

## **Oxford Cambridge and RSA Examinations**

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**OCR GCSE INFORMATION AND COMMUNICATIONS      1995  
TECHNOLOGY B**

**EXEMPLAR COURSEWORK TASKS:  
THE USE OF ICT IN THE HEALTH SERVICE**

**EXTENSION TASK: WEBSITE**

The documents provide examples of tasks for use in delivering Unit 3 of ICT B 1995. The task allows candidates to gain experience of a number of software packages.

You may adapt these tasks to suit your candidates or you may set your own. It is recommended that the tasks are based on The Use of ICT in the Health Service.

These coursework tasks are centred on an imaginary newly built Health Centre/Group Practice.

The Website task is a full exemplar which gives examples of how a pupil might work through the task.

The assignments offer guidance only as to the types of activities that candidates might wish to undertake to fulfil the requirements of the coursework units. In completing the assignments, candidates must identify the data requirements, select the correct hardware and software and design a system that would be appropriate in the set context. Candidate portfolios will be assessed in accordance with the marking criteria for internally assessed work outlined in the specification.

A guide to the tasks is included. The contents of the exemplar work should not be divulged to candidates. The exemplar work is intended as a working document to aid Centres' delivery of the course.

## ICT B Contexts

The new context for ICT B 1095/1995 is the Use of ICT in the Health Service. To help teachers plan for future years' provision the contexts are set out below.

Year	Session	Unit	Type	Context
2006	January	2378 & 2379	Coursework	Use of ICT in the Health Service
2006	January	2380	Examination	Use of ICT in the Health Service
2006	June	2378 & 2379	Coursework	Use of ICT in the Health Service
2006	June	2380	Examination	Use of ICT in the Health Service
2007	January	2378 & 2379	Coursework	Use of ICT in the Health Service
2007	January	2380	Examination	Use of ICT in the Health Service
2007	June	2378	Coursework	Use of ICT in the Health Service <b>or</b> Using ICT to aid Travel *
2007	June	2379	Coursework	Use of ICT in the Health Service
2007	June	2380	Examination	Use of ICT in the Health Service

**GCSE INFORMATION TECHNOLOGY**  
**COURSEWORK TASKS**  
**UNIT 3 - Website**

### **Analysis AO2a**

- The Howard Health Centre is a new purpose built Health Centre
- The HHC has moved from a manual wage slip system to an automated one
- It has also gone from paper files on patients to a digital file on patients
- It has also designed its own Web Site.

They now want to design a Web-Site to advertise all they have to offer the community.

Before deciding on the best way for HCC to advertise.

Look at the current system of advertising and find out exactly how advertising is done.

### **How?**

Talk to the staff that deals with the advertising

Look at the current system of advertising and consider what would be the best method of advertising to benefit patients

Look at what patients would like to see on adverts / information leaflets and websites by interview and / or questionnaire.

There are a number of ways Health Centres can advertise. These include:

- **In newspapers and magazines**
- **On posters**
- **Television and radio**
- **Free leaflets**
- **Brochures**
- **Billboards**
- **The Internet**

**Look at and annotate the advantages and disadvantages of each method.**

### **Free Leaflets**

Leaflets can be designed to be eye catching and can be displayed anywhere but distributing leaflets is quite expensive. This is because of the postage cost if delivered with the mail.

### **Poster**

Posters can be viewed by anyone at no cost to them and as they go about their business. However posters cannot hold a lot of information so advertising a complete range of issues would not be possible.

### **Billboards**

Billboards are eye-catching and can be put on roadsides where people travelling cannot help but see it. You are limited in the places billboards can be displayed so some people might not see it.

### **Newspaper advertisements**

Weekly adverts can work out costly and would need to be redesigned when issues change. To reach a wider audience advertisements would need to be in a national papers rather than a local paper. This would be costly.

### **The Internet**

Web sites can also be viewed world wide, making the audience far wider than the more traditional methods of advertising. The Internet offers two ways of advertising - through sending out e-mails to individual patients and through the use of web sites. However people have to have access to the Internet to view the information and it costs money to go on line. If the company do not have trained staff they would have to pay a web designer to set up the site. Web sites need to be kept up to date and accurate or patients will not want to view the information.

A Web Site should benefit the Health Centre and patients.

### **Benefits**

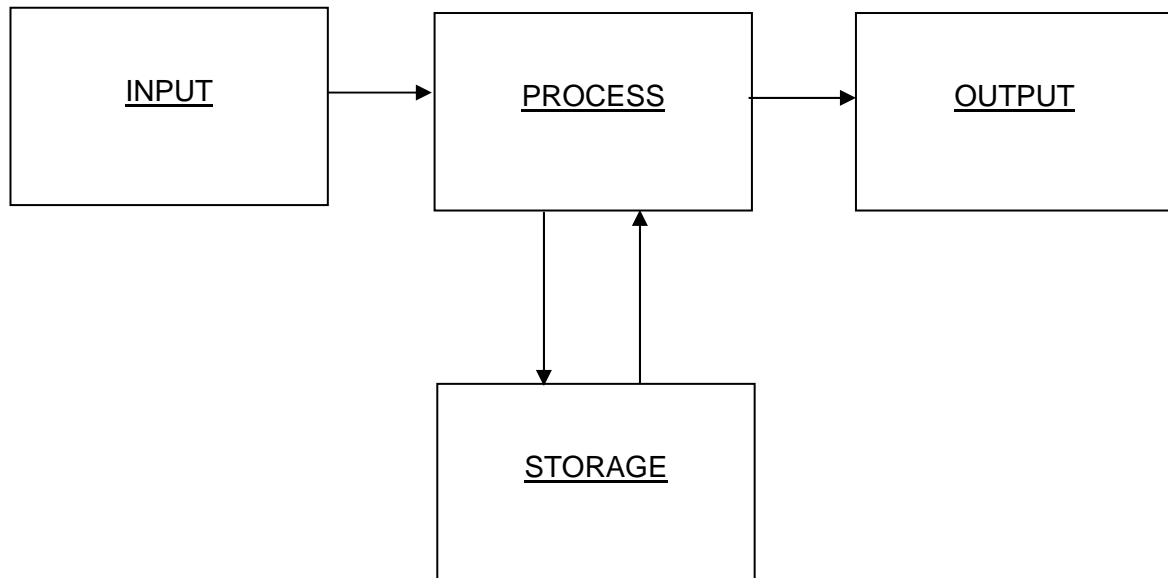
- HHC would be seen by a wider audience
- The web site will create a more modern up to date image for HHC
- Patients will be able to view the site 24hrs a day / 7 days a week
- Etc

