

Sean Andrew

AND14816366

HND Applied Computing

Internet Technology and Security

01/01/2019

Table of Contents:

Introduction 1.1	2
Requirements 2.1.....	3
Implementation 3.1	4
Validation 3.2	8
Evaluation 4.1	11
<i>Accessibility-</i>	11
<i>Search Engine Optimisation-</i>	12
References 5	14
Bibliography 6	15

Introduction 1.1

In this report I am going to write about any research that I conducted and include any development documentation that I made throughout the development of my website. I will also use validators to check to see if any of my code for the website has any errors and fix them appropriately as well as check the accessibility of my website. I will also reference any website/ books which I used as guides or information while creating this website.

Requirements 2.1

This website is about a tactical FPS game called Tom Clancy's Rainbow Six Siege. This website's purpose is to inform users about the different aspects of the game and what they do, this ranges from the different operators, different maps, different abilities etc.

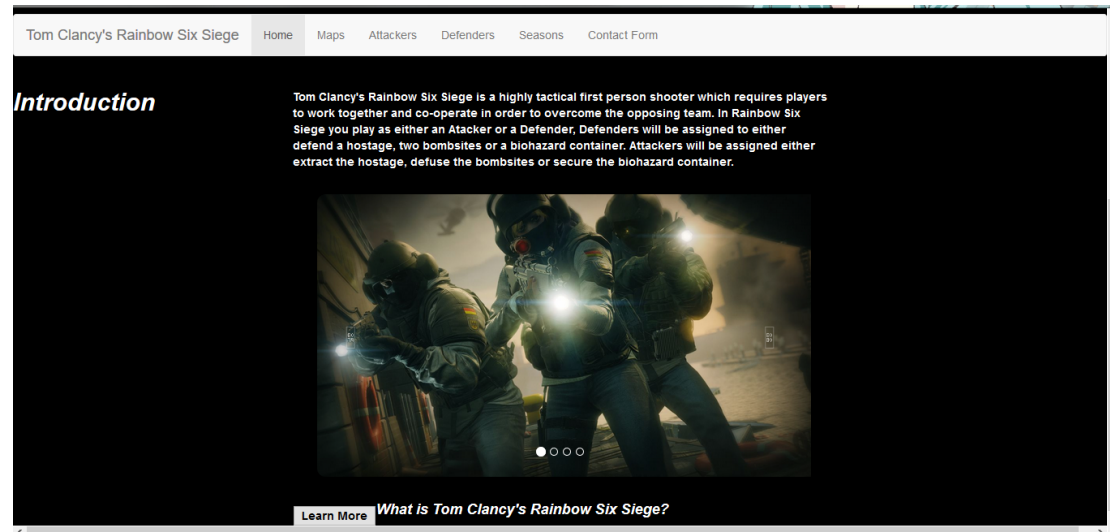
This website also informs the user about the different 'Seasons' that Rainbow Six Siege has in which a new map is introduced along with new operators.

The target audience is gamers and people who are new and/or existing players in the Rainbow Six Siege community. These people might be the ones who will be the most interested in this website as it contains information which can help new players to understand what the new operators do. This website will be relevant to gamers or people who play the game Rainbow Six Siege as it will inform them about the maps and what to expect from each operator in game, and how to counter them efficiently.

This website will include pictures of all the maps and operators as well as game play videos of the operators in action. This will allow the users to see what it will look like in game to use and be against the operators.

