Wireless Independence Now

An Overview of Smartphone Accessibility Features

Kendra Ragsdale, AT&T Manager of Outreach & Compliance
Ben Lippincott, Wireless RERC Project Director Industry and Consumer Outreach
• Questions for the Group
• What is Accessibility
• iOS and Android Accessibility Features
• Assistive and Accessibility Apps
• Accessibility Resources
Questions for the Group

• What type of phone or tablet do you have?
• What do you like about your device?
• What do you not like about your device?
• How did you choose your device?
Accessibility – what does that mean?

• Wireless accessibility is the ability to access and benefit from mobile phones and tablets.

• Accessibility means that a product, device, service, or environment is available and usable to as many people as possible.
Demonstration of Apple & Android Accessibility Features
Apple Accessibility Features
Apple Accessibility Features

- **General**
  - **Vision**
    - VoiceOver: Off
    - Zoom: Off
    - Invert Colors
    - Grayscale
    - Speech
      - Enabling Invert Colors or Grayscale will automatically disable Night Shift.
  - **Interaction**
    - Switch Control: Off
    - AssistiveTouch: Off
    - Touch Accommodations: Off
  - **3D Touch**: On
  - **Keyboard**
  - **Shake to Undo**: On
  - **Vibration**: On
  - **Call Audio Routing**: Automatic
  - **Home Button**: Default
  - **Reachability**: Double-tap the home button to bring the top of the screen into view.

- **Hearing**
  - Hearing Aids
  - LED Flash for Alerts
  - Mono Audio
  - **Phone Noise Cancellation**: On
    - Noise cancellation reduces ambient noise on phone calls when you are holding the receiver to your ear.
  - **L**: Adjust the audio volume balance between left and right channels.
  - **MEDIA**
    - Subtitles & Captioning
  - **Audio Descriptions**: Off
Android Accessibility Features
Android Accessibility Features
Accessibility Features Helpful for Everyone

Apple Devices (iPhone/iPad)
- Siri – Voice Control
- Accessibility Shortcut

Android Devices (LG, Samsung, HTC Phones/Tablets)
- Google Now and Ok Google – Voice Control
- Accessibility Shortcut
Apple: Siri – Voice Control

Press and hold the Home button or say, “Hey Siri!”

Image courtesy of Apple
Android: Ok Google – Voice Control

Type in the search bar on top or just say, “Ok Google!”
Apple: Accessibility Shortcut

1. LEARNING
   - Guided Access: Off

2. INTERACTION
   - Switch Control: Off
   - AssistiveTouch: Off
   - Call Audio Routing: Automatic
   - Home-click Speed: Default
   - Reachability: On
       - Double-tap the home button to bring the top of the screen into reach.
   - Accessibility Shortcut: Off

3. Accessibility Shortcut
   - TRIPLE-CLICK THE HOME BUTTON FOR:
     - VoiceOver
     - Invert Colors
     - Grayscale
     - Zoom
     - Switch Control
     - AssistiveTouch
Android: Accessibility Shortcut

When this feature is turned on, you can quickly enable accessibility features in two steps:

Step 1: Press and hold the power button until you hear a sound or feel a vibration.

Step 2: Touch and hold two fingers until you hear audio confirmation.

If the device has multiple users, using this shortcut on the lock screen temporarily enables accessibility until the device is unlocked.
Accessibility Features for People who have Difficulty Seeing

Apple Devices (iPhone/iPad)
• VoiceOver – Screen Reader
• Zoom
• Larger Text
• Invert Colors

Android Devices (LG, Samsung, HTC, Motorola Phones/Tablets)
• Talk Back – Screen Reader
• Magnification Gestures
• Large Text
Apple: VoiceOver – Screen Reader
Apple: Zoom, Larger Text, Invert Colors

**Zoom**
- Zoom magnifies the entire screen:
  - Double-tap three fingers to zoom
  - Drag three fingers to move around the screen
  - Double-tap three fingers and drag to change zoom

**Larger Text**
- Apps that support Dynamic Type will adjust to your preference.
  - Drag the slider below

**Invert Colors**
- Setting for inverting colors.
Android: TalkBack – Screen Reader

When TalkBack is on, your device provides spoken feedback to help blind and low-vision users. For example, it describes what you touch, select, and activate.
Android: Magnification Gestures, Large Text

Magnification Gestures

- On

When this feature is turned on, you can zoom in and out by triple-tapping the screen.

While zoomed in, you can:
- Pan: Drag two or more fingers across the screen.
- Adjust zoom level: Pinch two or more fingers together or spread them apart.

You can also temporarily magnify what's under your finger by triple-tapping and holding. In this magnified state, you can drag your finger to explore different parts of the screen. Lift your finger to return to your previous state.

Note: Triple-tap for magnification works everywhere except the keyboard and navigation bar.

