STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME

SIWES REPORT

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DEDICATION

I dedicate this report to Almighty God who has given me the grace and knowledge to write SIWES report. I also dedicate its to my loving and caring parent MR.&MRS OKE who has being supporting me both financially and spiritually, may you live long to reap the fruit of your labour (Amen).

ACKNOWLEDGEMENTS

All glory and adoration be to Almighty God the author and the finisher of my faith, who has been the sources of my joy, blessing and my helper who granted me the opportunity to be a student of KWARA STATE POLYTECHNIC and gave me the progress to achieve my siwes report work.

My profound gratitude goes to my caring and loving parent, MR&MRS OKE for their relentless effort that I must be educated in life.

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ABSTRACT

Student’s industrials work experience scheme (siwes) is an important part of course planned in polytechnic

Of education, for all student in vocation and technical department, polytechnics and college of technology.

During this period of training exercise, students are given and require real practical experienced which helps them in future undertaken. We also examine the roles and function of computer in our society.

This siwes programmed cover (4) month in order to evaluate the technical’s skills, accuracy, initiatives attitude of student in their chosen career.

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CHAPTER ONE

INTRODUCTION

BACKGROUND TO THE STUDY

Before the establishment of the scheme, there was a growing concerning among our industrialist that graduate of our institution of higher learning lacked adequate background studies preparatory for employment for the industries. Thus, the employers were of the opinion that the theoretical education going on in higher institution was not the responsive to the needs of the employers of labor.

It is against the background that the ration for initiating and designing the scheme by the fund during its formatives years 1973/1974 was introduced to acquaint student with the skills of handling employer's equipment machinery. The ITF solely funded the scheme during its formative years but as the financials involvement became unbearable to the fund, it withdraws from the scheme in 1978. The federal government handover the scheme in 1979 to both the NATIONAL UNIVERSITIES COMMISSION (NUC) and THE NATIONAL BOARD FOR TECHINAL EDUCATION (NBTE) later the federal government in November 1984 reverted the management and implementation of the scheme to IFE and it was effectively taken over by the industrial fund in July 1985 with funding being solely born by the federal government.

INTRODUCTION OF COMPUTER

A computer system has three main components :hardware , software ,and people . The equipment associated with a computer system is called hardware. Software is a set of instruction that tells the hardware what to do . People , however , are the most important component of a computer system- people use the power of computer for some purpose . in fact, this course will show you that the computer can be a tools for just about any one from business person , to an artist , to a housekeeper, to a student- an incredibly powerful sand flexible tools . software is actually a computer program. To be more specifc, a program Is a set of step-by-step instruction that sdirect the computer to do the tasks you want it to do and to produce the results you want . a computer programmer is a person who write programs. Most of us do no write programs, we use programs written by some else . this means , we are users- people who purchase and use the computer software.

HARWARE: MEETING THE MACHINE

What a computer? A six-year-old called a computer “radio, movies and, television combined!” a ten-year-old describe a computer as “a television set you talk to .” the ten-year-olds definition is closer but still does not recognize the computer as a machine that has power to make changes.

Processing output, and storage. the hardware responsible for these four areas operates as

- input devices accept data in a form that the computer can use; they then send the data to the processing unit.
- The processor, more formally known as the central processing unit (CPU),has the electronic circuitry that manipulates input data into the information people want. The central processing unit executes computer instruction that are specified in the program.
- Output device show people the processed data-information in a form that they can use .
- Storage usually means secondary storage. Secondary storage consist of device, such as diskettes. Which can store data programs outside the computer itself. These device supplement the computer memory, which ,as we will see, can hold data and programs only temporarily.

YOUR PERSONAL COMPUTER HARDWARE

Let us look at the hardware in teams of a personal computer. Suppose you want to do word processing on a personal computer, using the hardware shown in figure 1.

Processing software allows you to input data such as an essay, save it, revise and save it, and print it whenever you wish .The input device, in this case, is a keyboard, which you use to type in the original essay and any changes you want to make to it.

