Supporting the Language of Touch, Gestures, and Voice in Technical Documentation

Joe Welinske
WritersUA.com
joewe@writersua.com
Mobile UA Screen Shot Gallery

When we find records about your family, a hint leaf will appear.

Enter what you know and we'll search through our 10 billion historical records for your family.

www.writersua.com/mobile-ua-screen-shot-gallery/
A Major Inflection Point

- New interactions with the UI...
- ...require new techniques and processes
- Proprietary interactions...
- ...make software development harder
- Uniquely customized UIs...
- ...require decisions about language
To open PC settings

- Swipe in from the right edge of the screen, tap **Settings**, and then tap **Change PC settings**. (If you're using a mouse, point to the upper-right corner of the screen, move the mouse pointer down, click **Settings**, and then click **Change PC settings**.)

**PC settings**

- **Notifications**
  - Activate Windows
  - Personalize
  - Users
  - Search
  - Share
  - General
  - Privacy
  - Devices
  - Ease of Access

**To check Windows Update for drivers**

1. Tap or click to open Windows Update.

2. In the left pane, tap or click **Check for updates**, and then wait while Windows looks for the latest updates for your PC.

3. If updates are found, tap or click **Install updates**.

Read and accept the license terms, and then tap or click **Finish** if the update requires it. You might be asked for an admin password or to confirm your choice.
Multi-touch Controls

- Multi-touch controls are not easily discoverable.
- Multi-touch gestures to trigger certain features.
The Language of Gestures

- Individual word choices are extremely important
- It is worth testing with users to find the best words.
- Word choices may change depending on the mobile platform
Custom Interactions May Need Help

ToonPAINT
- Double-tap to change color x2
- Single-tap to select color x1

Weightbot
4. Rotate Clockwise to View the Graph.
Double-tap the graphs to access various views.

AutoCAD
Drag or tap to specify other corner
Helpful information should follow 4 “C”s

- Contextual
- Conforms
- Conditional
- Concise

welinske.com/mobile-ua-google-earth/
<table>
<thead>
<tr>
<th>Interaction Verb</th>
<th>Typical Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap</td>
<td>A quick touch and release to activate an event.</td>
</tr>
<tr>
<td>Double-tap</td>
<td>A quick touch and release twice in succession to activate an event.</td>
</tr>
<tr>
<td>Swipe</td>
<td>A quick vertical or horizontal movement to change the current view.</td>
</tr>
<tr>
<td>Touch and Hold</td>
<td>A press and hold without releasing until an event occurs.</td>
</tr>
<tr>
<td>Pinch</td>
<td>A two-finger gesture, spreading them apart and together to increase/decrease the size of the contents of the current view.</td>
</tr>
<tr>
<td>Enter</td>
<td>Using the keyboard to type text.</td>
</tr>
<tr>
<td>Select</td>
<td>A general reference for choosing between two or more UI elements or items in a list. This will require the use of a tap or other gesture.</td>
</tr>
</tbody>
</table>
Our new set of verbs for touch

Tap

Apple iOS & Windows Phone: A tap is a tap

Android: Touch

Samsung: Tap

Double-tap:

Windows Phone: “To change between full-screen and fit-to-screen viewing, double-tap the screen.”

iOS: “Double-tap a word to select it.”

Samsung: To zoom in or out, place two fingers on the screen and spread them apart (move your fingers closer together to zoom out) or double-tap the screen.

Android: Double-touch
Our new set of verbs for touch

**Swipe**

Android uses Swipe while Windows Phone uses Flick.

iOS has separate definitions for Flick and Swipe.

**Touch and hold**

iOS: Touch and hold the text to show the magnifying glass, then drag to position the insertion point.

Windows Phone: Tap and hold the Tile you want to move until it pops into the foreground.

The use of “tap” from Microsoft and Samsung is problematic.

