Test and evaluation

**Web & User Interface Design Assignment**

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## Google PageSpeed Insights (<https://developers.google.com/speed/pagespeed/insights/>)

## 1 (a) i.

It received a rating of 33/100 for Speed and 96/100 for User Experience in the mobile section of this site and received a 37/100 Suggestions Summary rating in the desktop section.

In the mobile section, for Speed it was recommended that I optimize images, eliminate render-blocking JS and CSS in above-the-fold content and if I wanted to I should leverage browser caching and minify the CSS file even more (which I won’t do now as it will make the CSS file harder to examine).

In the mobile section, for User Experience it was recommended that I not use plugins. I used a flash plugin for a music player only because the website host that I was using would not allow me to link up to audio stored on the server using HTML5 so I’ll leave that as it is for the time being.

In the desktop side of Google PageSpeed, it had the the same recommendations: optimize images, leverage browser caching, eliminate render-blocking JS and CSS in above-the-fold content and minify the CSS file.]

## ii.

The obvious thing about the website is that the images are too big data-wise so I’ll optimize those which will result in potentially an 89% reduction according to PageSpeed. Using a website called TinyPng, I got 50% in data size for my images. It did however leave some areas of blank space around my images which I don’t think looks great so I may not use them in the long-run.

## iii.

The altered webpage now has a speed of 80/100 which is great speed wise but I think it sacrifices a lot of the look of the website so I may look for other options to optimize images in the future.

## b.

For responsiveness, I checked out a few websites before settling for one called Responsinator (<http://www.responsinator.com/>) which apart from having a great name, allows its users to check all different screen sizes on the one page but allows the user to check them out one at a time by stacking the different screen sizes vertically so the user can drag the side bar down to whatever screen size they want to scrutinize at any given moment.

Almost all screen sizes are responsive. They go from two rows of three polaroids/tiles on larger devices to a single column of polaroids/tiles on smaller devices. Unfortunately the website is not 100% responsive on an iPad portrait (width 768px) and on an iPad landscape (width 1024px). The polaroids/tiles encroach on the very thick website border on these two screens. The metaphor I was going for was somewhat of a photo album/frame one and I would not like to get rid of that for a tiny minority of devices. Possibly, I could reduce the border size, but I think the polaroids/tiles would still overlap. In any futures websites I may design, I will definitely think twice about using a border.

## c.

To evaluate my website, I considered quite a few options (survey, peer-review, self-review) before settling on a website called Nibbler (<http://nibbler.silktide.com/>). I was a bit sceptical about using a website before I s aw the huge ranges of functions it offered and how in depth they went. I will now go through each point of review. It also takes utilizes W3C validation which I have neglected to do and must go back fix after this evaluation.

Overall, Nibbler gave my website a score of 4.7(/10). If this was an exam, I would have barely scraped a pass. The accessibility rating (how accessible the website is for mobile and disabled users) was 5.6. The experience rating (how satisfying it is likely to be) was 5.5. The marketing rating (how well marketed and popular the website is) was 1.3. This is a website where I am marketing myself so that needs to be fixed. And the technology rating (how well designed and built the website is) was 5.7.

Now I will give the breakdown of each of above headings i.e. accessibility, experience, marketing and technology.

### Accessibility 5.6

- Headings 0.0

- Code Quality 1.9

- Mobile 5.8

- URL format 6.0

- Page Titles 8.0

- Internal Links 9.2

### Experience 5.5

-Facebook page 0.0

-Google+ page 0.0

-Twitter 0.0

-Popularity 0.0

-Printability 4.0

-Amount of content 4.4

-Mobile 5.8

-URL format 6.0

-Internal Links 9.2

-Server Behaviour 9.5

-Images 10

-Freshness 10

### Marketing 1.3

-Facebook page 0.0

-Google+ page 0.0

-Twitter 0.0

-Analytics 0.0

-Headings 0.0

-Social interest 0.0

-Incoming Links 0.0

-Popularity 0.0

-Amount of content 4.4

-Meta tags 5.2

-Page titles 8.0

-Internal Links 9.2

-Domain age 10

-Freshness 10

### Technology 5.7

-Headings 0.0

-Code Quality 1.9

-Printability 4.0

-Meta tags 5.2

-Mobile 5.8

-URL format 6.0

-Internal links 9.2

-Server behaviour 9.5

-Images 10

-Domain age 10

There are a lot of zeroes in that breakdown which I’m sure can be easily rectified. I will implement as many changes as possible and I have a backup of my website so if I royally mess it up, I can rely on that to submit for the assignment.

The top priorities for website improvement Nibbler recommends are:

* Resolve the validation errors to make the website W3C compliant.
* Use social media buttons to access a wider audience.
* Consider a leading website analytics solution, such as WebTrends or Google Analytics.

## Now let’s see how we’ll fix that!

### Facebook page

My website is not linked to any Facebook page. It is now! DONE!