INPUT: WHAT GOES IN

the data that you put into the computer system for processing. Here are some common ways of feeding input data into the system:

- Typing on keyboard. Computer keyboards operate in much the same ways as electric typewriter keyboard. The computer responds to what you enter; that is, it echoes" what to type by displaying it on the screen in front of you.
- Pointing with a mouse. A mouse is a device that is moved by hand over a flat surface. As the ball on its underside rotates, the mouse movement cause corresponding movement of a pointer on the computer screen. Pressing button s on the mouse lets you invoke commands.
- Scanning with a flatbed scanner, wand reader or bar code reader (figure 3).
- Flatbed scanners act like a copying machine by using light beam to scan a document or picture that is laid upon its grass face. A great way to send pictures through email! Bar scanners, which you have seen in retail stores, use laser beams to read special letters, numbers, or symbols such as zebra-striped bar codes on many products.

THE PROCESSOR AND MEMORY: DATA MANIPULATION

in a computer the processor is the center of activity. The processor, as we noted, is also called the central processing unit.(cpu). The central processing unit consists of electronic device that interpret

and execute program instruction, as well as communicate with the input, output, and storage devices.

4.

It is the central processing unit that actually transforms data into information. Data is the raw materials to be processed by a computer. Such materials can be letters, numbers, or racts like grades in a class, baseball batting averages, or light and dark areas in a photograph. Processed data becomes information, data that is organized, meaningful, and useful in school, for instance, an instructor could enter various student grades (data), high can be processed to produce final grades and perhaps a class average (information).

Data that is perhaps uninteresting on its own may become very interesting once it is converted to information. The raw facts (data) about your finances, such as a paycheck or a donation to charity or a medical bill may not be captivating individually, but together, these and other acts can be processed to produce the refund or amount you owe on your income tax return (information). Computer memory, also known as primary storage, is closely associated with the central processing unit but separate from it. Memory holds the data after it is input to the system and before it is processed; also, memory holds data after it has been processed but before it has been released to the output device. In addition, memory holds the programs (computer instructions) needed by the central processing unit.

OUTPUT: WHAT COMES OUT

Output, the result produced by the central processing unit, is a computer's whole reason for being. Output is usable information; that is, raw input data that has been processed by the computer into information.

Chapter Two

THE COMPLETE HARDWARE SYSTEM

The hardware devices attached to the computer are called peripheral equipment.

Peripheral equipment includes all input, output, and secondary storage device. In the case of personal computers, some of the input, output, and storage devices are built into the same physical unit. In many personal computers, the CPU and disk drive are all contained in the same housing; the keyboard, mouse, and screen are separate.

In larger computer systems, however, the input, processing, output, and storage functions may be in separate rooms, separate buildings, or even separate countries. For example, data may be input on terminals at a branch bank and then transmitted to the central processing unit may then be transmitted to the international offices, where it is printed out. Meanwhile, disks with stored data may be kept in bank headquarters and duplicate data kept on disk or tape in a warehouse across town for safekeeping. Although the equipment may very widely, from the simplest computer to the most powerful, by and large the four elements of a computer system remain the same :input, processing output, and storge. Now let us look at the way computers have been traditionally classified.

CLASSIFICATION OF COMPUTERS

Computers come in sizes from tiny to monstrous, in both appearance and power. The size of a computer that a person or an organization needs depends on the computing requirements. Clearly, the national weather services, keeping watch on the weather fronts of many continents, has requirements different from those of a car dealer`s service department that is trying to keep track of its parts inventory. And the requirements of both of them are different from the needs of a salesperson using a small laptop computer to record client orders on sales trip.

