

Unit 4: system specification and configuration

Assignment 1:

Introduction:

For this unit I have been asked to produce a specification for an ICT system that will meet the needs of the company. The company that I will be providing the ICT system is called Mags Estate Agents, the main goal for the company is to sell and rent homes for their clients and arrange mortgages for buyers and provide other services. The company is new and they are thinking of opening an office in a town or a village and they need a computer system that will be used by the staff. The company needs a system that will do many tasks and the company is hoping to find a system that will do:

- ☀ Show multimedia presentations of the houses available to prospective buyers.
- ☀ Keep records of properties for sale that can be searched based on buyer requirements.
- ☀ Keep records of clients and buyers, including their requirements.
- ☀ Produce large numbers of high quality letters, property information sheets and other documents in color.
- ☀ Send personalized letters to all buyers looking for a particular type of property.
- ☀ Access competitors' websites to check what properties they are offering.
- ☀ Send and receive emails.
- ☀ Keep a diary for all staff of appointments with clients and buyers to view properties.

I will also be asked to include a system that will allow the computers to connect to the LAN.

Inputs:

This is what the company is expected to input in their computer system:

The client's name, address, telephone and other details and also the company requirements the size of the family, age of the family members and if any of the family members need special needs. The company will also need to input the details of property, the size of the house the clients looking for, what area they are looking for, how many bedrooms they are looking for and if they want a garden or a garage or a front lawn. The company will also need to store the information about the house prices and if the property is available or not and also need to store details about the clients. The company will also need to find a way of keeping the entire client appointments time and place to meet the staff; they will have to find a way to prioritise their prospective buyers and their needs.

Outputs:

This is what the company is expected to output out of their computer system: They company will need to produce newsletters for their staff, and also produce business cards for their customers and clients. They also need print out a list of what houses are available to be sold and rented and which are not. They also need print out statistics and their database. The company will also need print out their multimedia presentations to give it there staff in the meetings. They will also need to print out records of staff and clients. They will also need to print out property information sheet so that they can advertise their property. They will also have to print out there e-mail they receive form clients and form other branches. They may also need to print out there toolbars that they made out of the information they collected form the client.

Required software:

Mags Estate Agents needs software to carry out their tasks, they will need software's that could allows them to create newsletters, presentation, letters, questionnaire sheets, web browser, create information database and also need a operating system. These are the software's that I will be recommending to Mags Estate Agents to use:

Operating system: An operating system is what allows the computer perform the tasks the user is doing and the newer the operating system the better it gets, and a operating system is a special computer program that manages the relationship between application software, I will be recommending Microsoft Windows XP professional because it is the newest and XP professional is more stable then the other system and it will handle most of what Mags Estate Agents will need to do with out crashing and Defend the PC Against Viruses, Worms and Hackers with Advanced Security installed freely.

Multimedia software: Mags Estate Agents will need multimedia software that allows them to create presentations for clients and their staff and also to make posters to advertise their company. For this task I will be recommending Microsoft PowerPoint because Microsoft PowerPoint has Help Control Presentation Distribution, Share a Presentation on a CD, Broaden Your Reach, Mark up Slides, Bring Presentations to Life with Custom Animations, Add Impact with Graphics and Tap the Power of Smart Tags, and all these features make Microsoft PowerPoint the perfect choice and it also cheep the other competitors.

Database Software: Megs Estate Agents will need database software because they will need to keep clients details, meeting times and place and also keep of tracks of statistics. I will be recommending Microsoft Access because this software can do may tasks: Incorporate a Wide Range of Data Sources, Get the Most from Your Enterprise Data, Link Business Systems, Take Advantage of Flexible XML Import and Export, Share Information More Efficiently, Publish Forms and Reports on the Web, Deploy Access 2003 Without Missing a Beat, Run Macros with More Confidence, Help Block Potentially Unsafe Functions, Back Up Your Information in a Snap, View Dependency Information, Let Access 2003 Check for Errors, Choose AutoCorrect Options, Find the Help You Need Get Context-Based Help in SQL View, Update Properties Automatically, Dress Up Your Database and Polish Your Forms, Save Time with Smart Tags, Analyze Information in Powerful Ways and Format Fonts in