Large Text

- On

System
- Captions
  - Off
- Magnification gestures
  - On
- High contrast text
  - Off
- Power button ends call
- Auto-rotate screen
- Speak passwords
- Accessible shortcut

Advanced
- Large text
- High contrast text
  - On
- Power button ends call
- Auto-rotate screen
- Speak passwords
- Accessible shortcut
Accessibility Features for People who have Difficulty Hearing

Apple Devices (iPhone only)
• Vibrate on Ring
• LED Flash for Alerts

Android Devices (LG, Samsung, HTC, Motorola Phones only)
• Vibrate when Ringing & Vibrate on Touch
• Pulse Notification Light
Apple: Vibrate on Ring, LED Flash for Alerts

Vibrate on Ring

LED Flash for Alerts
Android: Vibrate for Calls & Pulse Notification Light

Vibrate for Calls

Pulse Notification Light
Accessibility Features for People who have Difficulty Touching or Grabbing

Apple Devices (iPhone/iPad)
• Assistive Touch
• Dictation
• Keyboard Shortcuts
• SWYPE (3rd party app that costs $0.99)

Android Devices (LG, Samsung, HTC, Motorola Phones/Tablets)
• SWYPE (Built into Android, free)
• Dictation
Apple: Dictation
Apple: Keyboard Shortcuts, Swype

Keyboard Shortcuts

Swype
Apple: Assistive Touch

AssistiveTouch allows you to use your iPhone if you have difficulty touching the screen or if you require an adaptive accessory.

CUSTOM GESTURES
Create New Gesture...

Custom gestures allow you to record gestures that can be activated from Favorites in the Menu.
Android: Dictation, Swype
Accessibility Features for People who have Difficulty Concentrating

Apple Devices (iPhone/iPad)
- Guided Access
- Reminders

Android Devices
- Google Keep
Apple: Guided Access

Guided Access keeps the iPhone in a single app, and allows you to control which features are available. To start Guided Access, Triple-Click the Home button in the app you want to use.

Passcode Settings

Time Limits

Accessibility Shortcut

When you Triple-Click the Home button while Guided Access is enabled, your Accessibility Shortcut settings will be displayed.

Set Passcode

Enter a passcode

1 2 3
4 5 6
7 8 9
0

Options Circle areas on the screen you would like to disable.
Apple: Reminders

Reminders
1 item

- Buy milk

Show Completed

Details

- Do something
- Remind me on a day
- Alarm Thu, 6/11/15, 3:00 PM
- Repeat Never
- Remind me at a location
- Priority None
- List Reminders
- Notes
Android: Google Keep
## Examples of Apps for All

<table>
<thead>
<tr>
<th>App</th>
<th>Functionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evernote</td>
<td>- Take notes in a variety of formats, including: text, sketches, photos, audio, video, PDFs, web clippings and more</td>
</tr>
<tr>
<td>PillBoxie</td>
<td>- Customizable medication reminder</td>
</tr>
<tr>
<td>Remember the Milk</td>
<td>- Note taking app designed for people with substantial loss of vision</td>
</tr>
<tr>
<td>Mint</td>
<td>- Simple spending tracker, budget creator and bill reminder</td>
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</table>
## Examples of Apps for Vision Loss

<table>
<thead>
<tr>
<th>App</th>
<th>Description</th>
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<tbody>
<tr>
<td>BrailleTouch</td>
<td>- Alternative text input app based on the Braille alphabet</td>
</tr>
<tr>
<td>IDEAL Currency Identifier</td>
<td>- Identifies three generations of U.S. currency notes beginning in 1993</td>
</tr>
<tr>
<td>Access Note</td>
<td>- Note taking app designed for people with substantial loss of vision</td>
</tr>
<tr>
<td>BARD Mobile</td>
<td>- Provides access to talking books from the NLS Braille and Audio Reading Download (BARD) site</td>
</tr>
<tr>
<td></td>
<td>- Contains nearly 65,000 talking books, magazines, and braille music scores</td>
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</table>
## Examples of Apps for Hearing Loss

<table>
<thead>
<tr>
<th>Hamilton CapTel</th>
<th>TruLink</th>
<th>What’s App</th>
<th>Skype</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Listen to your phone conversations while reading word-for-word captions of what's said to you</td>
<td>• Connects your hearing aids to your Android or iPhone</td>
<td>• Simple real-time instant messaging</td>
<td>• Free instant messaging, voice or video calls</td>
</tr>
<tr>
<td></td>
<td>• Easily adjust volume and customize performance to unique situations</td>
<td></td>
<td></td>
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Examples of Apps for Dexterity Impairments

<table>
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<tr>
<th>App</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Tetra Alarm</td>
<td>• Highly customizable timer that notifies you of weight shifts, bio-breaks, or to take meds</td>
</tr>
<tr>
<td>Parking Mobility</td>
<td>• Report disabled parking abuse to your city in less than two minutes</td>
</tr>
<tr>
<td>Perfect Keyboard</td>
<td>• Setup your Android keyboard so that it works best for you</td>
</tr>
<tr>
<td>Big Launcher</td>
<td>• Simplifies user interface of home screen and app pages</td>
</tr>
</tbody>
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Accessibility Resources

• AT&T Accessibility (download presentations) – att.com/accessibility
• AT&T Digital You – digitalyou.att.com
• AT&T for Disability and Aging for Wireline Services – Voice: 1-800-772-3140; TTY: 1-800-651-5111
• Wireless RERC – wirelessrerc.org
• LiveWell RERC – livewellrerc.org
• FCC Accessibility Clearing House – ach.fcc.gov
• Global Accessibility Reporting Initiative (GARI) – gari.info
If you have any questions, contact:

– Ben@imtc.gatech.edu
– 404-894-7034