

Question 11 (1 mark)

How could a .wav file be optimised for use on the web?

1

A .wav file can be optimised for use on the web by compressing the file - removing redundant coding from the file & to enable faster streaming on the web.

Question 12 (2 marks)

Compare downloading and streaming video.

2

Downloading videos means that the video is stored 'permanently' on a computer after it has been downloaded (i.e. through bittorrents). Streaming videos is different as the data is stored in a video buffer and only appears on the screen once data has been recieved from the source. The data viewed through streaming videos is not permanently stored on the computer, in contrast to downloaded videos. Streamed videos tend to be of lesser quality (audio/visual) as ~~if the video is~~ the video must be smaller size to enable faster streaming. Downloaded videos ~~are able~~ retain their quality as the entire file is sent.

(i.e. ~~comp~~ the contrast between ^{streamed} Youtube videos and downloaded iTunes ^{music} videos)

Question 13 (2 marks)

What are the advantages of using cascading style sheets when developing websites? 2

Cascading style sheets have advantages for developing websites. The cascading style allows the plan to be visualised and planned, no matter how large or complex, in one file. It is a more practical way to develop a website. Furthermore it allows for great interactivity with the file - the website planner is able to adjust and change things as time goes on.

Question 14 (3 marks)

Identify TWO types of video compression and describe an advantage of each. 3

1. Video compression in .zip files that save all the data. Zip files allow files and folders to be compressed without compromising the quality of the video once it is extracted from the zip file. The advantage of this type of video compression is that it allows videos to be sent via the web (i.e. bittorrents, software programs such as Azereus, Vuze) at a faster rate than if it had not been put into a .zip file.

2. video compression by reducing the ^{physical} size of the video and the quality of the audio by lowering the pixel and sample rate within the video. While this compromises the quality of the video, it enables it to be streamed faster online. Thus is more interactive and suitable for web use.

Question 15 (3 marks)

Discuss the suitability of using vector and bitmapped images in a multimedia presentation. 3

Images and graphics enhance multimedia presentations as they bring another visual element to the presentation. Depending on the type of presentation, either vector or bitmapped images are more suitable. For example, ~~a website~~ vector images used on ~~the~~ webpage are suitable as vector images are a mathematical formula of lines and colours, thus differing screen resolutions will not affect a user's experience on the web page. Although bitmapped images can become ~~very~~ quite small files ~~it~~ thus are able to be uploaded/downloaded on the web easily, it is unlike a vector, so its quality can be affected if it is compressed. Only vectors can be both decompressed and compressed as it is lossless. Bitmapped images are lossy thus the compression of pixels can affect the quality of the image when it is decompressed.

~~For~~ We can see that vectors are useful ~~for~~ in multimedia for things such as logos - which must be able to change size depending on where the ~~label~~ logo is placed. Also, bitmapped images would be suitable for presentations such as powerpoint as it allows the file to open ^{and be used} quicker. Vectors (i.e. .png .cad) ~~vectors~~ can be saved in different shapes whereas bitmapped (i.e. .jpg .bmp) ⁷ - always save in a rectangular shape.

Question 16 (4 marks)

Describe the procedures that need to be followed by a web designer when constructing a website. 4

There are a series of procedures that must be followed by a web designer when constructing a website. There are developmental, design, technical and ethical procedures that must take place when constructing a website. The web designer must develop their ideas based on purpose, functionality and the aesthetics of the website. These are key considerations that are part of the developmental ~~process~~ and design process. During this time the web designer discusses and exchanges ideas with either the employer they are hired by or the customer they are building for. Technical staff are an important part of project as they maintain the hardware/software capabilities, make sure it is running properly. Ethical procedures are a very significant aspect as copyright, plagiarism and censorship laws must not be broken to enable the publishing of the site.