008

<http://sender11.typepad.com/sender11/2008/01/prototyping-mob.html>

cludes a glyph for all Unicode characters.)

You can extract the fonts from the Android SDK.

### LiMo and other Linux variants

- \* Vera (Bitstream Inc.) and DejaVu

Bitstream gave the Vera font to the open source community. Vera has been modified and evolved into DejaVu. You can find these fonts a number of places, just google them.

### RIM Blackberry

Did you know that Blackberry typography is the universally accepted definition of the word "awful"? I would prefer to just put my head in the sand and pretend it didn't exist - or at least looked better. But let's put the pixel policing aside, here are the fonts you have access to from Java:

- \* Millbank
- \* Millbank Tall
- \* System

All are available in Regular, Bold, Italic and Bold Italic, AFAIK. I have not found TrueType versions of these fonts anywhere.

### iPhone

According to John Gruber, these fonts are included in the iPhone OS X:

- \* American Typewriter
- \* American Typewriter Condensed
- \* Arial
- \* Arial Rounded MT Bold
- \* Courier New
- \* Georgia
- \* Helvetica
- \* Marker Felt
- \* Times New Roman

- \* Trebuchet MS

- \* Verdana

- \* Zapfino

Since there is no official iPhone SDK available yet, you can only use these fonts in the browser. The way to get these fonts is of course to own a Mac. (Btw, I have a really, really nasty case of MacBook Air lust and I'm trying to convince my wife that we need yet another computer in the house.)

### Font sizes

In Java ME you have 3 set font sizes Small, Medium and Large. With the new anti-aliased fonts, you have to measure what font size matches what phone screen size for the different manufacturers.

Get some screen dumps from the phone, open them in Photoshop and Visio (or whatever software you prefer) and measure what point size equals the font size on the phone. For example: a 240x320 screen Series 40 phone uses font heights of 16, 20 and 24 pixels. This equals a point size of 16, 21 and 25 in Photoshop.

In a phone web browser you can specify the font size, but how its rendered is dependent on the capabilities of both the phone and the browser. It ranges from a single font size for all text to continuously variable size. I don't think it makes sense to spend a lot of time in Photoshop designing mobile web pages.

The entire mobile font size/screen size issue is somewhat complex and I'll try to cover it in a future blog post.



2 Sample Typography for Mobile

Fonts for Prototyping Mobile UIs

Good fake 1-line and AMPS faces

SYNCHRO LET  
Nokian  
Mobile Man  
v5 Prophit cell dot fading  
Nokia Cellphone FC Small  
Cellpic ASFRTK\*&\*

Nokia Series 40 and S60 (Home made) \*

Ememess S60 Small Bold Oblique  
Ememess S60 Medium Bold Oblique  
  
Ememess S60 Large Bold  
Ememess Mobile 9 Bold Oblique  
Ememess Mobile 12 Bold Oblique  
Ememess Mobile 16 Bold  
Oblique  
S60 Sans (Monotype Inc.) - from Nokia S60 SDK...

Sony Ericsson OSE and UIQ

Sans-Serif (Monotype Inc.) - from UIQ 3.0 SDK (UIQ website) - which monotype sans????  
Xerox Sans Wide

Motorola (various proprietary OSes)

Bitstream SynergyBasic  
  
Windows Mobile 6  
Segoe Condensed (Monotype Inc.) \*\*\*  
Tahoma **Bold**  
Microsoft Nina for East Asian

Google Android

Droid Sans **Bold**  
Droid Serif **Bold Italic Bold-Italic**  
Droid Sans Mono

LiMo and other Linux variants \*\*

Bitstream Vera Sans **Bold Oblique Bold-Oblique**  
Bitstream Vera Sans Mono **Bold Oblique Bold-Oblique**  
Bitstream Vera Serif **Bold**  
DejaVu Sans Extra Light  
DejaVu Sans **Bold Condensed C-Bold**  
Dejavu Sans Mono  
DejaVu Serif **Bold Condensed C-Bold**

RIM Blackberry

Millbank Tall  
System  
Tahoma **Bold**

iPhone

American Typewriter  
American Typewriter Condensed  
Arial  
**Arial Rounded MT Bold**  
Courier New  
Georgia  
Helvetica  
**Marker Felt**  
Times New Roman  
Trebuchet MS  
Verdana  
*Zapfino*

*None of these are going to be distributed, as they are limited license faces. Sorry, this will cause errors and you will see a lot of garbage to the left, but I can't figure out a way to solve that.*

\* Since TrueType is resolution independent, but the fonts themselves are originally "bitmap fonts", there is a separate font file for each size (small, medium and large).

To display the fonts correctly you MUST always specify 10px size and set anti-aliasing method to "none" in Photoshop. The Small, Medium and Large versions are actually separate typefaces, just remember to always specify 10px regardless of the font you use.

\*\* Bitstream, but open-sourced (with limits, I think). Get it here: <http://ftp.gnome.org/pub/GNOME/sources/ttf-bitstream-vera/1.10/>

DejaVu is derived from Vera, mostly for the purpose of being totally and completely free (libre) and having support for every language you can think of.

DejaVu LGC is a limited set of Latin, Greek & Cryll-lic only, to avoid incompatibility with the weird sets.

