# easterseals Crossroads

INDATA AT 101

#### **AGENDA**

- 1. What is Assistive Technology?
- 2. Low Tech
- 3. Labelers and Large Print Keyboards
- 4. Magnifier / Readers
- 5. Orcam
- 6. Built-In Accessibility for Computers
- 7. Magnifying Software
- 8. Screen Reader Software
- 9. Tablets and Apps
- 10. Questions & Answers



# What is AT or Assistive Technology

Any device or system that allows a person with different abilities to perform a task that they might not other wise be able to.















# **Low Tech**



**Puff Paint** 



Shelf Liner



**Rubber Bands** 



Bumps



Velcro



# Labelers and Large Print Keyboards

- Pen Friend
- ID Mate
- Braille Labeler
- Large print keyboards





# **Magnifiers and Readers**

- What they do
  - Magnify text and pictures
  - Adjust contrast settings







# Magnifiers Come in Many Shapes and Sizes













#### **OCR Devices**

#### ClearReader

 The Optelec ClearReader+ brings portability, simplicity and a sleek design to text-to-speech and OCR reading.

#### OrCam Glasses

The OrCam is a device that reads text aloud to people who are visually impaired or legally blind and is triggered by the simple point of a finger or push of a button. Wearers can also program the OrCam device to recognize commercial products, personal items and people's faces.



#### **Accessibility Options**

#### **ChromeBook**

#### How to Enable Accessibility Options In Chrome OS

To enable accessibility options in Chrome OS, go to settings and search accessibility. You can also access them by going to Settings > Advanced Options > Accessibility.



#### **ChromeVox**

#### CTRL + ALT + Z

ChromeVox is a free screen reader that brings the speed, simplicity, and security of Chromebooks to visually-impaired users. ChromeVox comes preinstalled on Chromebooks so there's nothing you have to do besides turn it on.



# **Accessibility Options**

#### **MAC**

#### How to Enable Accessibility Options In MAC OS

macOS features an **Accessibility** Options window that lets you quickly turn on or off common **accessibility** features like Zoom, VoiceOver, Zoom and more. You can bring up this window anytime with a simple shortcut. On the built-in keyboard of a **Mac** notebook computer, press Fn-Option-Command-F5.



#### **VoiceOver**

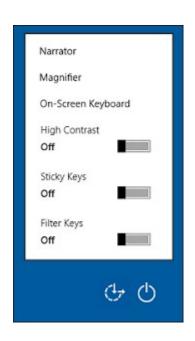
#### **Command F5 or FN Command F5**

VoiceOver is a screen reader built into Apple devices. By using VoiceOver, the user can access their Mac computer device based on spoken descriptions and, by using the the keyboard.



#### **Accessibility Options**

#### **Windows**



Setting up your PC to make it more accessible takes only a few steps. Most Ease of Access options are available in Settings. Select the **Start** button, then select **Settings** > **Ease of Access**.

Commonly used options are also available from the sign-in screen. Select the **Ease of Access** button in the lower-right corner to see them.



#### **Narrator**

#### **Press Windows Key and Type Narrator**

Narrator is a light-duty screen reader utility included in Microsoft Windows. Narrator reads dialog boxes and window controls in a number of the more basic applications for Windows



#### **Magnifying Software**

- How they work:
  - Magnify what is being displayed on screen
  - Offer a variety of enhancements
    - Size and color of mouse
    - Contrast on screen
    - Cursor tracker
    - Focus for navigation



# **Variety of Magnification Software**

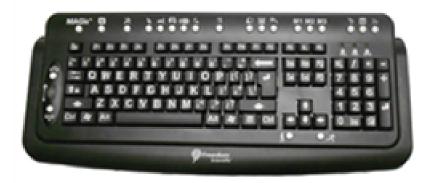
- ZoomText
  - **-** \$400-\$600
- Magic
  - **-** \$400-\$600
- Dolphin
  - **-** \$795