SQL Views, these are the features that makes Microsoft Access and leading database software and this is why I recommended Microsoft Access

Word processing software: Megs Estate Agents will need Word processing software because they will have to produce letters newsletters. I will be recommending Microsoft Word and Microsoft Publisher; Microsoft Word has many features that allow the user to write or process letters and allow has spell and grammar check so that the user do not use don't make mistakes. In words you can make newsletter but I recommend Microsoft Publisher because the software has many templates that are already made that the user can access it, it will make it easier for the user and saves time instead of vesting time on creating a template.

Web Browser: Web browser is what the user uses to brows the internet, Web browser will allow the user to access the websites, Web browser will allow the user to make site the user goes on the most to add to his favourites so that he does no have type in the domain name. The user can also set his favourite website as his homepage so that when he starts the Web browser program it loads with his favourite site. The Web browser program that I will be recommending to the company is Internet Explorer, I recommend Internet Explorer because Internet Explorer comes with the windows and it's free, and it's very user-friendly and will allow the user to add favourites and make any site his homepage, for all these reasons why I recommending Internet Explorer.

E-mail software: E-mail software is what people use to send and receive e-mails; the company will use the e-mail software to sent e-mails to their staff and clients. The company might also use e-mail to send newsletters to their costumers they can also send memos, any kind of letters, any type of documents, pictures, photos and any type of multimedia that the company might want to send it to their costumers. The software that I will be recommending to the company is Microsoft Outlook 2003; I recommended this software because the software can manage all the e-mails, user-friendly option menu, Organizes the Inbox, Automatically organize messages and receive reminders, Access your Contacts, Calendar, and Tasks quickly, these are the features that make me recommend this software.

Adobe Photoshop CS2: Adobe Photoshop CS2 is software that is used to edit pictures, make pictures, logos and any thing to do with pictures. I recommended this software because the company will be taking pictures of houses and showing them to clients and putting them on their websites, with this software they can Multiple layer control, Smart Objects, Multi-image digital camera raw file processing, 32-bit High Dynamic Range (HDR) support, Image Warp, Customizable workspaces and menus, Special effects filters, and these features that makes this software then best options, also is it one of the latest and most powerful pictures editing software around.

Microsoft FrontPage 2003: Microsoft FrontPage 2003 is software that is used to create websites and edit website. I chose this software because the company will be creating a website and they will be updating it regularly also uploading images. I chose this software because it one of the latest and the one of the powerful one around, also you can edit all kind of websites and that make this software the right option.

Required hardware:

This is the desktop computer that I will be recommending the company because I think it is suitable for all the tasks that the company will need to do.

**Key Features:**

Processor: AMD Athlon™ 64 Dual-Core FX-60 with Hyper Transport Technology, Cool'n'Quiet™ technology: I chose this processor because it is the latest and the most powerful processor around and also it will be able to run many programs without freezing, also has a 64 Dual-Core FX 60 with Transport Technology allow the user to display very high quality graphics, Hyper Transport™ technology will increase overall system performance with a 2000MHz system bus, in Mags Estate Agents they will be able to present very highly displayable graphics, also has a built in Cool'n'Quiet™ technology this hardware will keep the processor cool at all times with the lowest amount of noise so that the user does not lose concentration.

Operating system: Microsoft® Windows® XP Professional Edition: I chose this operating system because it is the latest one out and the most reliable and the most powerful one around. I chose it because it is more stable than the other system and it will handle most of what Mags Estate Agents will need to do without crashing and defend the PC against viruses, worms and hackers with Advanced Security installed freely also it supports the processor.

Case: Brushed Aluminium ATX Midi Tower +550W PSU – Black: I chose this case because it looks very attractive and modern to the eye, this will attract some clients, also made out of aluminium this cools the CPU three times more without a cooling unit.



