



JISC RSC Scotland South & West Case Study @ Central College Glasgow

My iPhone & the accessibility features: A student perspective

Introduction

Gary Copland is currently studying for an NC in Digital Media Computing level 5 at Central College Glasgow. In this video podcast, Gary demonstrates some of the accessibility features on his iPhone 3GS.



Figure 1: Gary Copland explains the accessibility features of his iPhone

Accessibility features of the iPhone 3GS

VoiceOver

[VoiceOver](#) screen reader is an accessibility feature on Mac computers and is now a standard feature on the iPhone 3GS. VoiceOver can be controlled using simple interactions that allow Gary engage with items on his screen.

Listening to elements of his iPhone home page

To hear what is on his iPhone screen, Gary drags his finger over different parts of the screen and VoiceOver describes each item under his finger as he touches it.

Listening to the content of one specific application

Gary opts to read/listen to his text messages, to choose the selected item he double-taps the 'messages' icon to open this feature. Once he is in his messages page, he taps each message to hear it being read out, and he can compose his reply based on hearing his message.

Listening to content on Safari web browser

On Safari web browser Gary slowly moves his finger along the screen. If he is on a blank part of the screen he simply hears a clicking sound, however when he moves onto a button or onto text element, the VoiceOver feature will read out the content. To read everything on his screen Gary simply flicks two fingers across the screen and VoiceOver will read all the text elements and also read the navigation elements of his screen (such as forward, bookmarks etc).

VoiceOver gestures allow a variety of different actions to be performed. In the VoiceOver section of the iPhone there is a place where users can practice /master the features before using them on the iPhone. [To find out more about the VoiceOver gestures follow this link.](#)



Figure 2: iPhone Accessibility Features

Zoom

[Zoom](#) is a feature that allows a user to magnify the entire screen of any application they are using to help you see what's on the display. Gary uses three fingers to navigate about his iPhone screen, He drags his three fingers down to zoom out and drags three fingers up to zoom in and magnify the screen even further.

Black on white colour contrast

Gary demonstrated the option to [change the contrast](#) on his iPhone. He demonstrates this on Safari and shows [Central College Glasgow's](#) webpage. Gary explained that this might be very useful for some people with visual needs. He explained that there are not many mobile devices available on the market at the moment with this extensive range of features.

Shortcut to opening iPhone accessibility features

[Triple-click Home](#) provides an easy way to turn some of the accessibility features on or off when you press the home button quickly three times. Triple Click Home provides access to the following features:

- Turn VoiceOver on or off
- Turn Zoom on or off
- Turn White on Black on or off



Figure 3: Triple Click Home

iPhone as a tool for students and in particular those who would benefit from accessibility features.

Essentially the iPhone is a touch screen phone which is highly accessible and Gary points out that anyone with an iPhone can use the accessibility features. He points out that the iPhone provides a wide range of functionality and includes the same (if not better) features than other smart phones or mobile devices and yet incorporates accessibility as a core feature. All the features of a smart phone with all the built in accessibility features of a Mac. He encourages anyone interested in finding out more to walk into a shop and ask staff to demonstrate these feature of the iPhone. Gary commented on the fact that the iPhone looks good, it is easy on the eye, and that he is using the same mobile device as many other students.

Advice for other visually impaired people considering purchasing an iPhone.

Gary advises prospective iPhone users to think about what they would want a mobile phone for and what they would expect from such a purchase. The iPhone is a very expensive purchase, however if a visually impaired user would benefit from the functionality offered it would certainly be worth purchasing.

Other features

- Speaking rate - VoiceOver allows the user to determine the rate of speech feedback
- Mono Audio - Mono Audio combines the sound of the left and right channels into a mono signal played on both sides. This enables users with hearing impairment in one ear to hear the entire sound signal with the other ear.
- Voice Control - Voice Control (available only on iPhone 3GS) lets you make phone calls and control iPod music playback by using voice commands. Voice Control is essentially a very simple form of speech recognition and does not require any programming by the user and will respond to your voice accordingly.

References

Apple's iPhone How to Webpage

<http://www.apple.com/iphone/how-to/index.html#accessibility.accessibility-features>

<http://www.apple.com/iphone/how-to/index.html#accessibility.using-voiceover>

My first experience using an accessible touch screen device

<http://www.marcozehe.de/2009/06/22/my-first-experience-using-an-accessible-touch-screen-device/>

Typing Tip for VoiceOver on iPhone

http://groups.google.com/group/viphone/browse_thread/thread/1653ba42c6e0dd44

RSC NE Scotland: iPhone Accessibility Features Videos

<http://www.youtube.com/profile?user=rscnescotland#p/u/54/FQeSwJ1eG9g>

AT Mac: Assistive Technology for Apple and Mac Users - iPhone Resources

<http://atmac.org/?s=iphone&submit=Go>

Happy App downloading if you have an iphone!

<http://access.ecs.soton.ac.uk/blog/2010/01/06/happy-app-downloading-if-you-have-an-iphone-2/>

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