### **Limitations**

- HHC would need to employ an expert to set up the site.
- More staff might be needed to maintain the site, as information that is out of date could be damaging to patients.
- Existing staff will need to be trained.
- Web advertising can't easily target a particular grouping :- for example an advert in a teen magazine such as Bliss will target female teenagers within a particular age group.
- Patients will not be able to get personal service or assistance over the Internet
- Etc

## Hardware Used AO1a/b/d/e

**Hardware** is the term used to describe all the actual pieces of equipment in a computer system.



**Input Devices** are used to transmit data to the CPU from outside the computer. Examples include –

- A Keyboard
- An OMR
- A Touch Screen – Input and Output
- A Mouse
- A Tracker Ball
- A Scanner
- Digital Camera

### **Keyboard**

This is used to enter information into the computer. It has keys with letters, symbols and numbers on them. Most computers come with a keyboard as standard and enable a person with good keyboard skills to enter data very quickly. However it is easy to make human errors when entering data this way.

There are however different ways of entering data, which avoids using a keyboard such as OMR (Optical Mark Reader) or Bar Code Readers.

## **OMR**

Optical Mark readers are able to sense marks made in certain places on pre printed forms. A lottery ticket is an example of a data capture form that would be input into the computer using a OMR. Using this form of input has many advantages one of these is it is a quicker way of entering the data than using a keyboard however; a disadvantage is the data has to be prepared in a form that is machine.

## **Touch Screen**

A touch screen is both an input and output device. Data can be entered by into a computer by touching it with a finger. Items are selected, as they would be using a mouse or light pen. Most interactive whiteboards work in much the same way as a touch screen. Touch screens are ideal in theatres, museums, shops, and Internet booths. They are also ideal for information kiosks. An advantage of using a touch screen is people who are not familiar with computers can use touch screens instead of a keyboard, as they can be easier to use. A disadvantage is it limits the options available for input.

## **My Choice**

I decided the best-input device for inputting the text into my web site would be a keyboard. I am a fast typist and the text can be changed as I type, a touch screen would take longer than a keyboard to enter the data. And is not suitable for inputting large quantities of data. An OMR would be a better choice if the data I was entering was the same for example forms customers fill in with their details

## **Mouse**

A mouse is a hand held tool that is used to point to and select items on the screen for example to open a file. Like keyboards, mouse designs are very similar however there can be useful features on a mouse that might not be on another

## **Tracker Ball**

A tracker ball is an alternative design where instead of moving the mouse around on a mat, you rotate a ball in a socket.

## **My Choice**

I could have easily used a tracker ball to select on the screen when building my system because it would do the basic functions a standard mouse does. The advantage of the tracker ball over a mouse is that it remains stationary and therefore does not require as much space as a mouse. Because space in the classroom between computers is limited this might have been a better choice of input for me than a mouse.

## **Scanner**

Detects images on a page as a series of dots and sends the data to the computer in an accessible form. Scanner may be handheld or flatbed. Scanning, particularly flat-bed, is a very accurate method of inputting image data, giving high resolution as every dot of a picture is stored. However scanned images take up a lot of disk space.

## **Digital Camera**

Takes photographs in the same way as a traditional camera, except that it does not use light sensitive film. Digital camera has a memory in which images are stored and extra memory cards can be bought to increase the camera's storage capacity. No film is needed, and no expensive developing costs. The user can also normally see the picture that has just been taken on a small screen at the back of camera and, if the image is not suitable, can delete it straightaway. Image data can then be transmitted with voice data or text messages to allow video conferencing.

**A disadvantage** of using a digital camera is specialised software is required to edit, store and display pictures on the computer.

## **My Choice**

I would have chosen to use the digital camera to take pictures of Future Fashion clothing, as this would allow real life pictures to be used and also allow me to delete unflattering pictures that would not help the clothes sell. A scanner could only be used in this situation if a picture of the item of clothing already existed.

**Output Devices** receive information from the CPU and change it into a form, which can be understood by humans. Examples include –

- A monitor
- A Printer
- A flatbed plotter
- A speaker

## **Monitor**

Display is composed of tiny dots called pixels. Pixels react to the electronic signals received from the central processing unit, producing an image. Standard VDUs on desktop computers work in the same way as the screen on a standard television set, but this technology is too bulky for portables or other handheld devices. These use liquid crystal displays, made from flat plates with liquid between them. A monitor is very useful for users working interactively with the system. However it is unsuitable for users with visual problems.

## **Dot – Matrix**

A dot matrix printer has a print head that travels across the paper. These printers are cheaper to buy than the ink jet or laser printer. However the print quality is a lot poorer than that of the inkjet or laser printer and not as many printouts can be and printout per minute when compared to an inkjet or laser printer.

### **Ink jet printer**

Print head of an inkjet printer consists of nozzles through which ink flows and is heated, to form bubbles. Each bubble expands and breaks, releasing a tiny ink droplet. Good quality black and white or colour printing can be produced of a better quality than a dot-matrix printer but these printers are more expensive to run when compared to a dot-matrix printer.

### **Laser Printer**

It produces output by using a laser beam to build up an electrical image of a page on a light sensitive drum. The image is built up from dots. These printers produce very fast printouts, faster than the inkjet or dot matrix printer but are more expensive to buy and run than an inkjet printer.

