Graphic formats LO2 (P2)

Explain how different types of graphic images relate to file formats.

There are many file formats for graphical images they all have their advantages and disadvantages. Different formats need to be used for different things depending on how and where you may use them.

PDF

A 'Portable Document Format' known as a PDF was created by Adobe who has created Photoshop, it is used to save documents with text and information the format has its own fonts and layouts. You can go online and create PDF files and you can then view from 'Adobe Reader' on online. It is very easy to use and you can easily change the font size and the layout of the PDF. This format is very good as anyone can use and create PDF's very quickly.

A PDF file format can be used for things such as-magazines and newspaper files, brochures and flyers, text books. This format is good as you can print it out or just view it online.

Used for –

- Magazines and Newspaper files
- Documents that will be displayed on the internet
- Brochures and Flyers
- Books and text books
- Other documents that will be printed

GIF

'Graphics Interchangeable Format' this is a very useful format for the use on websites as it is a very small file so it is compressed; this means that it will load faster than other formats. This format is also good as when it is compressed the image does not lose any quality; this is called lossless. On the down side there are only 256 colours; this could make the image seam in a lower quality that it is. Normally a GIF will be a simple image or text, you can also create a GIF animation; this is a collection of images that changes to create things such as flashing text.

PNG

This stands for 'Portable Network Graphic' this format lets you store images online. It supports lossless data compression in the same way as a GIF does. This format has been created as an improvement to GIF; it has much more colours than the GIF's 256 making the quality of the PNG image improved; it is for this reason that PNG is becoming more popular that the GIF format. But unlike a GIF you are not able to animate a PNG, if you are using an out of date browser you may not be able to see the PNG graphic.

JPEG

This stands for 'Joint Photographic Expert Group' they are compressed images so they are made smaller in file size. This is a method of lossy compression for digital photography (lossy compression is information technology which tries to minimize the amount of data needed for the computer to handle the image, it does this by removing as much data as possible). With a JPEG you are able to compress image 10 times smaller; this will not lose any quality of the image. Many devices such as phones and digital cameras use this format and it is the most common image format on the internet.

TIFF

A 'Tagged Image File Format' can be a '.tiff' or '.tif' file extension. It's a very common file format for images as they can store high quality images that are large. It's a file format that is used mostly among graphic designers and artists, professional photographers, this format works on both Mac and Windows. This format takes up a lot of space; some cameras have this format but will take a lot more space than the JPEG format does.

BMP

This is an abbreviation of 'Bitmap' this format is used on computers and it describes the colour of each pixel in an image. BMP images are not the actual files uploaded; it saves the image and it is converted to a different file format such as a JPEG or even a GIF. This format is not compressed making it a large file but has a higher quality than a JPEG file as quality is not lost; this will make the download of the graphic take longer that a compressed file. JPEG and GIF files also use BMP files to save, but compress the files.

Graphic formats LO2 (D1)

Evaluate how different delivery mediums for graphics influence file formats.

How delivery methods affect size, resolution, compression, colour depth.

Differing display mediums –

There are lots of formats and they all have advantages and disadvantages. Depending on the finial use of the graphical images changes the format, another factor is web delivery; when graphical images are used online it requires to be downloaded from the site server so the viewer can see the content. If a user has a dial up internet connection the graphical images may take a while to load compared to a 3G or a high speed broadband. Also as I have said about some of the formats, they all vary in size: a larger file size will take longer to load but the speed can be different depending on what type of internet connection is used. The formats that are best for online use are PNG, JPEG and GIF; a JPEG format is good as it has a small file size but some of the quality may be effected by this format, a PNG format is again a small file size but this format lets you use transparency in the graphic unlike other formats and lastly the GIF is good as the file is very small and the loading speed of the graphic is very fast however as I said you are limited to a small range of colours.

Magazines –

Graphical images used in A4 and A5 magazines need to be in the correct format so that the viewer can see the photos in great detail close up. A good format for this will be TIFF; this format is very suitable for print publishing, TIFF is good for graphics that are pixel-based it can also have large files that do not lack in quality unlike a JPEG or a GIFF format where the file is small but you lose some quality of the graphic, and using TIFF you are able to have layers and alpha transparency.

Billboards, hoarding (ultra large images) –

a graphical format for a magazine is different from a format that will be used on buildings for billboards as these graphics need to be large but they need to be clear; a JPEG would not be right as when enlarged you will be able to see the pixels that make up the graphic giving it a very bad quality. The format will need to be scalable to large sizes this way no quality will be lost once printed, it is suggested that this format should have a 72-150 DPI - dots per inch is the exact way to define the resolution for a file that needs to be printed. If the file is created in illustrator then file format should be ESP or AI files as they scale us to large sizes very easily while keeping the quality however a BIT-MAP format will be huge in size and will take a long time to save and can cause week computers to crash due to the size.

Sources –

http://graphicssoft.about.com/od/graphicformats/f/summary.htm

http://desktoppub.about.com/od/graphicformats/a/graphicformats.htm

http://creativecurio.com/2008/03/printing-large-format/

http://www.eng.nus.edu.sg/cee/EACEF2013/images/adobe-pdf-icon.jpg

http://www.maryspark.com/media/36119713215111168

http://www.myhungergames.com/wp-content/uploads/2013/09/katniss-empire.jpg

http://1.bp.blogspot.com/-yUSUVWPW-Vs/US97MUNH2uI/AAAAAAABCOo/iInT0t_fqpQ/s800/ipad+mini+piano+billboard.jpg