SUPERCOMPUTERS

The mightiest computers-and, of course, the most expensive- are known as supercomputer (figure 1 – 6a). Supercomputers process billions of instructions per second. Most people do not have a direct need for the speed and power of a supercomputer. In fact, for many years supercomputer customers were exclusives groups: agencies of the federal government .The federal government uses supercomputers for tasks that require both data manipulation, such as worldwide weather forecasting and weapons research. But now supercomputers are moving toward the mainstream, for activities as varied as stock analysis, automobile design, special effects for movies, and even sophisticated artworks (figures 1-7)

MAINFRAMES

In the jargon of the computer trade, large computers are called mainframes are capable of processing data at very high speed-millions of instructions

per-second –and have access to billions of char acters of data. The price of these large system can very from several hundred thousand to many millions of dollars. With that kind of price tag, you will not buy a mainframe for just any purpose. Their principal use is for processing vast amount of data quickly, so some of the obvious customers are bank , insurance companies, and manufacturers. But this list is not all –inclusive; other type of customers are large main-order house ,airlines with sophisticated reservation system ,government accounting services ,aerospace companies doing complex aircraft design and the like.

In the 1960 and 1970s and mainframes dominated the computer landscape. The 80s and early 90s had many people predicting that, with the advent of very powerful and affordable personal computers, that mainframes would become extinct like the huge dinosaurs in nature progression . however, with the incredible explosion of the internet in the mid 90s, mainframes may have been reborn. The current would wide web is based on the client /server paradigm, where server on the internet, LL Beans Web server, provide services, like online shopping, to million of people using personal computer as clients. The capacity required of these servers may be what saves the mainframe!

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PERSONAL COMPUTERS

Personal computers are often called PCs. They range in price from a few hundered dollars to a few thousand dollars while providing more computing power than mainframes of the 1970s that filled entire rooms. APC usually comes with a tower that holds the main circuit boards and disk drives of the computer, and a collection of peripherals, such as a key board, mouse, and monitor.

In the new millennium ther are two maini kinds of PCs the apple macintosh line, and ``all of the others`` the term ``PC`` or IBM refers to allof the others, which is a historical abstract back to the days when IBM and Apple were the two main competitors in the market and IBM called its machine a personal computer. So, although a macintosh is a personal computer, the term PC often means a machine other a macintosh.

Macintoshes and PCs, in general, cannot run software that was made3 for the other, without some special technology added to them. They run on different microprocessors. APC is based on a microprocessor originally made by the intel company (such as intel`s Pentium, although other companies such as AMD now make ``Pentium clones that can run Pc software). Macintoshes uses a power PC processor, or on older macintoshes a processor made by Motorola. Also, the operating system software that runs the two kinds of computers is different. PCs usually use an operating system made by Microsoft, like windows 98 or windows 2000.

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Macintoshes use a different operating system, called macos, made by apple. There are efforts to make the two kinds of computers compatible. As apple continues to lose its share of the market, apple has the incentive to either join the rest or disappear.

COMPUTER HARDWARE

Computer hardware is the collection of physical constitute a town as the PC is one of the most common types of computer due to its versatility and relatively low price. Are generally very similar, although they may use lower –power or reduced size components, thus lower performance? Case) main article: case the computer case is a plastic or metal enclosure that houses

most of the components.

CHAPTER THREE

COMPONENTS DIRECTLY ATTACHED OR PART OF THE MOTHERBOARD AND INCLUDE

The (central processing unit), which performs most of the calculations which enable a computer to function, and is sometimes referred to as the brain of the computer. It is usually by a heat sink and fan, or water-cooling system. Most new CPU include an on –die. The CPU governs how fast it executes instructions, and is measured in GHZ; typical values lie between 1 GHZ and 5 GHZ. Many modern computers have the option to over clock the CPU which enhances performance at the expense of greater thermal output and thus a need for improved cooling. This includes the mediated communication between the CPU and other components of the system, including main memory.

(RAM) , which stores the code and data that are being actively accessed by the CPU for example, when a web browser is opened on the computer it takes up memory; this is stored in the RAM until the web browser is closed. RAM usually comes on in sizes 2GB, 4GB, and 8GB but can be much larger.

- (ROM), which stores and runs the computer when is power on or otherwise begin execution, a process known as, or ``booting up``.
- The (basic input and output system) includes boot and power management firmware, newer motherboard use (UEFI) instead of BIOS that connect the CPU to various internal components and to expand cards for graphics and sound.

