**Featherstone High School**



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| Unit Number and Name: | Unit 20: Client Customisation of Web Pages | | |
| Unit Code: | Unit 1: M/601/7261 | Credit Value: | 10 |
| QCF Level: | 3 | Guided Learning Hours: | 60 |
| Assessor: | Mr. Dawkins | | |

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| **Assignment Launch Date** |  | |
| **Task hand in Dates** | Assignment 1: Decoding the Jargon |  |

**Grading Criteria – Unit 2 – Computer Systems**

**Aim and Purpose:** The aim of this unit is to enable learners to understand the components of computer systems and develop the skills needed to recommend appropriate systems for business purposes and set up and maintain computer systems.

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| **To achieve a pass grade you must show that you are able to:** | **To achieve a merit you must show that you are able to:** | **To achieve a distinction you must show that you are able to:** |
| **P1** – explain the function of computer hardware components |  |  |
| **P2** – explain the purpose of  operating systems | **M1 -** compare the features  and functions of different  operating systems |  |

**Unit 2 – Computer Systems**

On completion of this unit you should be able to:

1. Understand the components of computer systems
2. Be able to recommend computer systems for a business purpose
3. Be able to set up and maintain computer systems.

**Explanation of the Unit 2 – Computer Systems**

At some stage most IT professionals will have to set up and customise a computer system or systems. To do so effectively they will need to understand the components that make up computer systems. The operating system interacts with the hardware and software components in order to make a functioning machine.

In this unit you will consider a range of hardware and come to understand the technical specifications of components. There are a number of different operating systems, despite the dominance of the Microsoft operating system, and you will explore at least one other. In terms of software, the operating system itself often provides utility programmes that assist the user in managing the machine. Other third party software utility programmes such as virus checkers are also used extensively. This unit considers both types of utility software.

IT professionals will often be asked to recommend systems for varied user needs. There are many different manufacturers of computer systems and each manufacturer produces a wide range of models with different specifications. Deciding which particular model is appropriate for a given situation depends on a variety of factors. These factors are explored in this unit so that learners can make informed choices when recommending computer systems.

IT professionals also need to develop the skills required to install and configure computer systems. A large part of this unit will involve practical work in installing hardware components and software, configuring systems to meet specific requirements and testing to ensure a fully functioning system is produced. **Introduction to scenario**

Bodge-IT is an independent company that has ten employees.  The business is based on a Trading Estate where two members of staff produce individual specifications for customers depending on their requirements.  Three members of staff build the computers to the specification originally quoted to the customer.

 Also within the company there are three members of staff who offer after sales support, either over the phone or within the customers business or home.  The last two members of staff are the owner and her secretary.

You are employed as an engineer that give specification and provide after sales service. Your supervisor is Ms Alleyn.

**Assignment 1 – Decoding the Jargon**

**Task 1 – Functions of computer hardware components – P1**

You are an IT technician/supervisor of a local PC manufacturer (Bodge-IT) who feels that to train your team on IT support skills, it would be worthwhile producing a presentation with a range of 'guides' on PC maintenance.

Produce a presentation that will explain to customer support staff the different components of a computer and how they communicate.

Helpful links -

<http://computer.howstuffworks.com/computer-hardware-channel.htm>

<http://www.teach-ict.com/gcse/hardware/parts/miniweb/index.htm>

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| P1: Guidance (Taken from the unit specification)  *Internal system unit components*: **processors**; **motherboard**; **BIOS**; **power supply**; **fan and heat sink or cooling**; **hard drive configuration and controllers** eg SATA, IDE, EIDE, master, slave; ports eg USB, parallel, serial; **internal memory** eg RAM, ROM, cache; **specialized cards** eg network, graphic cards  *Peripherals*: **output devices** eg monitor, printer, plotter; input devices eg camera, scanner; **cabling** eg coaxial, optical, twisted pair  *Backing storage*: **types** eg disks, pen drives, optical media, flash memory cards; **portable and fixed drives**; **performance factors** eg data transfer rate, capacity  **P1 – Explain the function of computer hardware components.** |

***What to Submit:***

1. Computer hardware components presentation

**Task 2 – Purpose of Operating System – P2**

Operating systems perform very important functions; you are required to describe the purpose and functions of operating systems.

Use the links below to help you with your research.

<http://www.teach-ict.com/gcse/software/opsystems/miniweb/index.htm>

<http://www.teach-ict.com/news/news_features/operating_system/home_operating_system.html>

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| P2: Guidance (Taken from the unit specification)  *Operating system software*: operating system examples eg LINUX, Windows, DOS, MAC OS; command line and GUI operating systems; **operating system functions and services eg machine and peripheral management, security, file management; device drivers**; features eg ability to customize, support for connectivity of portable media, security, stability and reliability, ease of management, associated utilities, cost and support for the user.  **P2 – Explain the purpose of operating system.** |

***What to Submit:***

1. Purpose of operating system

**Task 3 – Features and functions of OS – M1**

Bodge-IT currently installs Windows on the PC’s and MAC OS on the Apple Mac computers but would like to investigate other options.  Research the features and functions of two operating systems and compare them.

You can examine operating system for portable devices such as Android, iOS, and other proprietary mobile OS.

Use the links below to help you with your research.

<http://www.teach-ict.com/gcse/software/opsystems/miniweb/index.htm>

<http://www.teach-ict.com/news/news_features/operating_system/home_operating_system.html>

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| M1: Guidance (Taken from the unit specification)  *Operating system software*: operating system examples eg LINUX, Windows, DOS, MAC OS; command line and GUI operating systems; operating system functions and services eg machine and peripheral management, security, file management; device drivers; **features eg ability to customize, support for connectivity of portable media, security, stability and reliability, ease of management, associated utilities, cost and support for the user.**  **M1 – Compare the features and functions of different Operating System** |

***What to Submit:***

1. Comparison of the features of two OS