# **Keyboards**







#### **Braille Displays and Screen Readers**

- Braille Displays and Notetakers
  - Tool for computer input and output
  - Allows the user to read output using Braille Dots
  - Allows User to Input
    - Perkins Keyboard
    - QWERTY Keyboard







#### **Screen Readers**

- Converts text on screen to audible speech
- Navigation of the computer done with keystrokes.
- Examples
  - JAWS \$1000
  - NVDA

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- Windows Narrator
- Window Eyes



IAWS for Windows



#### Window-Eyes Update

- Sales have been discontinued in the US and Canada
- Technical support (paid versions) will continue
- No further updates (so may become obsolete as Windows moves forward)
- VFO offering free migration to JAWS 18
- Read more: <a href="http://www.gwmicro.com/window-eyes/migrate/">http://www.gwmicro.com/window-eyes/migrate/</a>



# Apps, Apps, Apps

- 1. Magnifiers
- 2. Object Identifiers
- 3. Color Identifiers
- 4. Currency Identifiers
- 5. Optical Character Recognition
- 6. Other Kinds
- 7. Resources



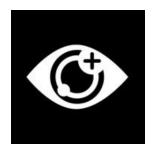
# Apps, Apps, Apps

#### Magnifiers

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- iOS and Android Brighter and Bigger, Claro MagX, Seeing Assistant Home Lite, SuperVision+ Magnifier
- iOS Only Better Vision, MagniFire, Mag. Light Pro (\$1.99), Vision Assist (\$3.99), Visor — Magnifier (\$1.99),
- Android Only Meyepal Magnifier, Magnifying Glass, Flashlight and Magnifying Glass, Zoom Plus

#### **Better Vision by Ergra Low Vision**





- Big icons for easy control
- Invert color
- Several color combination for contrast
- Option to freeze
- Optical character recognition needs improvement

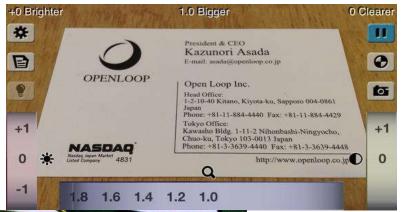


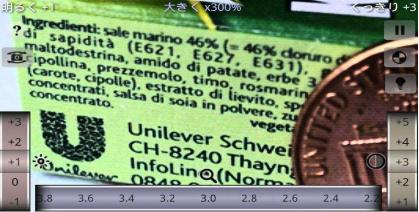




#### Brighter and Bigger by Kazunori Asada

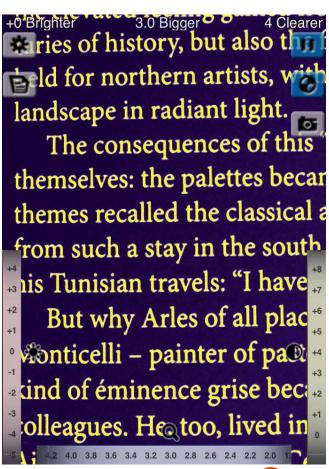






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- Many robust options to make the image clear
- Adjust contrast and magnification as you go



# Meyepal Magnifier by Meyepal





- Big buttons for easy control
- Option to freeze
- Invert color



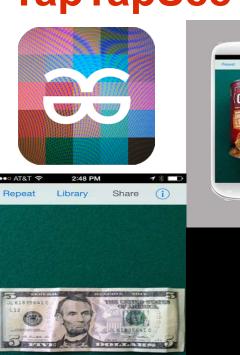
# Apps, Apps, Apps

#### Object, Color and Currency Identifiers

- iOS and Android TapTapSee, CamFind, Talking Goggles
- iOS Only Be My Eyes



# TapTapSee by CamFind, Inc.



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- Descriptions appear in text format at the bottom of the screen
- There is no built-in audio feedback; need to turn on tablet screen reader to hear descriptions

#### CamFind by CamFind, Inc.











- Descriptions appear in text format on top of the screen
- There is built-in audio feedback
- Provides web
   search results of
   the product or
   something similar
   or something
   totally not relevant
- Audio feedback available in several languages



