**BTEC Extended Certificate**

In Creative Digital Media Production

**UNIT 6: Website Production**

**TASK 1: The purposes and requirements of websites**

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**Learner declaration**

I certify that the evidence submitted for this assignment is my own. I have clearly referenced any sources used in the work. I understand that false declaration is a form of malpractice.

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# Introduction

The internet is a global computer network that provides a wide range of services to people. It consists of an interconnected network that uses standardized communication protocols. It is used for many services; the most common is information sharing and communication

# Topic A.1 Websites in context

## **The internet** (computer network)

The internet is a network of computers all over the world that offer services.

The way to connect to this network is with an ISP (internet service provider) for example Virgin or Sky. Your computer then connects to virgin who then connects to the domain name server (also known as DNS), which then connects to the websites files. You’re not connected direct to the website, you are connected to the file server which finds the files information we use.

The internet address or URL (uniform resource locator) basically tells the browser where to get the information from and then does just that.

The website information is stored on a server which is a more complicated computer. This holds the information for the website and then sends the information to your computer. When you type in the URL in the browser, it sends a request to the server. This then fetches the page index.html and sends it to your computer.

Server space costs money to use depending on how big the server is and who you buy it from. But essentially any computer can be turned into a server.

## **The world wide web** (WWW)

The World Wide Web is not the internet; it is a way of connecting one page to another though hyperlinks which are programme commands that tells the browser to jump to another page.

These hyperlinks tell the browser to ask the server for a different page and the server then send the page the hyperlink is connected to, to the World Wide Web. This allows us to search for documents of the same webpage.

A webpage is a combination of documents connected together that usually has one theme and you can jump to each one individually. They are all connected by hyperlinks allowing easy access to all the pages of a webpage.

A webpage can show a lot more content then it could do at birth when the internet was first created, as the most it could do is text.

The World Wide Web allows content to be shown, this can be anything from images to video and this can either be seen fast or instantly instead of a picture that loads line by line.

## **Web browsers**

Web browsers are software that allows a user to search the internet. The browser retrieves the information for the user then presents it according to what is in the source code.

The difference between these web browsers can be speed, as chrome might be faster than internet explorer. It can also have a customizable difference as chrome can customize the start screen, whereas explorer cannot.

Web browsers are the only way to access information on the internet . Without using web browsers there is really no other way.

# Topic A.2 Why do we use websites?

Websites have many purposes, they can inform, entertain, pursued and so much more. A few examples of the purposes are as follows:

They can be used as information websites which is usually newspapers, research websites, and library websites. These are used to give information and are a big part of how people now find things out, they don’t need to go to a library and flip though books they can just type it into google and it will come up with thousands of answers. This is more convenient (which is usually what websites and the internet are made for things to be more convenient).

Information websites usually have a unique design with links to more information on the side, a search bar at the top right and at least one link to a discussion forum.

Another form of the purpose of websites is to educate people. The internet now has so many sites for revision and learning that it is easy for young and old alike to revise and learn from it, thanks to sites like BBC bitesize you can learn at your own pace at home as well as in mainstream education. A learning websites layout is usually the same all the time with links to all the key stages. A search bar in the top right corner, it has lots of pictures for younger learners and links to videos for people who learn more from seeing, rather than reading.

# Topic B.1 What is a website and how does it work?

There are two different types of websites, static and dynamic. I will be explaining the differences between these two types here.

Static websites send the files straight from the web servers file system and cannot change unless the whole site is shut down, edited, then put back up. This is useful for factual information and business, as it will not need to be updated as much as dynamic websites. Examples of static websites are play works which is used for a business and will not need to be updated very often.

The other type of website is dynamic, which will generate content after a request. Sometimes you will have to reload the page for new content and some will do it for you. How it works is the request gets delegated to a running web application such as php or WordPress which then sends the new information back.

# Topic B.2 Designing a website: Technical and creative considerations

## **File management;**

With a website, file management is important. This is because if the files are not put together correctly, the website won’t work, or can have terrible looks so it’s good to have a folder for each piece of content, one for pages, one for CSS pages, and one for images and so on. This will make things easier to get to and be orderly.

Another thing is no spaces are used. You need to use the symbol \_ every time you need a space, otherwise it won’t work.

Another thing is to use the correct extensions such as html and css or it will not work either.

## **Web page structure;**

A webpage can be structured in many ways, but it is built in one general idea;

When we add content, we use tags. They usually look like this: open<p> and </p> close. This starts and ends a paragraph this is the backbone of the internet and builds up everything on the page.

The header is where the title is and also the place where the bar of links are. This is important as it gives a place to start and doesn’t get confused with the body.

Metadata, also known as key words, summarise basic information about the data such as author and date modified. Metadata is also used to find images and videos and etc. Without metadata the website would not be able to find any of the information it needs to display the webpage.