Android: Long press

Samsung: Tap and hold the thumbnail of a screen and drag it to the location you want.
Our new set of verbs for touch

Pinch

Pinch Open, Pinch Close (iOS)

Pinch (Android)

Stretch, Pinch (Windows Phone)

The word “zoom” is often used in conjunction with the pinch terms as shown in the following examples:

iOS: Double-tap, or pinch and stretch a photo. When you zoom in, you can drag to see other parts of the photo.

Windows Phone: To zoom in or out, just stretch or pinch the viewfinder with your thumb and forefinger.
Our new set of verbs for touch

**Select**

**iOS:** Select the album, then enter a new name.

**Windows Phone:** Swipe over to Contacts, select the contact you want to edit, then tap Edit.

*Is a “Tap” a “Select”?*

**Enter**

Alphanumeric keys: To add names, address, dates, and miscellaneous notes

“*Type*” is less common.

- Enter your email address and password.
- Tap the Name box and type your contact's first name and surname, or just their first name.
“Simplified Technical” and “Plain” English

- Use the active voice.
- Use simple verb tenses.
- Use language consistently.
- Avoid lengthy compound words.
- Use relatively short sentences.

<table>
<thead>
<tr>
<th>Replace</th>
<th>with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modify</td>
<td>Change</td>
</tr>
<tr>
<td>Option</td>
<td>Choice</td>
</tr>
<tr>
<td>Initial</td>
<td>First</td>
</tr>
<tr>
<td>Complete</td>
<td>Fill-in</td>
</tr>
</tbody>
</table>

Replace | With | to save
---------|------|--------
Additional | Extra | 5
Submit    | Send  | 2
Contains  | Has   | 5
Purchase  | Buy   | 5

List of plain English words and phrases
To share a photo or video
You can share a photo or video you’ve just captured, or one that's been on your phone for a while. You can even share photos from your SkyDrive or Facebook account in the cloud.

Share any photo or video...
... that’s on your phone or in SkyDrive or Facebook.

3. Tap Attach 📬, then do one of the following:
   - Tap Voice note, say your message aloud, then tap Done.
   - Tap Ringtone, then tap the custom ringtone. (Only short ringtones can be attached to messages.)
   - Tap Contact, find and tap the contact you want to attach, then tap Share 🔄.
Change the Appearance of the Border

1. Tap **Borders** at the bottom of the screen.
2. Tap one of the four buttons right below your image:

   - **Size**: Move the sliders to adjust the thickness and shapes. Curves only works on some layouts.
   - **Color**: Move the sliders to adjust hue, saturation, and brightness.
   - **Texture**: Tap a pattern to select it. Swipe left for more options.
   - **Canvas**: If you rounded the outer border, you can color the background. Move the sliders as shown below.

**Tip**: Numbers appear above the sliders. Use these to get the same settings on other images.
How do I adjust my timeout settings?

Tap the Menu button, then tap the Settings icon.

On the Settings screen tap the 'Time Out Session After' row to modify your timeout settings. You can adjust the timeout preference between 5, 15 and 30 minutes.
Bringing UA to the UI

1. Tap the **Menu** icon, then select **Guide**.
2. Tap the **date** at the top.

**DirecTV**

- **Movies**
- **Portfolios**
  - 0023 Complete Investing
  - Market Value
    - $59,407
  - Total Cash
    - $1,542.82
  - Cash
    - $24.01 (1.0%)

**Dick's Sports**

- **Hints for successful scanning**
  - **Light**
  - **Distance**: should be about 3 to 5 inches
  - **Shake** to force the camera to focus
  - **Wait** for the autofocus to finish
Interaction verbs: Generic or Custom

• **Generic**
  - “To change the widget setting, **select** Preferences.”
  - **Scroll** to view additional items.”
  - “**Move** the unused items to the trash.”