# Talking Goggles – A Camera with Speech by Sparkling Apps BV







- Descriptions appear in text format in the middle of the screen
- There is built-in audio feedback
- Upgrade (\$0.99) to remove ads and view the web search results
- Audio feedback available in several languages



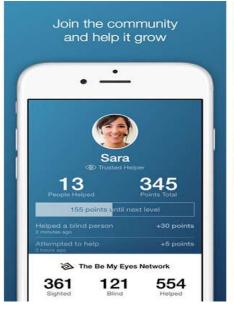
#### Be My Eyes by Be My Eyes



- Blind users can request help from a sighted person and the sighted users will then be called for help. As soon as the first sighted user accepts the request for help a live audio-video connection will be set up between the two and the sighted user can tell the blind person what she sees when the blind user points his phone at something using the rear-facing camera.
- Live audio-video connection between blind and sighted users
- Add the languages you know under settings
- An easy way you can make a difference for blind people









# Apps, Apps, Apps

#### Color Identifiers

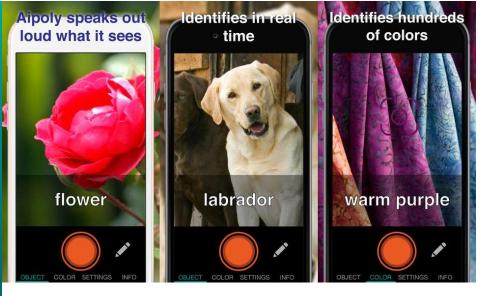
- iOS and Android Color ID, Aipoly Vision (works with certain versions of iOS devices only)
- iOS Only ColorSay, Say Color
- Android Only Color Identifier, Color Grab



# **Aipoly Vision by Aipoly**



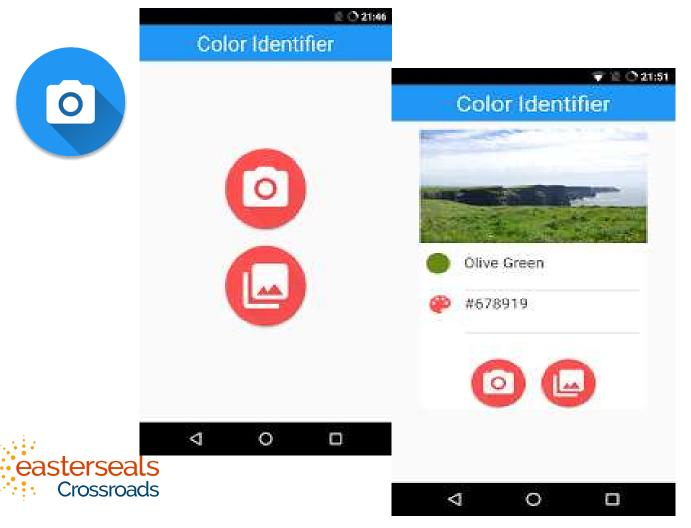




- It's free to identify color and objects in general.
- It has own built-in audio feedback.
- It requires a subscription of \$4.99 a month to recognize text in 7 languages, food, plants and flowers, animal species, US Dollars, and packaged products.



#### Color Identifier by Eoghan O'Duffy



- Take a picture or retrieve a picture from your photo gallery app
- Touch the part on the picture you want its color to be identified
- It then matches its color database and presents the color in text format below the picture.
- It does not have builtin audio feedback; one will need to turn on the screen reader to hear it.