## **Design and control of the visual content of web pages;**

* The body is where the main content is displayed and is where the information about the subject of the webpage is shown. Usually the body has more information than the head.
* We have many types of content and services we use for webpages such as tables. Tables help with websites that require statistics; websites that use these are sites like Wikipedia or environmental sites, as statistics are highly used. CSS is used to style the page, not make it look pretty (although you can) but to make it look acceptable and get the information across. Without it, the webpage looks like words and images with no borders or backgrounds and will just look ugly.
* Alignment is important in the design of the website as a way of getting the information across, by making it easier to read. It does this by, if it’s on a website and is aligned to the middle, you can have more room for pictures and content than without alignment, as there would not be enough room.
* Colours are the most basic form of personalizing a website, but there’s something that must be remembered when using colours, you should think of people, who can’t see bright colours, especially with writing. The writing must be darker; otherwise some people won’t be able to read it. How we get more exotic colours is by using hexadecimal numbers, this is made up of 0-9 and a-f and starts with a # this is an easier way to get more exotic colours such as the perfect red or a darker yellow.
* Hyperlinks are used to connect multiple webpages together. Without this a website would only be one page. Hyperlinks can be anything, from a picture, to text, or even an combination of both, which is handy if your running low on space for your webpage. Forms are used to give users more options, like feedback, and signing in, or up for something. This is used to give the user more freedom and privilege in return for a signup fee.

## **Web standards;**

Wc3 or wide web consortium is a company that decides the standard of the code for your websites. If you use this validation you are making sure that your websites are up to code. If you do this your website will have more chance of working on more browsers.

## **Preparation of files for the web;**

To make your website more optimized, you will need to do a number of things to prepare files for the internet first. The smaller the file size, the smoother it runs.

Images take up the most space so they need to be compressed. Their file size is the one that needs to be shrunken, and one of the ways to do this is to use less images. If you don’t want to do this, you could use higher quality software or pick the right image format.

GIF format is best for photos and doesn’t take up to much space, while still allowing you to see the picture. Compressing can also help make files smaller. It does this by reducing redundant information, and when it is uncompressed nothing is lost so it makes it smaller and easier to work with.

There are many other things you can use to optimise, such as using shorthand code for css.

## **Content/media file types**

There are many different kinds of content that are displayed on a webpage. These are media files and they come in many forms, such as images.

Images are the simplest, but arguably the most effective source of information. They are also the smallest file other then buttons and text and are easy to find and use.

Video is another one but is quite large and harder to find, this is because it uses both image and sound to get its message though, but it can be difficult to find the one you want or to make your own so it is not used on every website.

Audio is also one that is not used as most people work better with video not audio as you don’t have anything to look at with audio so it’s more difficult to get the message fully animation isn’t used as it’s the hardest to use and is the biggest, but some do use it for games and animation videos as it can appeal to a younger audience which could be the aim for educational websites.

Form objects are a group of things in one, like buttons and list menus. These are used for more convenience so it will take you where you want to go. and it’s also easy to then set up a sign up or feedback sheet for helping to improve your websites convenience.

## **Navigation**

With a website, navigation is important. Without it, there would be no way to get to anything, and it would be a mess and a total waste of time and effort.

There are many things that will make a website have better navigation, one is site maps which are files where there is a list of pages. This helps crawlers like google bot successfully crawl though the website getting all the information. It also gives sites like google valuable metadata to give the best experience.

Buttons are also used, and they are useful as they allow easy ways to submit forms and details.

Text hyperlinks and image hyperlinks make it easier to find the information you want, as with one click it will instantly take you to the page you want. One more thing that helps is rollovers, these will allow an image then when you complete an action such as hovering, the picture can change. This allows more information about what the image is before you do anything with it.

## **Accessibility**

Accessibility is important as you have got to decide what users can and cannot access, such as code or they could wreak havoc and that would not be good. You will also need to make sure people can actually see it as there are some things you have to include so people can access your website wcag (or web content accessibility guidelines).

These guidelines are for the makers of websites to follow to make their website more accessible. They do this by having a decent size text and a natural black colour, or something easy to read.

Animations should be easy to follow and contain subtitles; this will make it easier for deaf people, and image alt tags, will give people who can’t see the colours of the image, to be able to read what the image is.

## **• Creative Considerations**

When making a website you have to make sure you are creative. Originality is important; otherwise you might breech copyright and trademark laws and could be sued.

Also, more people will visit an original site than one that looks like every other one, and will also make the website balanced. You shouldn’t put too much information, and nothing to help people swallow a website. It should also be easy to use, not be more locked up then fort Knox, and the layout should be unique but with at least something people have seen before like where the search bar goes.

For a website to be successful, it should have a wide range of media so everyone can get the message, and finally it should look nice not a lot of writing and pictures thrown on a page.

# References

**W3 org drafts:** [**http://www.w3.org/WAI/EO/Drafts/PWD-Use-Web/**](http://www.w3.org/WAI/EO/Drafts/PWD-Use-Web/)

**Last access 13/11**

**W3:** [**http://www.w3.org/WAI/intro/wcag**](http://www.w3.org/WAI/intro/wcag)

**Last access 13/11**

**Franchise magazine:** [**http://www.franchisingusamagazine.com/expert-advice/wc3-validation-work-affect-seo-franchises/**](http://www.franchisingusamagazine.com/expert-advice/wc3-validation-work-affect-seo-franchises/)

**Last access 13/11**

**Wikipedia: https://en.wikipedia.org/wiki/Site\_map**

**Last access 13/11**

**What is.com:** [**http://whatis.techtarget.com/definition/metadata**](http://whatis.techtarget.com/definition/metadata)

**Last access 13/11**