- The power for date and time in BIOS chip. This battery is generally a watch battery.
- Graphic card which processes computer graphics, more powerful graphic cards are better suited to handle strenuous tasks, such as playing intensive video games.

EXPANSION CARDS

Main articles: An in computing is a printed circuit board that can be inserted into an expansion slot of a computer motherboard or backplane to add functionality to a computer system via the expansion bus. Expansions card can be used to obtain or expand on features not offered by the motherboard. Storage device a storage device is any computing hardware and that is used for storing, porting and extracting data files and effect. It can hold store information both temporarily and permanently, and can be internal or external to a computer, several or any similar computing device.

Data storage is a core function and fundamental component of computers. ixed media data is stored by a computer using a variety of media. Are found in virtually all order computers, due to their high capacity and low cost, but are faster and more power efficient, although currently more expensive than hard drives in term hard in team of dollar per gigabyte so are often found in personal computer built post -2007. Some systems may use a for greater performance or reliability . removable media)to transfer data between computers, a or may be used . their usefulness depend on being readable by other system ; the majority of machines have an optical disk drive, and virtually all have at least one USB port.

INPUT AND OUTPUT PREIPHERALS

Main artice and devices are typically housed externally to the main

computer chassis . The following are either standard or very common to many computer systems.

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COMPOSING, EDITING, FORMATTING, AND PEINTING OF DOCUMENTS

The word processor was a stand –alone office machine in the 1960s, combining the keyboard text entry and printing functions of an, with a recording unit, either tape or(as used by the machine) with a simple dedicated computer processor for the editing of text . although feature and designs varied among manufacturers and models , and new features were added as technology advanced, word processors typically featured a and the ability to save documents on or . later models introduced innovations such as programs, and improved formatting options.

As the more versatile combination of and became commonplace ,and computer software applications for word processing became popular , most business machine companies stopped manufacturing dedicated word processor machine . as of 2009 there were only TWO US. Companies, classic and, which, still made them] many older machines, however, remain in use . since 2009, sentinel has offered a machine described as a “word processor”, but it in more accurately a highly specialized micro computer used for accounting and publishing.

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The most widely use application o personal computer s until the rose to prominence in the mid -1990s.

Although the early word processors evolved to use tag-based for document formatting.

Most modern word processors take advantage of a providing some form of (‘’WYSIWYG) editing. Most are powerful system consisting of one or more programs that can produce a combination of, and test, the later handled with capability. Typical features of a modern word processor include: multiple font sets, spell checking, grammar checking, a built – in thesaurus, Web integration, HTML conversion, pre-formatted publication projects such as newsletters and to-do lists, and much more. In its simplest form, a word processor is like an or machine, with the improvement of being able to proofread , and correct mistake before.

As the most widely used word processing software according to a user tracking system built into the software . Microsoft estimates that roughly half a billion people use the suite , which includes word. Many other word processing application exist, including (which) dominated the market from the mid -1990s on computer running Microsofts and still (2014) is favored for legal application) and applications, and.

Word processing added to the test editor the ability to control type style and size, to manage lines (word wrap), to format document into pages, and to number pages. Functions now taken for granted were added incrementally, sometimes by purchase of independent providers of add-on

programs. Spell chacking grammar checking and were some of the most popular add-ons for early word processors are also capable of hyphenation and the management and correct positioning of footnotes and endnote.

More advanced features found in recent word processors include:

Collaborative editing, allowing multiple users to work on the same document.

- Assistance. (true indexing, as performed by a professional human indexer, is far beyond current technology, for the same reasons that fully automated, literacy-quality machine translation is.)
- Creation of trables of contents.
- Management, editing , and positioning of visual material (illustrations, diagrams), and sometimes sound files .
- Automatically managed (updated) cross- references to pages or note.