### **Loudspeakers**

Loudspeakers work in the same way as speakers used with music systems. ICT systems designed to run multimedia software are often supplied with speakers as an integral part. On other systems, cables to special hardware fitted inside the computer casing connect speakers. Speakers are invaluable for users who are visually impaired as they produce audible output – music and other sounds, also voice output. However they do not produce permanent output.

### **My Choice**

I choose a monitor to view the data as I worked; the monitor I used was only 15" so was not the ideal size. When working with a desktop publishing program it is far better to have a larger monitor to work with graphics. A monitor would be the most common output device to view the web site on when published, although it is possible now to view websites through TV and mobile phones. An alternative to the monitor to view the web site could be a touch screen.

However reports and documentation needed to be produced. For this I chose a laser printer because it is faster than the inkjet. Speed was not as important for this task because I only needed to print out one copy of each document. I used the ink jet printer to print out the user guide because I wanted this in colour and a colour inkjet printer is cheaper to use than a colour laser printer. If I were printing out a lot of user guides the laser printer would be my choice because of speed.

I did not need speakers because no sound was used on my site, however if at a later date I decided to use sound, speakers or headphones could be used. Headphones are better when used in a classroom situation where the noises from speakers are a distraction to others.



## **Storage Devices**

A storage device is any device that holds information in an ICT system. The data/information may be held in a volatile, or non-volatile form, depending on the device. Where memory is volatile, it will be lost when the device is switched off.

### **Read Only Memory (ROM)**

A chip inside the processor is used to hold data that cannot be changed by the user. Programs relating to the operating system are stored on ROM chips. This data will usually be the software that tells the computer how to load the operating system (called the boot program) when it is switched on or rebooted. This memory is Non-volatile, which means the data is not lost when the machine is switched off. It also has extremely fast access to recall vital data required by the computer system. A disadvantage is it has a small capacity and cannot be used to store new data.

### **Random Access Memory (RAM)**

This device comprises a computer's main store memory. Held on a chip inside the processor, but only temporarily, the memory is volatile. Data held disappears if power is switched off. RAM is used to hold both data and programs during processing. Also holds contents of the screen during use. This memory has fast access to store and recall data but a small capacity and can be expensive.

Other types of storage devices are known as backing stores. They hold data outside the central processing unit. Although access to backing stores is slower, they provide non-volatile storage.

Examples include:

- Hard Disk
- Floppy Disk
- CD
- DVD
- Magnetic Tape

### **Hard Disk**

Usually fixed inside the hard disk drive of the central processing unit. The disk is made of metal and is inside a hard disk drive and is made from more than one disk. Hard disks hold a lot of data, typically Gigabytes and data on hard disks is retrieved very quickly using random access. This access time is very important because modern software often needs to move data to and from a hard disk. It does not hold everything in memory all the time. A disadvantage is the read-write heads move across the disk extremely close to the surface so a speck of dust can easily cause damage – it is normal to seal hard disks inside the disk drive. This also keeps moisture away from the disks' surface.

### **Floppy Disk**

Made of plastic coated with a magnetisable material that can hold electronic signals in code. The disk is sealed into a protective case with openings to allow data to be written and read. These disks are light and portable, easy to exchange and transport. However access is slower than to hard disks and can only hold a limited amount of data.

### **Magnetic Tape**

Tapes are written to and read by a tape drive. These tapes can hold very large amounts of data, and are used as a backup media. Tapes cannot be used for random access as the machine has to search through the tape to find the data required. This is called serial access. Transfer of data is quite slow, however it is faster than a floppy disk but slower than the hard disks.

### **CD-Rom – Compact Disk (Read Only)**

Works in the same way as compact disks used to store and play music – data is stored digitally. The light is reflected differently according to whether the bit stored is a 1 or a 0. A low intensity beam is used to read the data but a higher intensity beam is needed to write the data on to the disk. CD ROM's are very reliable and can hold large quantities of data so ideal for graphics, encyclopaedias, and photographs. They are also easy to transport between computers. A disadvantage is once the surface of a CD-ROM has been altered to store data, it cannot be changed so that, although these disks can be read many times, they can be written only once. However, disks that can be written by the user (CD-R), and disks that can be written and read many times over (CD-RW) are available.

### **DVD - Digital Versatile Disk**

Works like a CD-ROM but specifically stores multimedia files in digital format. The capacity is much greater than a CDROM – can be used to store applications software, multimedia programs and full-length films, they also produces much better quality pictures and sound than standard video tape. DVDs are used for viewing only at present – strict copyright restrictions apply to the films, software, etc. stored on them.

### **My Choice**

I used the hard drive to save my web site because it loaded in quickly from this. The web site also contained a large number of graphics, which take up a large amount of memory. The hard drive has this memory; a floppy disk did not have enough memory to hold the web site. If I had been able to save to a floppy disk I would have been able to take the work home to complete. The computers at school were networked and so I was able to access my work on any of the computers in school which is one of the advantages of having networked computers.

## **Software Used AO1a/c**

When designing a web site there are many programs available to do this. Each program has its own advantages and disadvantages.

### **HTML**

HTML means Hypertext Mark-up Language and is the code that is used to write web pages. To use HTML you would have to learn the language, but because the code is often repeated within the web pages it is not as difficult as other programming languages to learn. However there are no error messages in the use of HTML, which makes finding errors difficult. Problems could occur when using HTML because American spellings are used. An example is when changing the colour of fonts and the background the code would need to be spelt COLOR instead of COLOUR. Using HTML allows you to use Notepad to type in the code, however you cannot see how the page is looking without opening the page in the browser.

### **Microsoft Front Page**

Software available for web design includes special software for example Microsoft Frontpage. This software is specially designed to make the creation of web sites easy. It has all the tools available to create a good website

### **Word processor and DTP**

Now more advanced word processors and desktop publishing software allow you to design web pages. One advantage of using this software is that it is WYSIWYG, which translates –What You See Is What You Get. This means that you can see how your page is developing, adding pictures and text very easily. There is no need to keep viewing the site using the browser to see how it is developing.