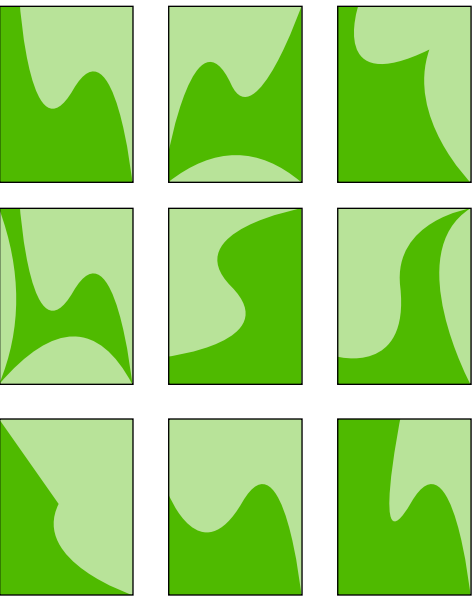
\*\*\* This is Segoe UI, from the desktop. Not the condensed one referenced.



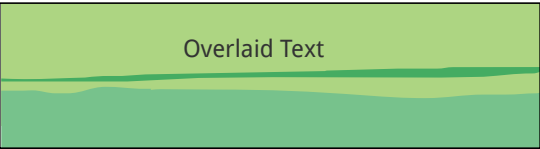
# Content

## 3 Images

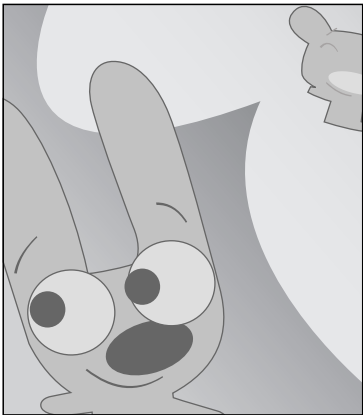
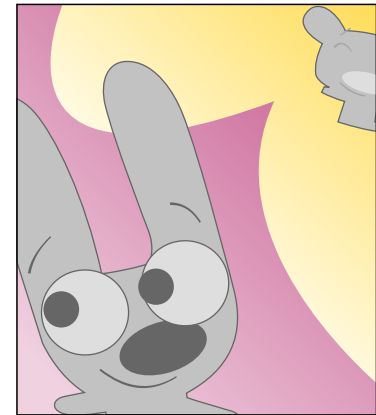
### Image greeking



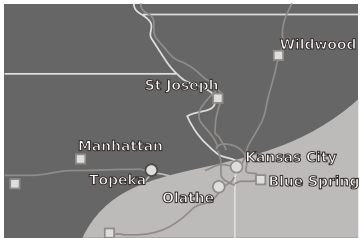
Use grayscale in most places. Green only when the image is key to the discussion.



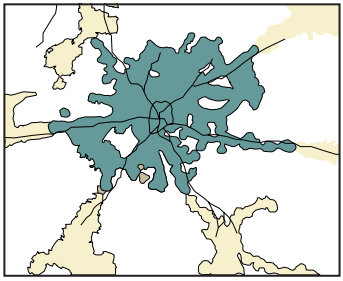
### Stand-in images & graphic widgets



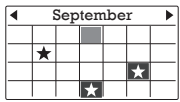
Cartoons derived from some Hallmark characters. All other items, including reference photography, created by Little Springs.



Weather radar (KC)



Coverage map (KCMSA)



Calendar



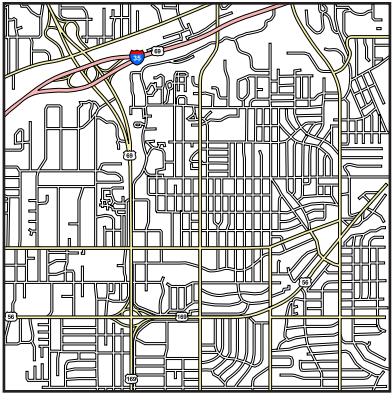
Greeting card



Football field. Used for game summary in sports widgets.



Simple globe



Vector street map (Mission, KS)

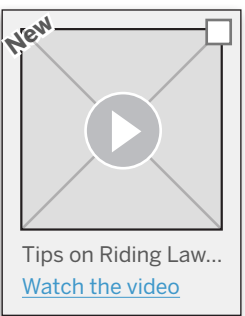
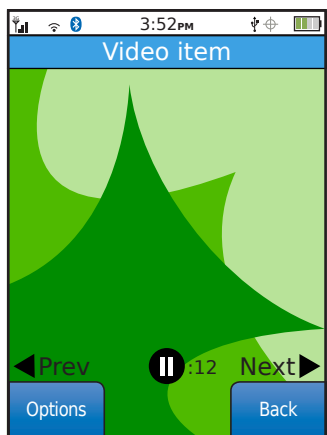


US as individual states



# content

## 4 Video



*Replace the green swoopy greeking with a raster image of the appropriate dimensions (including black masks) when needed for comps or presentation mockups.*



Join the mobile community

# 4ourth mobile patterns wiki

Visit [www.4ourth.com/wiki/](http://www.4ourth.com/wiki/) to contribute to the design patterns, and to add and view other mobile design tips and tools (like this document).