### Google+ page

My website is not linked to any Google+ page. Can’t find a URL link for my Google+ but since no one uses Google+ that’s ok. NOT DONE!

### Twitter page

My website is not linked to any Twitter page. It is now! DONE!

### Analytics

I’m not using any analytics software because they cost money and won’t be using one for the foreseeable future. NOT DONE!

### Headings

60% of my website’s pages do not have headings according to Nibbler. They are obviously not taking into account the headings embedded in the pictures of the website so I think I’ve done all that can be done in this regard. DONE!

### Social Interest

Nibbler did not find any Tweets, Facebook likes or Google +1s for the pages tested. They might want to check again because I just tweeted the address of my website there. DONE!

### Incoming Links

No pages were found linking to my page which is not a surprise as it is only new. Something to consider for the future but not for now. NOT DONE!

### Popularity

Nibbler said that I should not be surprised by extremely low popularity (of my website) because it is only new. Improving it will only take time and maybe implementing a few of their recommendations from above. NOT DONE!

### Code Quality

This is where the W3C validation service comes in. It found a total of 46 errors and 50 warnings! The HTML checker found 4 errors and 1 warning. I got that down to 2 errors! DONE!

The CSS errors are from borrowed code which I shall not be touching as I don’t want to disrupt my website beyond repair. NOT DONE!

### Printability

According to Nibbler only 40% are optimized for printing. What Nibbler does not know is that they are taking into account of website that are not used that I have to put up with to avail of free web hosting. The 40% that are optimized for printing are all the pages that I have for this assignment. DONE!

### Amount of Content

A page on my site averages 99 words (so close!) and it recommends that I increase the amount of content. I disagree. I thought it would be better to keep it short and sweet but Nibbler reckons that the amount of content correlates with its search engine ranking so I should take that into account in the future. NOT DONE!

### Meta tags

Nibbler thinks that only 40% of pages have descriptive meta tags but like Printability that 40% makes up my whole website so really all of my pages have meta tags. DONE!

### Mobile

This is linked with my CSS problems which I am not willing to touch at this time. NOT DONE!

### URL format

3 URLs are not ideal. 1 is unavoidable due to free web hosting and the other two are also due to free web hosting but for different reasons. NOT DONE!

### Page title

My home page title is “Gavin McCoy Curriculum Vitae Home Page”. Page is unnecessary, Nibbler says and so it has to go. DONE!

### Internal Links

This is one of the best scores but the one slip up was where I left a link with text describing its destination. This has since been removed. DONE!

### Server Behaviour

This is another high score. Unfortunately this is related to free web hosting and cannot be resolved at this time. NOT DONE!

### Images, Domain Age and Freshness

These categories got 10/10. DONE! DONE! DONE!

## d. Outcome of Test and Evaluation

1. At first analysis, my website did quite poor: 33/100 for Speed, Responsiveness was good but not perfect, somewhat of a shambles on certain iPad sizes and Nibbler which gave my website an in-depth review, gave it an overall score of 4.7/10.

By optimizing the images alone, I was able to get the Speed up to 80/100. After making numerous changes based on Nibbler’s recommendations, I couldn’t improve on the score of 4.7 for reasons unknown, but possibly for Nibbler keeping a cached version of my site.

2. Mobility-wise, the site is fantastic. With big images, big writing, it actually seems more suited to mobile devices that a lot of websites out there. Quite responsive too. The music player at the bottom of the Home page and the More page don’t work for various reasons (HTML5 Audio doesn’t work with free web hosting and flash players don’t seem to work on Chrome mobile) but I will be getting rid of all music from site after the site has been marked because music on a website is generally regarded as being quite annoying. The CSS3 animations and the JS on the More page work great on mobile devices too.

3. Going forward, I will have to adequately optimize the images on the website. After using various web applications that don’t seem to work, I think I will invest in a program like Adobe Photoshop which I’m sure has excellent codecs for compressing images to an adequate degree.

I will have to link up all the social media account that I have with the websites like Twitter and LinkedIn.

I will be removing all the audio from the website. Definitely from the main page anyway. I might leave the audio on the More page because I think it really suits the fade in.

In the future I may try and design the website through a program like Dreamweaver for the general design and use the HTML/CSS/JS skills I have learned to fine tune it.

## Use of JavaScript

The first implementation of my website did not require any JS so I stuck the two examples of it in the More page through the use of two buttons. One button being clicked resulted in a simple popup saying something like how are you? The other button, which should only be clicked in Firefox/Chrome (as they offer options to ignore it) will probably result in the browser having to be terminated if used in Internet Explorer. The use of this button will be great for any future monetization that I want to implement much to the dismay of the user but could result in a nice little profit for the designer.

## Use of images

This was an image-centric website. The metaphor was a photo album/frame. Bootstrap nicely took care of any responsiveness with a nice “thumbnail” class. Optimizing the images left a horrible space around them, making them considerably less responsiveness so I didn’t include that in the final submission.