If you want make an appealing web site, you may need more than just an editor to get the job done. Most sites have a very attractive visual look and feel to their sites. This is done by using various programs, which manipulate images such as Paint shop pro. You can also search the Internet for graphics to add to your web site.

### **My choice of software**

The software I am going to use for the design of my web pages will be a Desktop publishing program called Microsoft Publisher. I have used this software before for the design of leaflets and posters so I am familiar with the tools available. I will add clipart and motion clips by searching the Internet for graphics or using a scanner to scan images. New skills I will need to learn will be how to create hyperlinks to move between the web pages and how to scan pictures in using the scanner.

# INPUTTING DATA AND THE NEED FOR ACCURACY AO1d

## INPUT DEVICES

When the data is entered into the computer it is important that it is entered correctly and that the information is up to date. If information on the web site is inaccurate then this could cause problems for patients.

For example - If hyperlinks do not work properly then some pages might never be viewed.

Also that new data is updated whenever it needs to be, as information that is out of data is of no use to its patients.

There are two methods that can be used to check data has been entered correctly, these are verification and validation.

## Verification

A verification check is designed to make sure data entered or transferred from one medium to another has been copied accurately. There are various ways of verifying data on input or transfer. When data is entered at a keyboard, verification is often achieved by having the data typed in twice. When data is entered by keyboard, two operators are asked to enter the same data. These two versions can then be compared and if they match the data is stored. Also the data can be verified by proof reading it to find any errors.

## Verification of my web site

I will check the data on my web site is correct by proof reading it. I will also use the spellchecker to help find mistakes. Having two people enter the data would be very time consuming. I will check that hyperlinks work correctly by checking every hyperlink on every page.

## Validation

Validation checking is carried out on the software to make sure it is sensible and will cause no problems when it is processed.

Different types of validation are carried out to check different types of errors.

**Type checks** make sure that numeric data does not contain letters such as 'O', which takes the place of zero, but this is not noticed when it is verified.

**A range check** is used to make sure that data is inside a fixed set of values e.g. a date of birth might have to be between 1900 and the present date. It can be used on letters as well as numbers.

**A presence check** makes sure that a value has actually been entered in a particular field. This type of check may also be used to make sure that a particular bit of data has been entered.

**Check digits** are used to check numeric data especially where large digits are being entered. Check digits are present in barcodes and also account numbers.

## **Validating my web site**

If a web site had a request for a repeat prescription validation checks would be necessary. Patients would have to give their National Health Service number. A validation check for this might be a presence check; this would check that all numbers had been entered. A presence check would also be used to make sure that all data necessary had been entered for example, the customers' address or postcode.

## **Ease of Use**

To cut down on data errors and speed up data entry, combo boxes and list boxes would be included. Drop down boxes where the customer enters Title would contain Mr, Miss, Mrs. The user would not need to type anything into these boxes but choose from the list provided. This will mean that data entered will be correct – no spelling mistakes and more importantly it will be entered the same time and again. This speeds up the customers filling any forms in on the web site and cut down on spelling mistakes.

# A User Guide

## Creating A Web Site

Click on *Start / Programs / Microsoft Publisher 98*

Click on *Blank Publications* choose *web page*

A blank web page will now be on the screen

**Change the width of the page by clicking on the *File / Page Set-up / Click on Wide / OK***

When using Microsoft Publisher to design your web site *Design Gallery Object* provides all the tools necessary to add extras. The most used are listed below.

### **Inserting the *web masthead***

Click on *Insert* from the menu toolbar at the top of the screen

Click on *Design Gallery Object*

Click on *web masthead*

Choose the *web masthead* that you want on the top of your web page

Click on *insert*

This *web masthead* can be customised with your own house style and logo by first ungrouping the objects—click on *Arrange / ungroup objects* and then changing the individual objects. To regroup the *web masthead* click on each object holding down the shift key then click on the *group object button*

### **Inserting your logo**

Open the file that contains your logo

Select the logo

Click on *Edit / Copy* return to your web page click on *Edit / Paste*

***The first page can form the basic layout for all other pages in the web site***

### **To add pages**

Click on *Insert / Page*

Click on the radio button - *Duplicate all objects on page* and check the box next to this has the number 1 in. This will make sure your house style is on every page in the web site.

### **Inserting Web Navigation Bars—this will automatically create the hyperlinks to connect your web pages.**

Click on *Insert* from the menu toolbar at the top of the screen

Click on *Design Gallery Object*

Click on *Web Navigation Bar*

Click on the *Web Navigation Bar* that you want on your web page

Click on *Insert*.

This will provide the links to all pages in the web site.

### **Additional hyperlinks can easily be added by -**

Click on the object to be the hyperlink

Click on *Insert / hyperlink / choose another page in your web site* choose the page number from the drop down box

### **Add text to your web site by—**

Click on the *Text frame tool*

Draw a text box and then type in the text

### **Add pictures to your web site by—**

Click on *Insert / Picture from file*

Choose the Drive and folder that you have saved the pictures to

Click on the appropriate picture

### **Add an order form by—**

Click on *Insert* from the menu toolbar at the top of the screen

Click on *Design Gallery Object*

Click on *Web Reply Forms* choose the type of form you want

Click on *Insert / Object*

## **User Guide Evaluation**

I tested my User Guide by asking a friend to use it and then to give me some feedback. Not all the feedback I received was positive. Improvements needed included:

- Adding screen dumps would allow the user to see what the actual screen should look like, this way they would know they had opened the correct menu or screen.
- Add bullet points to separate the instructions.
- Colour would make the User Guide more interesting.
- A smaller booklet type User Guide would be easier to handle and store.