Motherboard: ASUS A8N32-SLI Deluxe PCI-Express Mainboard – ATX: I chose this motherboard because it is one of the most powerful, and also it is reliable and stable, it will allow the user to run many programs as he likes without freezing also its powerful enough to stabilise the processor.



Memory: 2048MB DDR400 Memory - PC3200 (1x2048): I chose this amount of memory because with this amount of memory they can load many pictures, programs, multimedia presentations, databases, letters and anything the company needs to load and still have lots of memory left to allow the computer to run fast and effectively.



Hard drive: 800GB (2x 400GB) Serial ATA Hard Drive with 16MB Buffer: I chose this amount of space because I think this amount of space will be more than enough for the company to store their pictures, their multimedia presentation, videos, website and their client details. I chose this hard drive because it has 16MB Buffer speed this will allow the user to go through his work very quickly because the hard drive will be able to transmit 16mb a second, also it has a large buffer and enhanced reliability.



Optical drive: SONY 16x Dual Layer DVD-Re-Writable +R/-R/RW: I chose this drive because this drive will be able to read DVDs, DVD-Re, CDs, CD-Re and Dual Layer DVD and DVD-Re. I chose this because it saves space on the tower will be able to read all the CDs the user inputs.



Video card: 2x 512MB nVIDIA GeForce 7800 GTX - DVI - SLI Configuration: I chose this graphic card because it is one of the most powerful one around and also it is strong enough to work with the CPU and the motherboard, this graphic card is made to high intense gaming but I chose it for this company because they will be handling very high quality graphics and also be working on multimedia presentations and the graphics and card will be able to display all of them. It combines two NVIDIA SLI-certified graphics cards in a single system allows you to essentially double your graphics performance and that displays the best image on the screen.



Sound card: CreativeLabs Sound Blaster X-Fi Fatal1ty FPS: I chose this sound card because it is one of the least and the fastest around and also this sound card is made for high intense gaming but I chose it for this company because they will be showing their customers and staff presentations and this sound card will supply the highest quality of sound and this will make the clients happy and they may buy a house and make the staff happy.



Symantec Norton Internet Security 2006 anti-virus software: I have chosen this software because just incise the system get a virus this one is one of the best and the most reliable around.



Peripherals:

Speakers: Creative Labs Inspire T7900 - 7.1 Surround with Subwoofer: I chose this speaker because it one of the powerful speakers around and also it gives the audience a cinematic effect. I chose this because this speaker was made for home interment system, but I chose it for this company because they will be presenting presentations I this will provide the best quality of sound and make the audience fell like they are at a cinema or at home. It has 7 speakers and 1 subwoofer also these are the only type that will be good enough for the sound card.



Keyboard: Logitech Cordless Keyboard: I chose this keyboard because it is wireless and that makes it very easy for the user.



Mouse: Rechargeable Cordless Mouse: I chose this mouse because it is wireless and that makes it very easy for the user and he does not have to be near the computer to use the mouse.



Monitor: 27" Viewsonic Widescreen LCD-TV - Model N2750w: I chose this big screen because the company needs a big screen because they will be presenting multimedia presentations also power point presentation, I chose the big one because it is big enough for all the staff to see the presentation. I chose the monitor because it is widescreen LCD TV, it does not take up much space on the desk because it is flat and gives very high quality images because it is LCD also it will allow the graphic card to perform at its best and it is reliable.



DVI cable: DVI connector Cable: I chose this because DVI is a new form of video interface technology made to maximize the quality of flat panel LCD monitors and high-end video graphics cards. It is a replacement for the P&D Plug, and this plug will allow the graphic card and the monitor to display its maximum quality.



Power Protection: Belkin SurgeMaster 500VA Battery Backup and Surge Protector: I chose this because it safeguards valuable equipment and critical data from blackouts, brownouts, surges, spikes and lightning, and that makes the user feel safe when he is working.



Modem: External ADSL Modem with UK filter: I chose this hardware because the company will need to access the internet to create their website; this hardware will not be enough access the internet because they will need an internet provider but this modem is what the company uses to access the internet when they have a network provider.