# Apps, Apps, Apps

#### **Currency Identifiers**

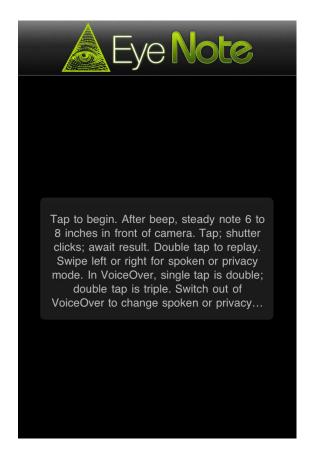
- iOS EyeNote, NantMobile Money Reader
- Android IDEAL Currency Identifier, Darwin Wallet

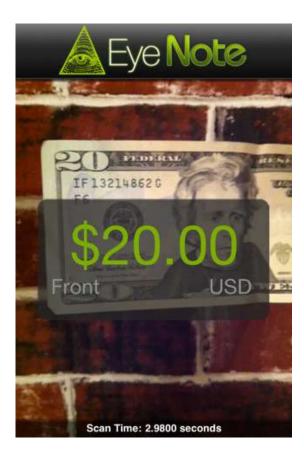


#### **EyeNote by Bureau of Engraving and Printing**



- It has its built-in audio feedback
- Clear instructions if needed
- Identifies front and back of currency
- Identifies US Dollar only

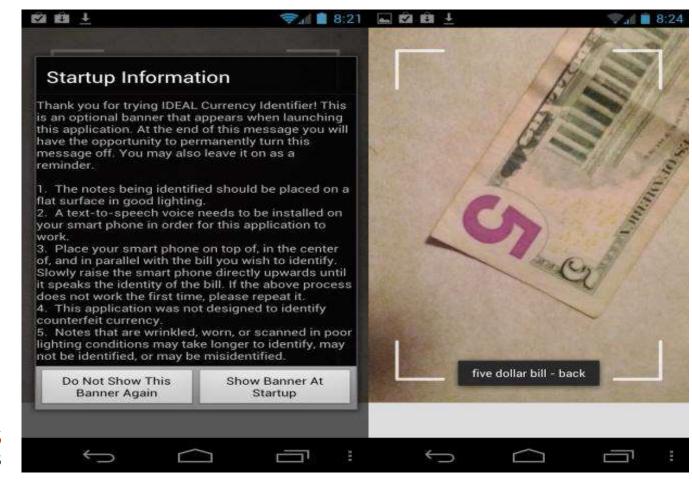






# IDEAL U.S. Currency Identifier by IDEAL Group, Inc.







# Darwin Wallet by VoccaLight



Darwin Wallet enables blind and visually impaired users to quickly recognize paper money. It uses the phone's camera to detect currency denominations for:

- US dollars
- British pounds
- Canadian dollars
- European Union euros
- Australian dollars
- Russian rubles
- Belarusian rubles
- Georgian laris
- Ukranian hryvnias



# Apps, Apps, Apps

#### **Optical Character Recognition**

- iOS and Android CamScanner, Office Lens
- iOS Only KNFB Reader (\$99.99), Prizmo (\$9.99)
- Android Only KNFB Reader (free download with 25 recognitions; \$99.99 for unlimited use)



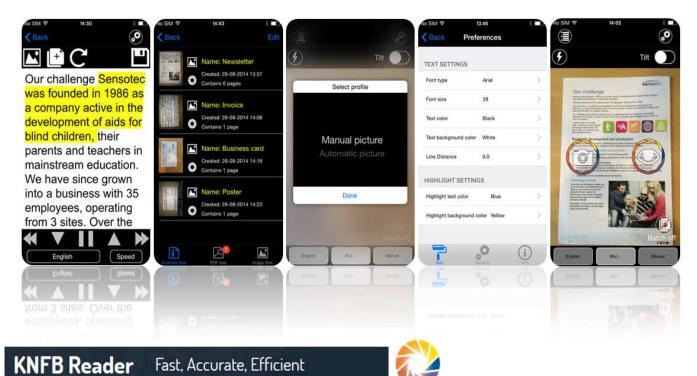
# **KNFB** Reader by Sensotec



- Big buttons for easy control
- Reading speed, language, font size and style can all be adjusted.
- Batch style processing option
- Save to cloud accounts

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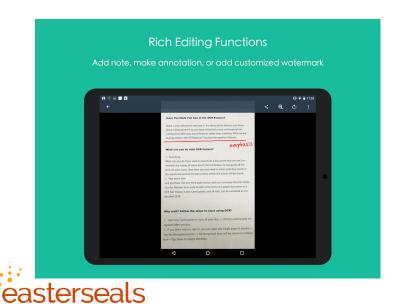


