INBUILT ACCESSIBILITY FEATURES: INTRODUCTION

CONTENTS

MODULE INFORMATION AND LEARNING OBJECTIVES

UPON COMPLETION OF THIS MODULE YOU WILL:

Be familiar with the inbuilt accessibility features offered within the most commonly used computer operating systems (Microsoft Windows and Apple OSX).

➢ Know what terms are used for the inbuilt accessibility features.

➢ Recognise when to implement the correct accessibility feature to increase the users ease of access.

➢ Demonstrate ability to use inbuilt accessibility and apply settings appropriate to a range of users.

Be familiar with the accessibility options built into Web Browsers.

Be familiar with the accessibility options available within mobile operating systems.

TARGET AUDIENCE:

This module could be useful for all computer users at some stage of their lives, whether because of a disability, an acquired or temporary disability or as a workaround to a hardware malfunction.

It is however specifically designed for those who support computer users with disabilities such as:

➢ Occupational Therapists
➢ IT Trainers
➢ Personal Assistants of people with disabilities (PWD).
➢ Friends or family members of PWD.

PRE-REQUISITES:

There are no pre-requisites for this module although basic IT proficiency will be helpful.

HOW TO USE THIS RESOURCE:

This module will be split into a number of chapters. Each chapter content will be outlined on the following page.

Chapters 2 to 5 will look at the accessibility features available in the most common computer operating systems: Apple OSX and Microsoft Windows. The features will be categorised under the following headings:

➢ Chapter 3: Sensory (Vision and Hearing)
➢ Chapter 4: Physical & Motor Skills
➢ Chapter 5: Literacy & Cognition

Chapters 6 and 7 will also be split under these headings, although as there is less content, each heading will be contained within a single chapter.

CHAPTER FEEDBACK

Within the chapters we have included interactive software simulations, video tutorials and quiz questions. There are also some practical exercises included throughout.

These exercises will not be graded, but are designed to highlight important points covered and as such should be completed by all participants. Some exercises by their nature will not be accessible to some users (visual "drag and drop" and software simulations will not be accessible to **screen reader** users for example). In these cases every effort has been made to provide an equivalent alternative.

INBUILT ACCESSIBILITY COURSE OUTLINE

CHAPTER 1: INTRODUCTION

Within this chapter we will list the learning objectives and outline what will be covered within the course as a whole. We will also give a brief background and explanation of the subject. The good news is that you are already halfway there and that this chapter (unlike the others) does not require you to answer any questions or complete any tasks.

CHAPTER 2: EASE OF ACCESS CENTER AND UNIVERSAL ACCESS

In this chapter, we will show you where to access most of the inbuilt accessibility features on an Apple OSX and a Windows computer. We will also show you some quick and easy ways to adjust your computer to make it easier to use, without getting bogged down in terminology and settings.

CHAPTER 3: SENSORY

In this chapter, we will look at the inbuilt accessibility features that can help people with limited or no vision or those who are deaf or hard of hearing (HoH) to access the computer. Adjusting the display by making text and icons larger, auditory alerts and using software called a magnifier or a screen reader are accommodations that can be made for those with vision difficulties. We will demonstrate these here.

We rely less on the sense of hearing to access a computer, yet there are some useful adjustments that can be made here that will also be examined in this chapter.

CHAPTER 4: PHYSICAL AND MOTOR SKILLS

There are many reasons why someone might find the keyboard and/or mouse difficult to use in the way they are set up on a standard computer. In this chapter, we will look at the accessibility settings that can be used to reduce mistakes and make common tasks easier to achieve. We will also look at alternative input options such as using speech recognition or the on-screen keyboard (OSK).

CHAPTER 5: LITERACY AND COGNITION

Computers are very versatile and powerful devices, but although this is one of their great strengths, it is also a weakness when it comes to usability. For people with learning difficulties or for those coming to a computer for the first time, the interface can seem overly complex. In this chapter, we will look at ways of simplifying the interface and reducing distractions. We will also look at some of the inbuilt supports available for those who have literacy difficulties.

CHAPTER 6: WEB BROWSER ACCESSIBILITY OPTIONS

In this chapter, we will start by providing some background on the world wide web, followed by a look at some additional accessibility options that can be implemented within web browsers. These features can be used to complement settings made within the operating system accessibility features outlined in previous modules.

CHAPTER 7: MOBILE DEVICE INBUILT ACCESSIBILITY FEATURES

This chapter covers accessibility features built into mobile OS. We will pay particular attention to Apple iOS, Android OS and Windows Phone & RT.

BACKGROUND

WHAT ARE INBUILT ACCESSIBILITY FEATURES AND WHY DO WE USE THEM?

Many of us use a computer and/or mobile device every day. In work, they increase our productivity, at home, they allow us to keep in close contact with friends and family who live far away, they provide entertainment and they are a way of quickly and easily accessing information and services.
There are a significant number of people who, however, for various reasons, have difficulty accessing their computers. Here we might immediately think of people with physical or sensory disabilities and while this is true, there is also a much wider demographic that stand to benefit from inbuilt accessibility features. Examples of people we might not consider to have a disability who would benefit from accessibility features would include:

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Advice and Information: 01 8714000 www.enableireland.ie

> ➢ **Elderly people** – unfortunately as people get older they often experience a reduction in some or all of their abilities in the areas of vision, hearing, memory or motor functions.

> ➢ **Situational disabilities** – due to an environmental condition a particular task may become difficult or impossible. Examples might include: someone in a noisy environment could be situationally deaf, using a laptop in very bright sunny conditions could mean someone has a situational vision impairment or trying to browse the web on a handheld device with a very small screen could result in a situational motor impairment.

> ➢ **Technological disabilities** - due to the devices or software a person is using. Examples might include someone using an old computer or working with a slow internet connection, maybe a defective mouse or monitor.

People in the examples above, while not having a disability as such share the same requirements as those who do and so will benefit from similar solutions. Thankfully computer operating systems developers like Microsoft and Apple have always been at the forefront of accessibility and have, since the early iterations of their software, built in accommodations that are potentially of use to everyone but particularly useful to people with disabilities. These inbuilt accessibility features can also make prolonged use of a computer a healthier and more comfortable experience.

Once set up these features will be associated with your profile or account so if you share a computer, anybody who logs on with a different account can also create settings that best suit them without affecting your settings. You do not need administrator rights to use the inbuilt accessibility features and only in situations where many people share a common account should these features be locked (for example a library).

FURTHER INFORMATION

In the next module you will learn how to implement and adjust the settings of some of the more common accessibility features discussed in this module. Below are links to the Microsoft and Apple websites dedicated to accessibility.

WINDOWS XP ACCESSIBILITY
Although over 10 years old Windows XP is still commonly used. While not referred to directly, many of the features discussed within this module can be found in Windows XP.
microsoft.com/enable/products/windowsxp/

WINDOWS 7&8 ACCESSIBILITY
There have been some minor upgrades to the accessibility features between Windows 7 and 8, mainly to accomodate the increased use of touch screen devices. Information on the accessibility of both OS can be found from this page as well as information on the accessibility of other Microsoft products such as the Office Suite, Internet Explorer, Windows Phone and the Kinect.
microsoft.com/enable/products/

APPLE OSX ACCESSIBILITY
As you will have seen from this module Apple have large range of innovative accessibility features built into their OSX operating system. These features are outlined in this section of their website.
apple.com/accessibility/osx/