Floppy Drive: 1.44MB - 3.5" Floppy Disk Drive: I chose this hardware because some clients and some staff still use floppy drives to transport data, so the company needs to be ready. This floppy drive will read any kind of floppies that are 3.5 inches.



Card Reader: Internal 15-in-1 Memory Card Reader: I chose this hardware to be part of the computer because it has extra ports that the computer does not have. It has extra USB ports, Compact Flash (CF), Micro Drive (MD), Smart Media (SM), Secure Digital (SD), and Multi Media Card (MMC) so that when the company takes pictures of the house they are going to be selling they can just take the card out of the camera and input here and upload the pictures.



Printer/scanner: Lexmark X7170 - All-in-One Photo Printer/Scanner/Copier: I chose this laser printer because I can print up to 25 colour pages and prints on most of the paper sizes and uses 6 Colours and has Colour Photo Printing. I chose this scanner because it was part of the printer and also it has 19200 x 19200 Scan Resolution, and also you can send fax and make copies instead of a photo copier. I chose this type of hardware because instead of having 4 different machines there is 1 and that takes up less space, also it is very reliable and strong according to the makers and the users.



All of these peripherals come with the computer.

Camera: Canon EOS-5D Digital: I chose this camera because it has 13.4 Mega pixel CMOS sensor combines with Canon's DIGIC II Image Processor, a high-precision 9-point AF system with 6 assist points, and "Picture Style" colour control to deliver images of superior quality with enough resolution for any application. With its wide-angle capabilities, 2.7 inch LCD and magnesium-alloy body, the 5D is the perfect

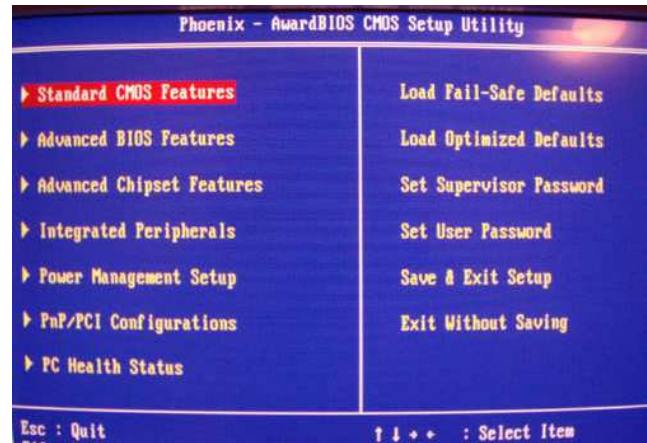


addition to the Digital EOS line and all this makes these camera very powerful, I chose this because the company will be taking pictures of houses that they will be showing their clients so with this camera they can have the best quality pictures to show their clients.

All the computers in the company are connected together by a LAN, connection.

Required configuration:

Hardware configuration: After I you have put all the hardware's together and connected to the motherboard and make sure that they isn't any wires hang out you can start the computer up. When you start the computer for the first time it will take to into the BIOS stings. These menus where you can configure most of the hard ware you have connected also this where you can set the time and date and also this is where you set up you windows. In this menu you can set up most of the hardware that goes inside the pc and configure it. The BIOS is the basic input/output system, the built-in software that determines what a computer can do without accessing programs from a disk. On PCs, the BIOS contains all the code required to control the keyboard, display screen, disk drives, serial communications, and a number of miscellaneous functions.



Peripheral configuration:

Speakers: after you have set the speaker around the computer connect it to the commuter with the cable provided, and then install it with the CD also provided with the printer package.

Keyboard: place the key board where you want because it is wireless, connect receiver plug in to the computer, then configure it in the BIOS stinging.

Mouse: place the mouse where you want because it is wireless, connect receiver plug in to the computer, then configure it in the BIOS stinging.

Monitor: connect the monitor to the computer with the DVI cable, and then configure it in the BIOS setting.

DVI cable: this cable does not have to be configured because it only connects the compute to the monitor.