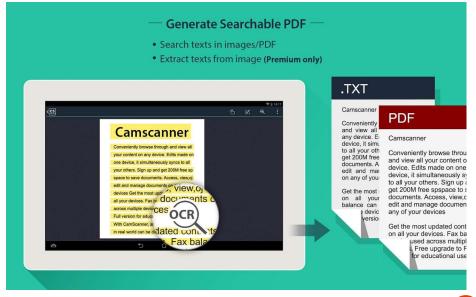
# CamScanner -Phone PDF Creator by INTSIG Information Co, Ltd.



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- It's free to scan with enhanced quality, extract text to be read by screen reader, store document images, and share PDF documents with watermark.
- It requires a subscription of \$4.99 a month (or \$49.99 a year) to edit and share OCR results, upload to cloud accounts, enjoy extra cloud storage, extra security protection and additional collaborators.



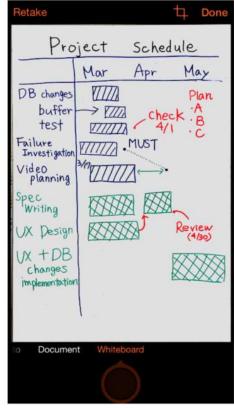


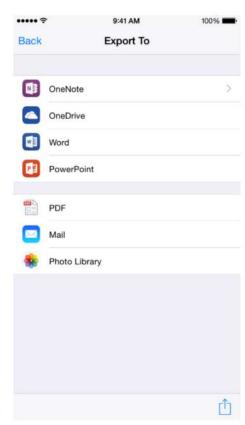
# Office Lens by Microsoft Corporation



Converts
 picture and
 exports to
 several
 different
 kinds of
 format





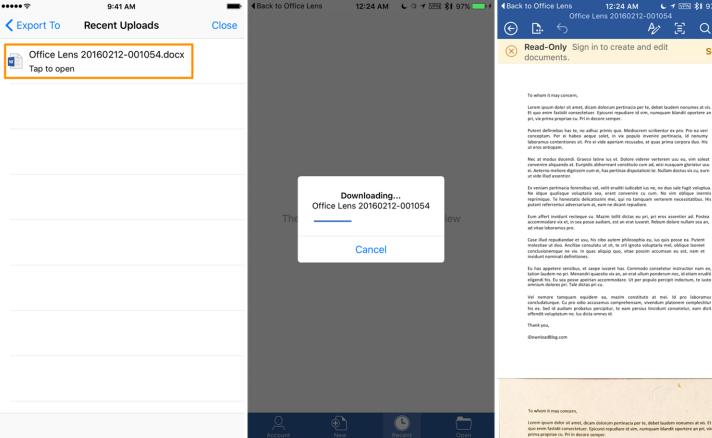


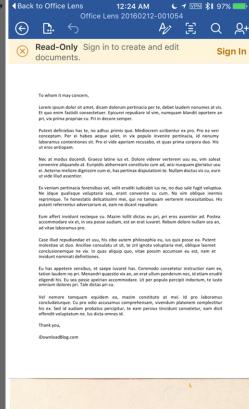


#### Office Lens by Microsoft Corporation



**Exports** scanned image to Microsoft Word and makes it a lot more readable







# Apps, Apps, Apps

#### Other Categories or Kinds

- Talking calculator apps
- Big font / browser apps
- Audio book apps
- Note taking apps
- Reminder apps
- Wellness apps
- GPS apps
- Ride sharing apps
- Etc. etc. etc.





#### Apps, Apps, Apps

#### Resources

- BridgingApps.org
- AppleVis.com
- AFB.org
- BrailleInstitute.org
- AppAdvice.com (iOS apps only)
- InclusiveAndroid.com
- AndroidAccess.net
- AndroidAuthority.com
- App Store
- Google Play Store
- ViA app for iOS apps
- Inclusive Android app for Android apps





# Thank you! Any questions?

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