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MICROSOFT EXCEL

Microsoft excel is a developed by and . it features calculation , graphing tools and a programming language called. It has been a very widely applied spreadsheet for these platforms, especially since version 5 in 1993, and it has replaced as the industry standard for spreadsheets, using a grid of cells arranged in numbered rows basic features of letter –named columns to organize data manipulations like arithmetic operations. It has a battery of supplied functions to answer statistical, engineering and financial needs.

In additions, it can display data line graphs, histograms and charts, and with a very limited three-dimensional graphical display. It allows sectioning of data to view its dependencies on various factors for different perspectives (using and the scenario manager). It has a programming aspect, Visual Basic for Applications, allowing the user to employ a wide variety of numerical method, for example, for solving differential operations of mathematics physics, and then reporting the results back to the spreadsheet. It also has a variety of interactive features allowing user interfaces that can completely hide the spreadsheet from the user, so the spreadsheet presents itself as a so-called application, or decision support system (DSS), via a custom-designed user interface, for example, a stock analyzer, or in general, as a design tool that asks the user questions and provides answers and reports. In a more elaborate realization, an Excel application can automatically poll external databases and measuring instruments using an update schedule, analyze the results, make a report or slide show, and e-mail these presentations on a regular basis to a list of participants. Excel was not designed to be used as a database. Excels supports, or separated from specified groups of cells. The generated graphic component can either be embedded within the current sheet, or added as a separate object. These displays are dynamically updated if the content of the cells changes. For example, suppose that the important design requirement are displayed visually; then, in response to a user's change in trial values for parameters, the curves describing the design change shape and their points of intersection shift, assisting the selection of the best design. Data storage and communication number of rows and columns

Version of excel up to 7.0 had a limitation in the size of their data sets of 16k (2^{14} = 16384) rows. Versions 8.0 through 11.0 could handle 64k (2^{16} =

65536) rows and 256 columlabel ‘IV’).

Microsoft PowerPoint is a currently developed by, for use on both Microsoft windows and apple Macintosh operating systems. PowerPoint, initially named presenter”, was created by. Microsoft’s version of PowerPoint was officially launched on may 22, 1990, as a part of the suite. PowerPoint is useful for helping develop the slide-based presentation format and is currently one of the most commonly used slide-based presentation programs available. Microsoft has also released the power point mobile application for use on apple and android mobile operating systems. PowerPoint 2002 massively overhauled the animation engine, allowing users to create more advanced and custom animations. PowerPoint 2007 makes it possible to remove image backgrounds, and provides additional special effects for pictures, such as “pencil effects”. As of 2012, various versions of PowerPoint claim about 95% of the presentation software market share, with installations on at least 1 billion computers. among presenters world-wide, this program is used at an estimated frequency of 350 times per second.

Powerpoint provides three types of movements:

1. Entrance, emphasis, and exit of elements on a slide itself are controlled by what powerpoint calls
2. Transitions, on the other hand, there are movements between slides. These can be animated in a variety of ways.
3. Customs animation can be used to create small story boards by

animating pictures to enter, exit or move.

PowerPoint provides numerous features that offer flexibility and the ability to create a professional presentation. One of the features provides the ability to create a presentations that includes music which plays throughout the entire presentations or sound effects for a particulars slides.

CORELDRAW

CorelDraw (styled CorelDraw) is a developed and marketed by. It is also the name of corel's graphic suite, which bundles CorelDraw with bitmap-image editors a s well as other graphic-related programs (see below). The latest version is designed x8 (equivalent to version 18), and was released in march 2016. CorelDraw is designed to edit two-dimensional image such as logos and posters.

In 1987, Corel hired software engineers Michel bouillon and pat Bernie to develop a vector-based illustration program to bundle with their desktop publishing systems. That program, CorelDraw, was initially released in 1989. CorelDraw 1.x and 2.x ran under windows 2.x and 3.0. CorelDraw 3.0 came into its own with Microsoft's release of windows 3.1 the inclusion of in windows 3.1 transformed CorelDraw into a serious illustration program capable of using system-installed outline fonts without requiring third-party software such as; paired with a photo-editing program (Corel photo- paint), a font manager and several other pieces of software, it was also part of the first all-in-one graphics suite