• **Custom**
  - Click, double click, click and drag
  - Tap, double tap, flick
  - Hover, wave left/right
  - Press left, press down, select
  - Say “Preferences, then widget setting”
Voice today

- **We need APIs**
  - iOS Siri / Nuance Nina
    - http://tinyurl.com/cjkkkg35
  - Windows Phone API / Cortana
    - http://tinyurl.com/islmovh
  - Android Voice API (not Google Voice)
    - http://tinyurl.com/nxakw3c

- **Automotive may lead**
  - Ford Sync
  - Honda Accord
    - welinske.com/help-behind-the-wheel/
UA Language in Automotive

MyFord Touch
controlled vocabulary

Touch the Voice button on the steering wheel to make a call, then say “Call <name from phonebook>” or “Dial <desired number>”

1. Touch the Voice button on the steering wheel to make a call
2. Touch the Phone button on the steering wheel to receive a call
3. Touch and hold the Phone button to end a call
4. Browse your phonebook in the Contacts menu. Confirm your contacts have been downloaded to SYNC. Remember to say the contact name just as it is listed

TOUCH THE VOICE BUTTON ON THE STEERING WHEEL, AND THEN SAY:

<table>
<thead>
<tr>
<th>Basic Commands</th>
<th>SYNC Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>What can I say?</td>
<td>Must say “Services” first, and then:</td>
</tr>
<tr>
<td>List of commands</td>
<td>• What can I say?</td>
</tr>
<tr>
<td>Main menu</td>
<td>• Traffic</td>
</tr>
<tr>
<td>Previous</td>
<td>• Directions</td>
</tr>
<tr>
<td>Next</td>
<td>• Business search</td>
</tr>
<tr>
<td>Go back</td>
<td>• Operator (when using directions or business search feature)</td>
</tr>
<tr>
<td>Exit</td>
<td>• Favorites</td>
</tr>
<tr>
<td>Help</td>
<td>• News, sports, weather, horoscopes, stock quotes, movies or travel</td>
</tr>
<tr>
<td>Vehicle health report</td>
<td>• Help</td>
</tr>
<tr>
<td></td>
<td>• Services (to return to the main menu)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phone</th>
<th>Climate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone list of commands</td>
<td>• Climate control list of commands</td>
</tr>
<tr>
<td>Dial</td>
<td>• Climate &lt;On/Off&gt;</td>
</tr>
<tr>
<td>Call &lt;name&gt; on cell/</td>
<td>• Climate my temperature</td>
</tr>
<tr>
<td>at home/at work</td>
<td>• Climate temperature &lt;60-85&gt; degrees</td>
</tr>
<tr>
<td>Call voicemail</td>
<td></td>
</tr>
<tr>
<td>Do not disturb &lt;On/Off&gt;</td>
<td></td>
</tr>
<tr>
<td>Listen to text message*</td>
<td></td>
</tr>
</tbody>
</table>
Emerging interaction types

iOS Event Handlers
http://tinyurl.com/ng8a4lz

BlueRay Remote Control

PayPass
http://www.mastercard.us/paypass.html

Tobii PCEye Go
http://tinyurl.com/7pfrqzs
Google Glass gestures

http://tinyurl.com/k3s5fwt

Galaxy Glass
http://tinyurl.com/galaxyglass
Create a table of possible interaction types. Update as needed.

Variable names can be whatever represents the interactions best.

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Interaction Type and Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generic</td>
</tr>
<tr>
<td>Command_Select</td>
<td>select</td>
</tr>
<tr>
<td>Command_Scroll</td>
<td>scroll</td>
</tr>
<tr>
<td>Command_Move</td>
<td>move</td>
</tr>
</tbody>
</table>

Excel Worksheet
## Command Language Interaction Table

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Command</th>
<th>Select</th>
<th>Mouse</th>
<th>Touch</th>
<th>Hand Gesture</th>
<th>Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command.Select</td>
<td>select</td>
<td>click</td>
<td>tap</td>
<td></td>
<td>(hover)</td>
<td>say “select”</td>
</tr>
<tr>
<td>Command.Scroll</td>
<td>scroll</td>
<td>click the scroll bar</td>
<td>flick</td>
<td></td>
<td>(swipe)</td>
<td>say “scroll”</td>
</tr>
<tr>
<td>Command.Move</td>
<td>move</td>
<td>click and drag</td>
<td>press and slide</td>
<td></td>
<td>(grab and position)</td>
<td>say “move”</td>
</tr>
</tbody>
</table>
RoboHelp UDV interaction scheme