Power Protection: this hardware does not have to be configured because it only protects the user form appliance.

Floppy Drive: after you have connected it to the motherboard and make sure that no wire is hanging out then turn the computer on, configure floppy drive in the BIOS setting.

Card Reader: connect card readers to the computer with a cable provided, then install it with the CD which is also provided, and then you can insert the cards and chips.

Printer/scanner: you connect the printer to the computer with the cable provided. Then install the printer with the CD that is provided with the printer then it's ready to be used.

Camera: you connect the camera to the computer with the cable provided with the camera, and install the camera with the CD that is also provided with camera then it's ready to use.

Software configuration:

Microsoft Windows XP professional: you will be provided with 4 to 7 CDs, the windows program is divided into the 4-7 CDs. When you start the installation you will be asked to enter the installation code which will be provided in the CD cover. When you install the windows you will have to enter your personal details and register.

Microsoft PowerPoint: you will be provided with a CD, the CD already has the software, insert the CD into the CD drive then follow the instruction which will be provided in the installing menu also you have to input the installation code which is provided in the CD cover. Then you have to register the software then you can configure it to the way you like.

Microsoft Access: you will be provided with a CD which has the program in, insert the CD into the CD drive then start the installation, follow the instruction which will be provided on the booklet that comes with the CD or in the installation menu. After the installation is finished you have to register.

Microsoft Word: when you start the installation you will have to enter the ID code which will be provided with CD, then you have to register then the installation is complete.

Microsoft Outlook 2003: this software comes in the CD, when you install it will ask for the ID code which will be provided with CD. When you finish installing the program you will have to register then the installation is complete.

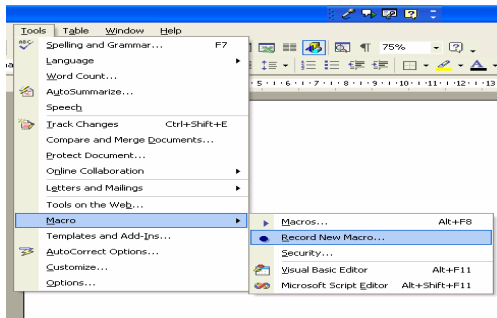
Microsoft FrontPage 2003: this program also comes in a CD, when you are installing it will ask for the ID code which will be provided with CD after completing the installation you have to register.

Internet Explorer: this software comes with the windows, it is already installed in the windows and the user does not have to install or register because you do that when you are installing and registering the windows.

Adobe Photoshop CS2: this software comes in 2 different CDs, when you start the installation it will ask for the Id code which will be provided with the CDs, after completing the installation you will have to register to use the software.

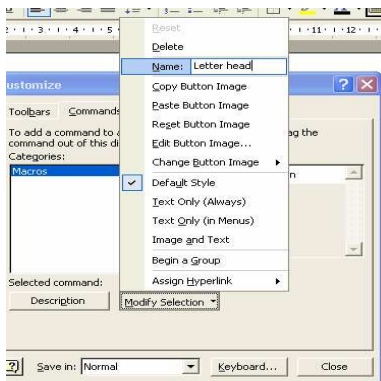
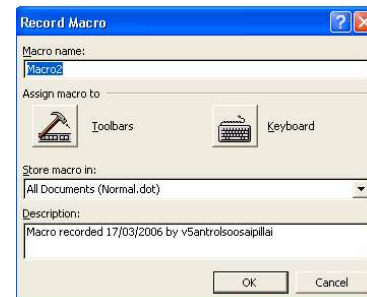
Macros:

I will make a macro that will help the user by making a letter head so that he does not have to insert the logo, the title and the date. I designed the macro on paper first to see how it looks, after I was satisfied with the design I started to make the macro on the computer.

