Reflective Website Report

My final product varies from the pitch and is not completely as technically advanced as I hoped it would turn out to be, however I managed to include the main technical features that I had anticipated to deploy. Even though I lacked time to include all the topics I needed to cover (in retrospect, I overestimated my capabilities of dealing with a huge data load), I got familiar with JavaScript, which is very similar to Java, in regards of semantics, tried a few animations and figured how to manipulate CSS using jQuery, made my website almost entirely responsive using Bootstrap (also used it to create menus and slideshows) and learned how to use a completely responsive and flexible HTML5-based library with which I implemented text-to-speech into my website. The only thing I, unfortunately, did not have time to figure out was voice control, which proved to be more complicated than the text-to-speech plugin.

The key features of my design are: the responsivity of my site, ability to listen to the material without the need to sit down peering at the screen, stop the audio, resume it, and turn it off completely, topic tests and a not yet fully implemented review board. I used Bootstrap's grid layouts to structure my site, thus when it shrinks, everything comfortably aligns reacting to the width of the screen. The only possible glitches are with quotes on high resolution pictures located in *history.html* and *htmlcss.html*, since I only found out that these are fixable using the *@media* property that allows to rearrange positions of website elements according to the change of screen size. I used this to centre another element, however, lacked time to fix the quote issue. Another thing that does not collapse as it should is Bootstrap's navigation menu, however, I have researched and found out that might be the case of a class added to the navigator's name. Therefore, the glitches are easily fixable and not the biggest issues. Responsivity is intrinsic nowadays when users tend to iterate through sites on so many different devices and, especially so, when an average person has at least 2-3 of those different devices, be it a computer, telephone or a tablet. The text-to-speech is extremely useful since the user can now listen to the material not devoting his/hers full attention, which requires sight, handwork and immobility caused by the need to sit in one place and look at the screen. This solves problems for blind people that want to access my site, people that like to drive and listen or simply busybodies that adore multitasking. Therefore, just using this one technical feature I expand my audience and make the website much more accessible and appealing for the average person. I would like to, in the future, add the ability to fasten or slow down the speaking speed, let the user pick the tone of the voice, even the accent of the speaker that is how much *ResponsiveVoiceJS* library has in store. Alongside with that, to make it fully accessible to disabled people and get maximum no-hand control I wanted to use the *annyang*! library for voice recognition (then followed by unsuccessful attempts to implement *artyom.js* and a few others), however, I encountered problems due to the browser not being able to ask the user to enable the microphone and when I tried to force it by custom code, there was an audible echo and the libraries still did not react. Moreover, I wanted to do a review board, however, as we were not advised to use PHP yet, not much could be done. I then decided to save user comments to text files and load them up using jQuery, but, apparently, that approach was only available using an actual website that was connected to a host. Therefore, I made a simple jQuery solution letting user post his/hers comments, pop them up after it's done, however, the comments disappear whenever the user leaves the website, but that can be changed once we are taught PHP and how to implement cookies and then I would actually make a registering and logging in possibility, so the website reviews would not be arbitrary, identity-less comments but certified user commentary.

I had done a bit of web development before the course, therefore the HTML/CSS bit was not new to me at all. However, I refreshed my knowledge quite a bit, instead of doing it arbitrarily like I used to, now I found out why some elements get lines inserted above and below them and others do not. I finally understood the purpose of segregation of HTML and CSS files (despite HTML having some styling features implemented). I did my best to follow the advice of including the JavaScript code from an external file as well, however, some of my pages have window scrolling events and when I exported their JavaScript code the features started to behave unexpectedly, therefore I was forced to leave some of the code just before the closing of the body tag (because otherwise it was throwing an error due to the ID I requested not having been initialised).

A yet another thing that took me a while to complete were the tests I put up using HTML forms, which I then processed using JavaScript and JQuery. I stripped off all the white text and the in-between word occurring accidental spaces, converted the user answer to all lowercase to get the maximum accuracy and on submit I would return a function that had an array of values that were all the answers on the test. The function was comparing that stripped off text with the actual value that was to be answered to that question. It then generated the result and *jQuery* would use a fade in effect for a *<div>* that displayed the rounded said result. In the future, I was thinking of changing the colours of the <div> (since it is now green by default) depending on how well the user did on the test and what progress he was making. Add all attempts to a table and the user would see his/her improvement by colours: green, yellow, red, that, respectively, meant results: 70-100%, 40-70% and 0-40%. Alongside that, the user could choose (after the submit button was clicked) if he/she wanted all of the unfilled answers shown and the bad ones fixed or he would like to try again.