However there was some positive feedback:

- The guide covered most of the essential steps needed to create a web site.
- The use of *Italics* for words that the user would find on screen was helpful

In view of the feedback given I refined my User Guide to include some of the points made. I added –

- Adding screen dumps
- Add bullet points
- Added colour

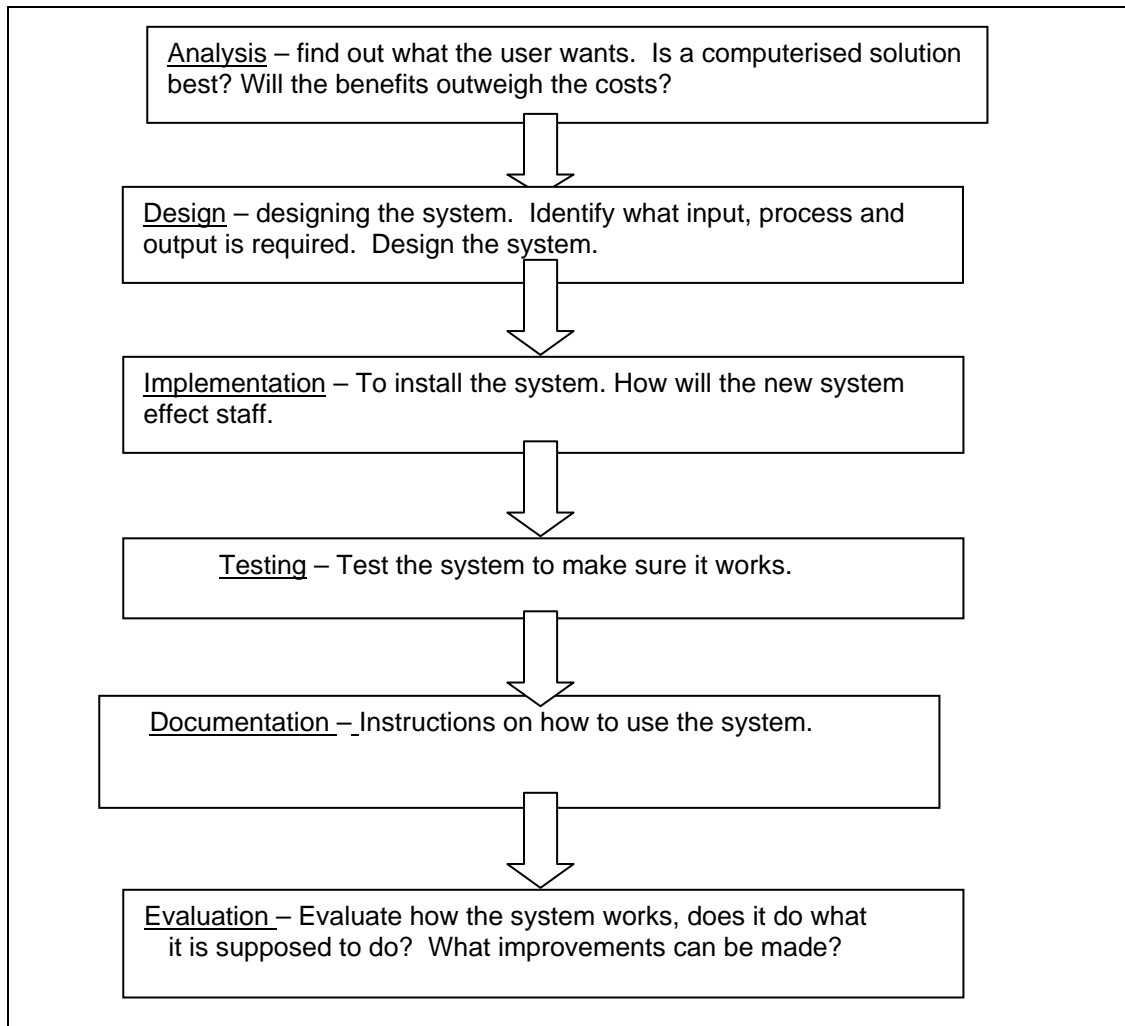
However if I were printing out lots of the User Guides, colour would be a very expensive option. Most companies would print out in black and white because of the costs involved or even make an on screen User Guide or tutorial. I thought the idea of a smaller booklet type User Guide was a good idea but time did not allow me to make these changes.

A section on FAQ or a troubleshooting guide would be useful to include in the User Guide. At present the user guide has no way of helping the user if things go wrong.



## Designing a system

When designing a system there are various stages of design



## **Improvements and Future Developments – AO2c**

With more time and a greater knowledge of website design I could have made many improvements to the website. These developments include having a competition page or pages, a newsletter for patients. The site however would have become much larger and more difficult to produce, document and maintain if these were implemented. Also a page dedicated to frequently asked questions and a newsletter.

If I was to re-do the project I would have liked to use a program like Front Page, this has many extra features but still is easy to use. Microsoft Publisher had very limited tools for website design and only simple sites can be produced. Web sites are not published efficiently as each occurrence of an image is saved, which means it has to be downloaded. Every page had the HHC logo so it should have only needed to be downloaded once, using Microsoft Publisher meant it was downloaded each time a person visited that page.

There are many programs available that allow you to animate pictures, if I had more times I would have experimented with one of these and produced my own animated gifs.

As technology is constantly changing, HHC would also need to keep up to date with this and alter their web site accordingly to take into account these changes.

## **Analysis Cont AO2a**

Having decided to use a web site to advertise I researched other web sites on the Internet to find out how they advertised and what they included on their site.

### **Research**

I looked at the following web sites;

Look at two Health Centre Web Sites and note the good and not so good points of each site.

Eg House Style, Hyperlinks, Logo etc.

### **My Findings**

All had a consistent layout and the company logo was displayed on most pages.

The best sites contained more pictures than text, I think this is because the customers would prefer to see what symptoms look like rather than read the text.

When the home page took a long time to load in I closed that web site down as I found it very frustrating waiting a long time for a web site to load.

