University of
St Andrews

School of Computer Science

Web Technologies

Coursework 02

by

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Reflection:

Understanding the specification was very straight forward and coming up with no error and a fully validated responsive website was the first thing that I did and honestly didn't take much time for that. But building the adaptive websites was a bit time-consuming, not that the lectures didn't help or the requirement was hard to understand, but it's just that the adaptive webpages should resemble the one built using bootstrap.

Design choice:

Considering the sustainability factor, I decided to go with a minimal design and also minimal usage if not nothing that is feature-rich that needs a lot of resources to render the webpage. The website has no background and uses simple fonts, more on it in a later section. Not only the adaptive websites but the responsive ones are also designed minimalistic.

Images and videos:

The images used in the websites were downloaded from https://www.pexels.com/ and all the images were downloaded and saved in the images folder in the project folder for each website. For videos, a YouTube video (youtube.com/watch?v=odnRRZKhNPk) is embedded in each website's article page. The reason for using downloaded images is that there are more images on a given website and trying to fetch each of the high-resolution images uses a lot of resources but in the case of video, there is just one video in each website and also downloading a video itself consumes a lot of data and then to render it the browser draws a lot of power, data along with processor time.

Error handling:

All the code submitted is free of errors and warnings. But while developing the websites I encountered nothing in responsive as all I was doing was just using bootstrap, but while writing the adaptive websites' script there were quite a few errors in HTML and just one in CSS.

On the article page, there was an hr tag inside the unordered list (ul) tag. This isn't allowed according to the web standards as the validator flagged this as an error and that's when I got to know ul tag cannot have hr as its child.

Also in the iframe, by default, YouTube gives 'frameborder' as zero but this is against the web standards so it suggested removing that attribute as it is redundant.

There was another error this time on the index page of the adaptive website where I used div elements inside the span tag. Fixed this by using a div tag instead and using a float attribute in the CSS for that respective tag.

The last one was with the font in CSS, as discussed earlier, even though simple fonts are used the main font family was set to apple's default sans font. This was flagged by the validator as this is vendor font and may not work on other vendors' devices. So made the font family a generic one.

These errors are handled now however, I thought it's worth mentioning the process and my learning alongside.

Built for:

The submitted website works best on any MacBook 13" device for the desktop version in the responsive and adaptive desktop version.

The adaptive mobile version is purposefully built for iPhone XR and Samsung Galaxy S20 Ultra when zoomed out completely.

Testing:

Testing the websites was done using the chrome developer tools and for the mobile version, the device was selected as iPhone XR and Samsung's S20 Ultra whose resolutions are 414*896 and 412*915 respectively.

Validated and de-bugged the code using W3schools https://validator.w3.org for HTML and https://jigsaw.w3.org/css-validator/ for CSS.