User-defined variables
+ Screen profiles
+ Multi-screen output

1. Define your UDV$s$.
2. Add UDV$s$ to your topics.
3. Assign UDV sets to screen profiles.

Works similarly in other Help authoring tools
Selecting portfolio elements

1. From the main menu, click Portfolio Packager.

   The Portfolio Packager screen appears.

2. Click the **Project Site** list box.

Selecting portfolio elements

1. From the main menu, tap Portfolio Packager.

   The Portfolio Packager screen appears.

2. Tap the **Project Site** list box. Then select one of the project sites from the list.

   Chicago  

Laptop

Phone

TV
Single-sourcing for Multiple Device Types

- Responsive Design
- Adaptive Content
- Conditional Text
  - Based on device type
  - Based on UI type
- HTML5 / CSS / Media Query
- CMS / Authoring Tools
Getting Started with Evernote for: Windows 8 (Touch)

Remember Everything

Welcome! Evernote is the easy and powerful way to remember everything, from limiting membranes and vital information to daily reminders and to-do lists.

Everything you store in your Evernote account is automatically synced across all of your devices, making it easy to capture, browse, search and edit your notes everywhere you have Evernote, including smartphones, tablets, computers and on the Web.

This guide will introduce you to the basics of using Evernote, including how to create, organize, sync, search and share notes.

Create Your Evernote Account:

Evernote offers two account types: Free accounts and Evernote Premium accounts.

Don’t have an Evernote account? Create a Free account now!

Free Account

Anyone can create an Evernote account for free. Free accounts include the core Evernote features covered in this Getting Started Guide and more.

Evernote Premium

Evernote Premium includes additional features and services that are not available in the Basic Account.

Visit the Evernote Web site at evernote.com to create an account.

http://evernote.com/evernote/guide/wind...
Visual cues in an overlay

Snapseed
Literal representations of hands/devices

Layar

Welcome to Layar!

Choose a layer and hold up your device to view your world in a whole new way!

Sketchbook Pro

Swipe on canvas in any direction for quick access

Layer Editor

Undo

Redo

Brush Editor
Visual cues for unique interactions

Set the tip type used.

Tap-drag a slider to change values.

**Note** To precisely move sliders, tap-hold a slider, then drag up to increase its value or down to decrease it. The further you move away from the slider, the more precise your control.

Sketchbook manual

Play with **Spacing** to dramatically change a stroke by spreading out or condensing the brush stamps.

Tap **Brushes** to flip back to the **brush palette**.

Courtesy of Starr Allen Shaw
Visual cues for unique interactions

Set the tip type used.

Tap-drag a slider to change the setting.

**Note** To precisely move sliders, tap-hold a slider, and drag up to increase its value or down to decrease it. The further you move away from the slider, the more precise your control.

Sketchbook manual

Play with **Spacing** to dramatically change a stroke by spreading out or condensing the brush stamps.

Tap **Brushes** to flip back to the brush palette.

Flixster

New: access your movies faster!

Silver Linings Playbook

Swipe a movie to the right to quickly add it to your Want To See list, watch a trailer, and more!

Side Effects

42%

8 friends want to see
Rooney Mara, Channing Tatum

Tap to dismiss

Courtesy of Starr Allen Shaw
Evaluating UI text

"Dismiss" > "Hide"
Resource Directory: writersua.com/resources/
Blog: writersua.com/blog/
YouTube Channel: youtube.com/user/jwelinske
Email: joewe@writersua.com

WritersUA East Charleston – east.writersua.com
WritersUA Central Austin – central.writersua.com