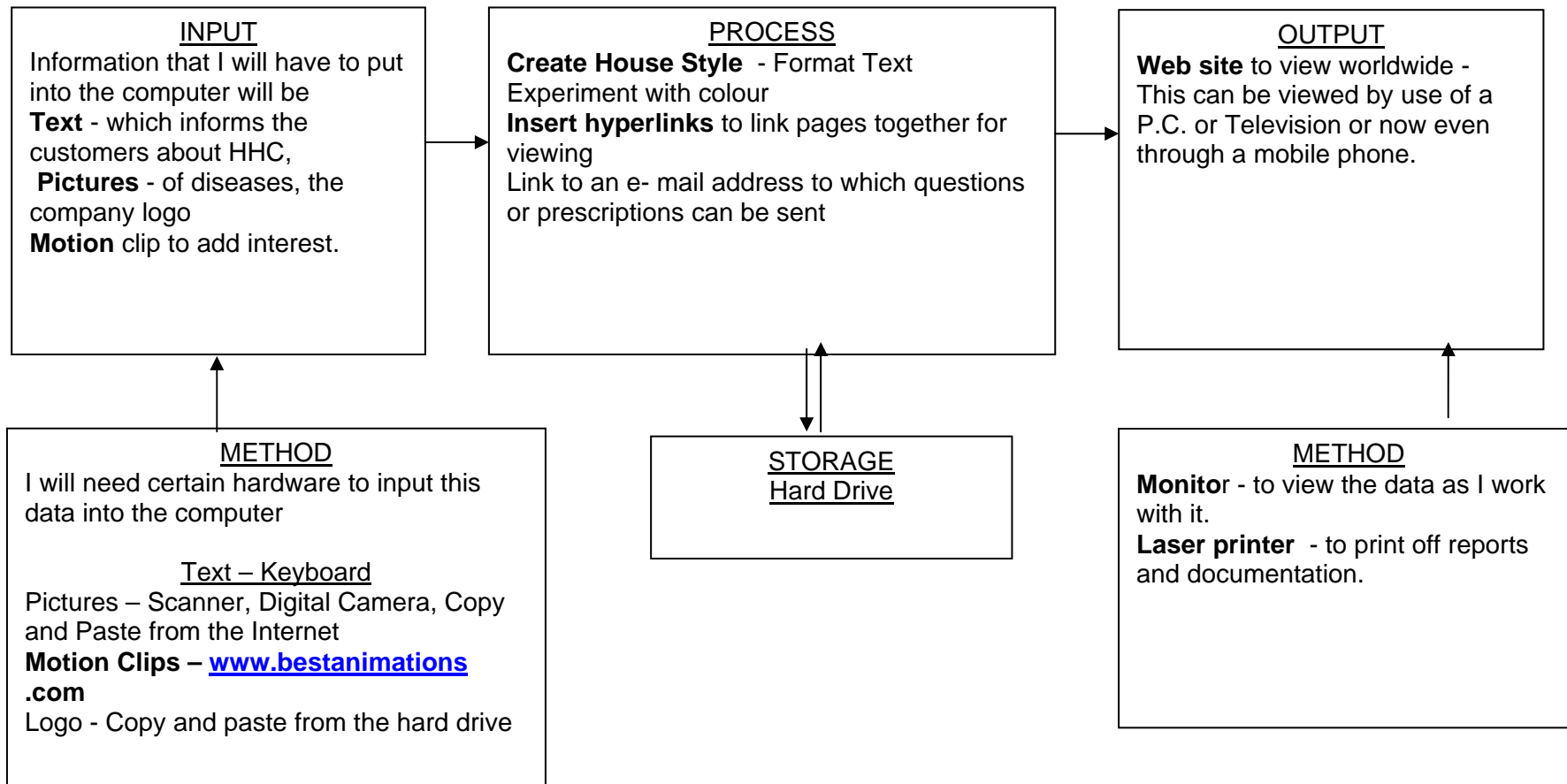
## Objectives

As a result of my analysis I will

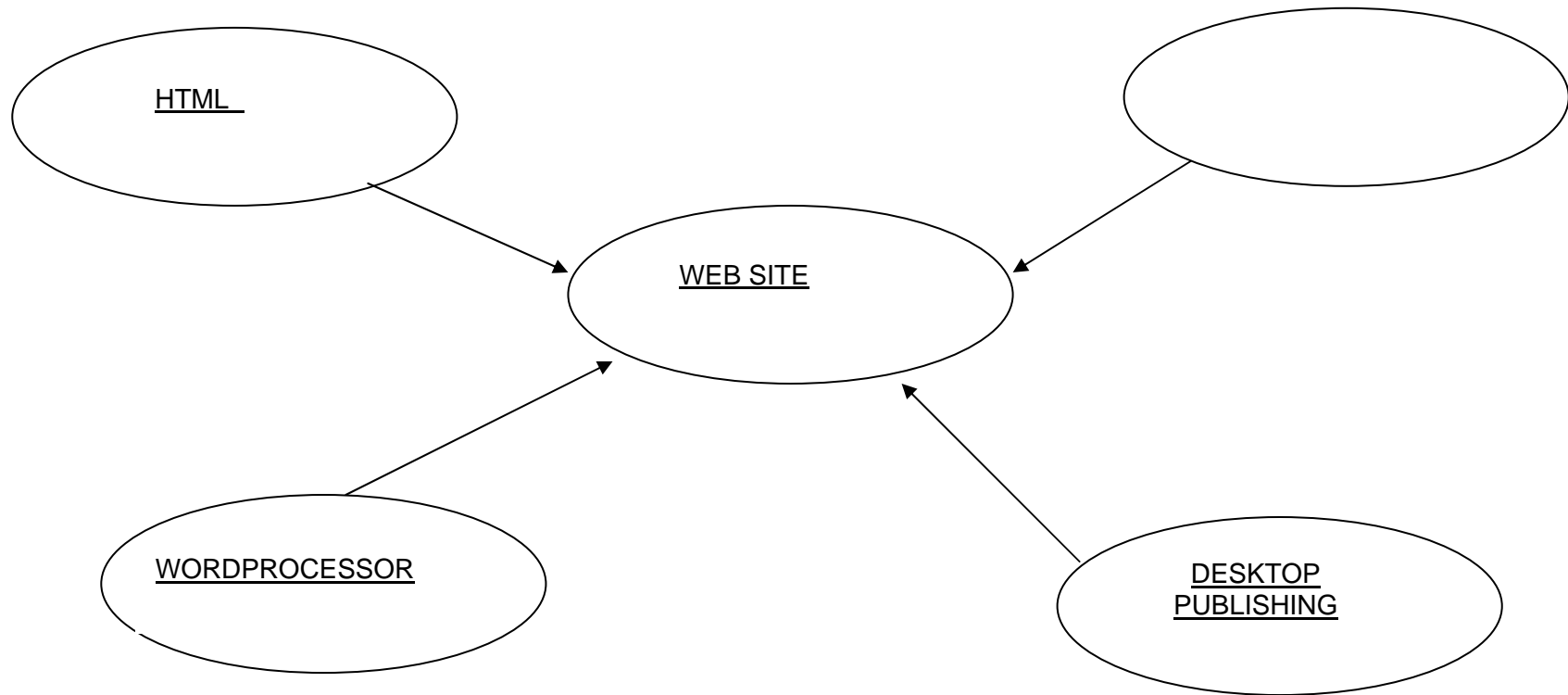
- Develop a company house style, which will be consistent throughout the web site.
- Include the company logo and company contact details on every page.
- Each page will contain a different type illness
- I will include hyperlinks on every page so that users can move around the pages any way they wish.
- The location of other Health Centres will be displayed on a separate page on the site.
- A page of FAQ will be accessible to the patient
- Avoid lots of pictures on the home page so that the web site will load in quickly