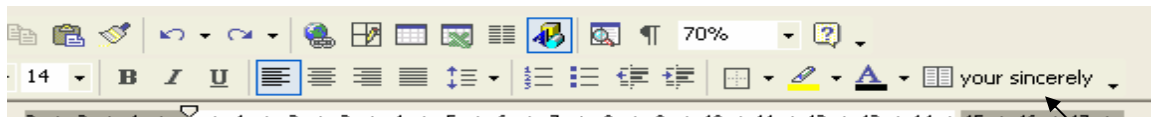


To start the macro you click on tools then macro then click on “Record new Macro” which will give you a new toolbar.

You click on “toolbar” that is where you can customise the toolbar.

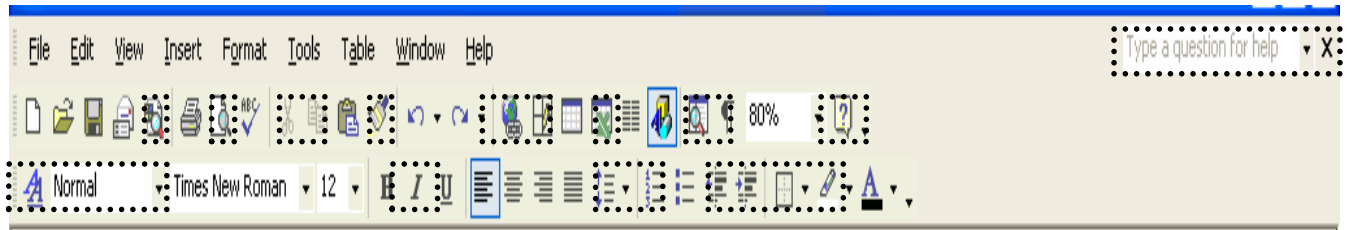


In this option you can edit the name of the macro, the image of the macro, but first drag the macro in to the toolbar then click on the modify selection there you can start the editing, after you done editing the macro click on close to start the recording.



This macro allows the user to insert the phrase 'your sincerely' at the end of his letters and templates, this allows the user to save time.

After I have created the macros the companies needs and the templates, I was asked to place the macros in the toolbar section, also I had to remove some of the icons form the toll bare because the company wants minimum amount of icons in the toolbar to make the life easier for the users.



The icons that inside the dotted boxes will be removed, because I believe these icons will not be used mainly by the user. Also the user wanted the minimum amount of icons on the toolbars. I will be removing these icons because:

Search - the function of this button is to search the documents, and I don't think the user will be searching his documents.

Print preview - the function of this button is to show the user a preview of what the document is going to look like, I think the user don't need this because the user would already know that the document would look like.

Cut, Copy - the function of these buttons is to cut and copy text or pictures. I think the user don't need this because the user would be using right click on the mouse to cut and copy, also the mouse is easy to use to copy and cut text then buttons.

Format painter – function of this button is to format the text, I think the user don't need this because the user can use the font colour button and the bold button, also it easier to user more buttons the using one.

Insert hyperlink - function of this button allows the user to add a hyperlink to the text. I think this button will not be useful to the user because he or she will not be adding hyperlink to their text according to the task specification sheet.

Table and borders – the function of this button is to create and modify tables. I think the user don't need this button because the user will be using Microsoft excel that I have recommended, also Microsoft excel is easier to use and understand.

Insert Microsoft Excel worksheet - the function of this button is to create tables that look like Microsoft Excel. . I think the user don't need this button because the user will be using Microsoft excel that I have recommended, also Microsoft excel is easier to use and understand, also there is another button that allows the user to create tables called "Insert Table".

Document Map - the function of this button is to list all the headings and subheading the user have used in his document. I think the user don't need this button because the user wants minimum about of icons in his toolbar also he can just scroll up to look at his heading and subheadings.

Show/Hide - the function of this button is to show that user where he has used space and where the user has created a new line. I think the user don't need this button because the user wants to have minimum amount of icons on his toolbar, and I don't think the user would want to know where he has "space" and where he created a "new line" in his document.

Evaluation:**Good points:**

The computer is very fast and powerful, it has very high memory so that the user can run many programs. Company address

Bad points:

The cost for all the parts put together is very high.

Improvements:

Need to find cheaper parts. Need to find cheaper parts.