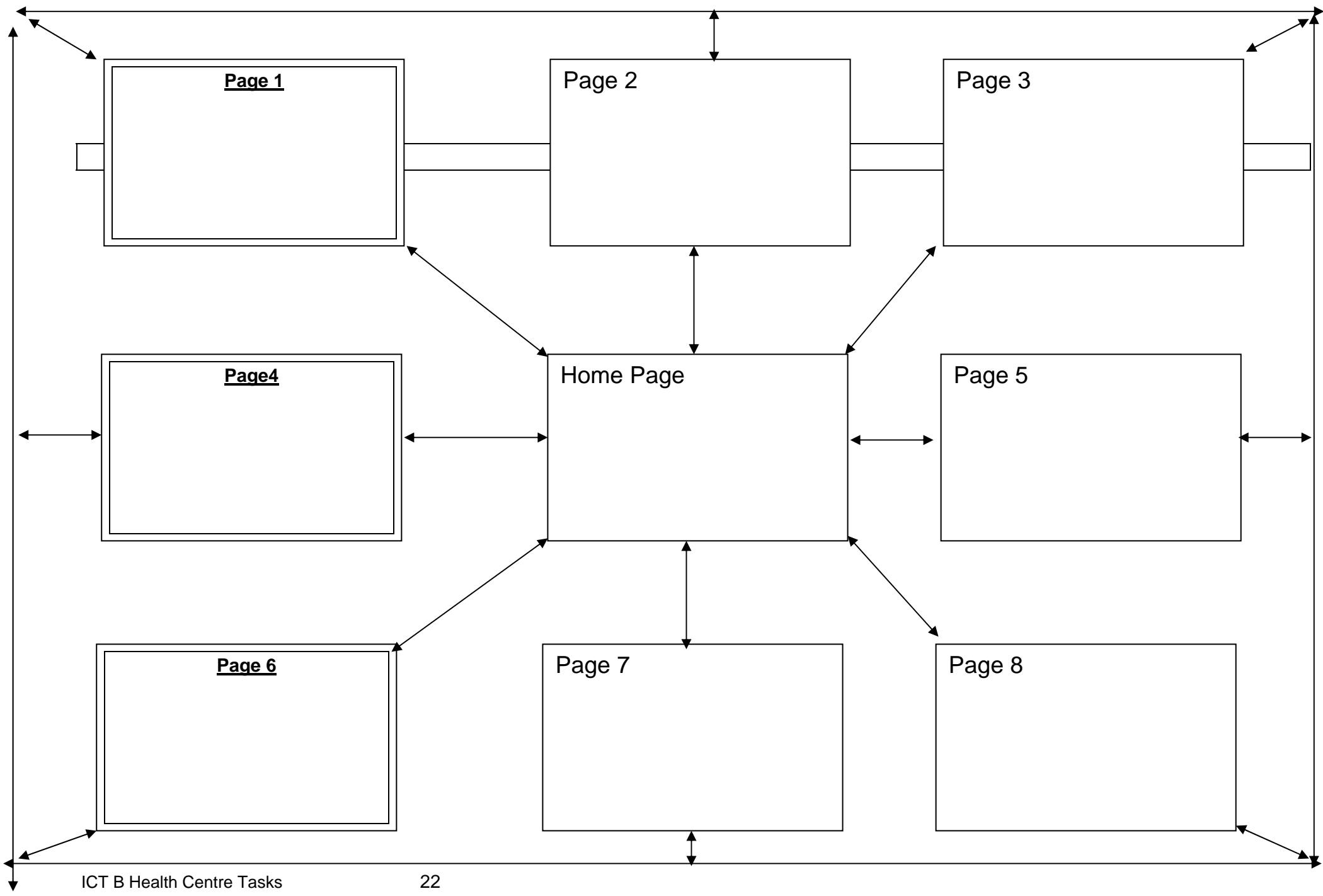
# Design – INPUT – PROCESS - OUTPUT

After completing my research I have been able to identify what Input – process and Output will be required.



## SOFTWARE





## The aims of my web site and how these aims have been met

When designing my web site I set the following objectives

- Develop a company house style, which will be consistent throughout the web site.

I achieved this by ensuring all pages have a similar layout and will be instantly recognisable by use of font and colour scheme. The company colours were taken from the logo I designed and used throughout the site.

- Include the HHC logo and contact details on every page. Every page on the web site contains the logo at the top of the page and the contact details at the bottom of the page.
- Each page will contain a different type of disease or Health Care Advice
- I will include hyperlinks on every page so that users can move around the pages any way they wish.

The hyperlinks on my web site enable the user to move to any page, from any page and also to the home page from any where on the web site.

- The location of other Health Centres will be displayed on a separate page throughout the site
- A page of FAQ will be accessible to the viewers who are having problems.
- Avoid lots of picture on the home page so that the web site will load in quickly

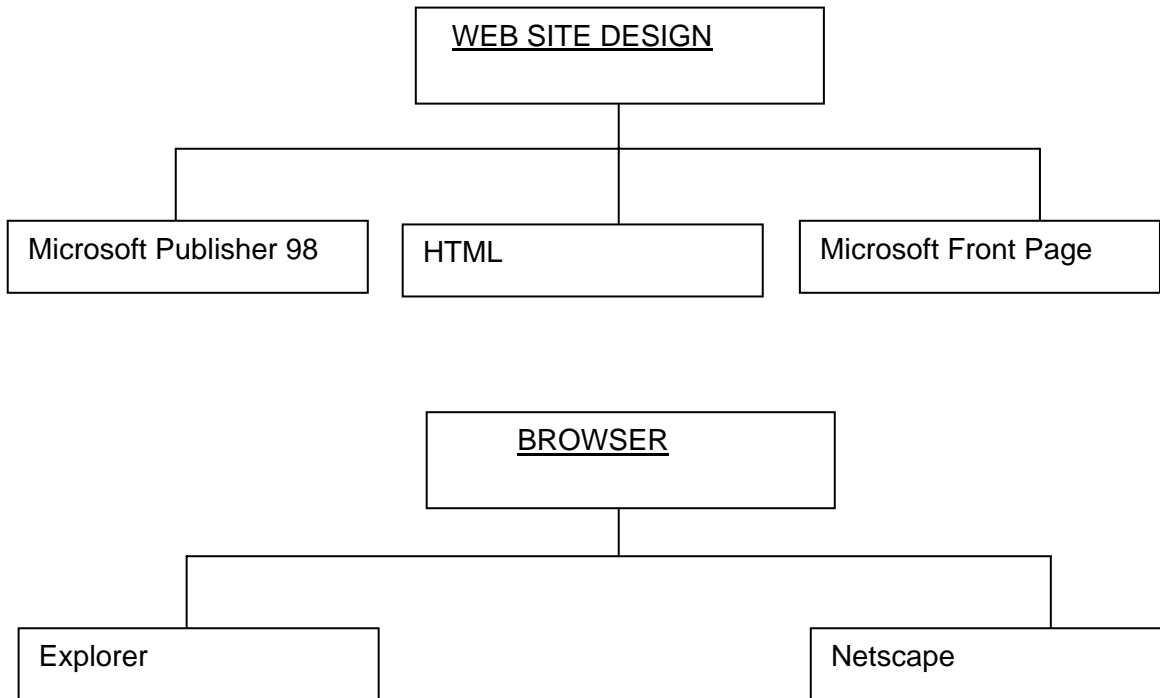
I included pictures on the home page, but tested the web site on the browser to make sure the pictures included did not take too long to load in. Testing the web site proved they were quick to load in and because they were saved as jpeg did not take up too much memory.





## Design

The best way to advertise will be using the Internet, although I would still use some of the more traditional ways so that patients who do not have internet access are not disadvantaged. I will use a Desktop publishing program to design the web site but I will also need a browser because this is the software necessary to view a web site through a PC





## How staff at the HHC will be affected and meeting training needs

Staff training will need to be considered by HHC, as updating of the web site will be very important.

Training will be essential if the system is to operate effectively, and to enable staff to use the different facilities available. While staff are new to the job or being trained, errors could occur. This might result in the information on the web site being inaccurate lead to patients suing the HHC. Some staff might not have used a computer before and so will need the basic skills. Staff training will cost money

HHC could employ a company to maintain the site, but this might mean redundancies for some staff members. Some people might fear they will use their jobs through redundancies if fewer staff are required. New technology often makes jobs that were done manually more efficient and quicker to complete and so this is a real threat to existing staff.

The creation of the website will create a lot of new jobs in this area – technical staff to deal with any problems that might occur with the website, staff to update the information being displayed, graphic designers to make sure the user interface is appealing to the viewers. Staff to deal with e-mail correspondence. Information on new patients will need to be entered into a database and staff will need to know how this operates. Also staff will need to deal with queries on line and answer e- mail enquiries.

The way of working for staff might change in other ways. Web sites can be maintained from home, this might result in the work being contracted out or staff now being able to work from home. Problems of working from home include isolation as they would have little contact with other staff, however it does allow workers to work hours more suitable to them. Travelling and being stuck in traffic jams is no longer a problem when working from home, many every day problems such as sleeping in, missing buses and trains, the car not starting are no longer problems. The company also saves money, as big company premises are no longer needed.

## Improvements and Future Developments

With more time and a greater knowledge of website design I could have made many improvements to the website. These developments include having a competition page or pages, a newsletter for customers. The site however would have become much larger and more difficult to produce, document and maintain if these were implemented. Also a page dedicated to frequently asked questions and a newsletter.

If I was to re-do the project I would have liked to use a program like Front Page, this has many extra features but still is easy to use. Microsoft Publisher had very limited tools for website design and only simple sites can be produced. Web sites are not published efficiently as each occurrence of an image is saved, which means it has to be downloaded. Every page had the Future Fashion logo so it should have only needed to be downloaded once, using Microsoft Publisher meant it was downloaded each time a person visited that page.

There are many programs available that allow you to animate pictures, if I had more time I would have experimented with one of these and produced my own animated gifs.