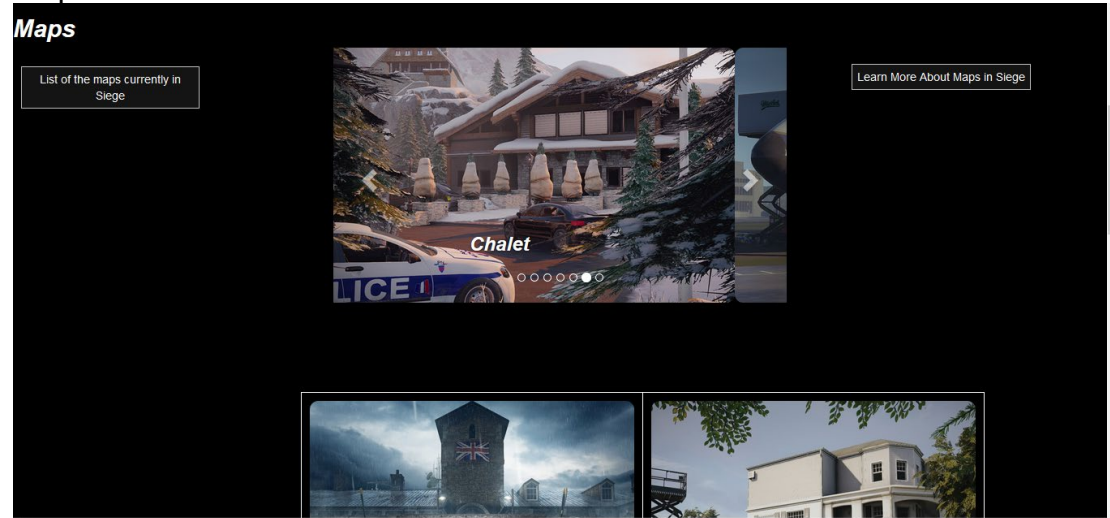
Implementation 3.1

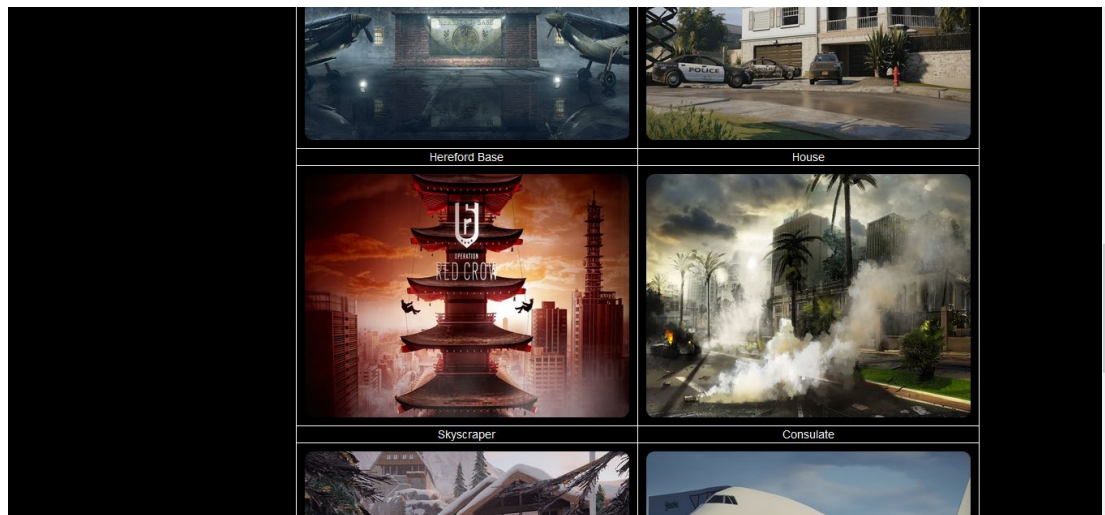
Index.html



This webpage gives the users some information about Tom Clancy's Rainbow Six Siege as well as giving a few screenshots and a video of how the game looks and plays.

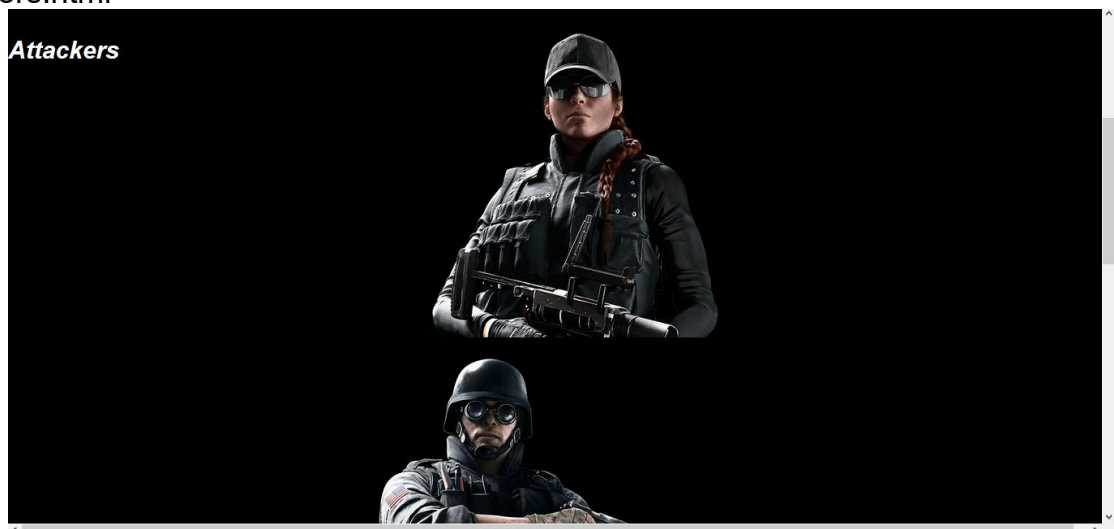
maps.html





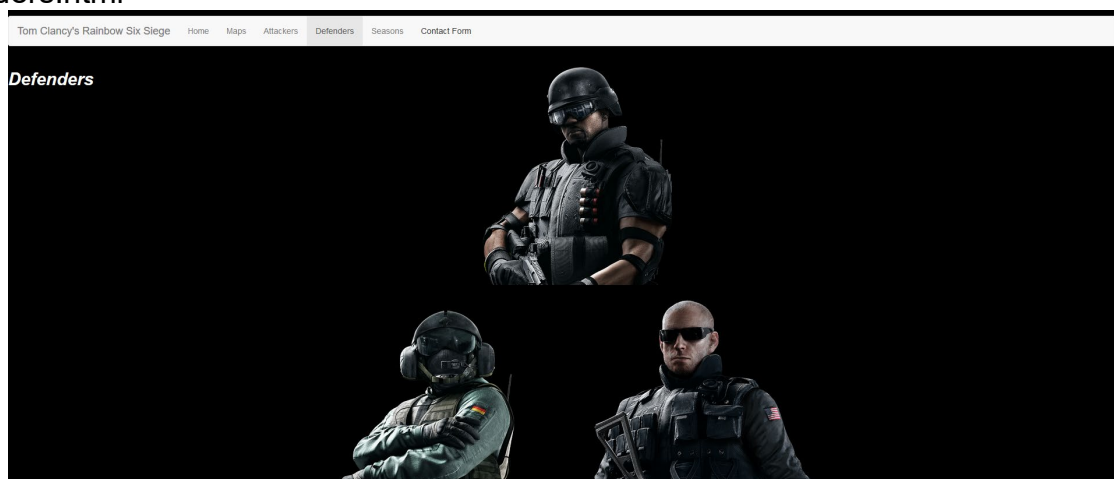
This webpage informs the users about most of the maps that are in Rainbow Six Siege as well as what game modes are in the game too.

attackers.html



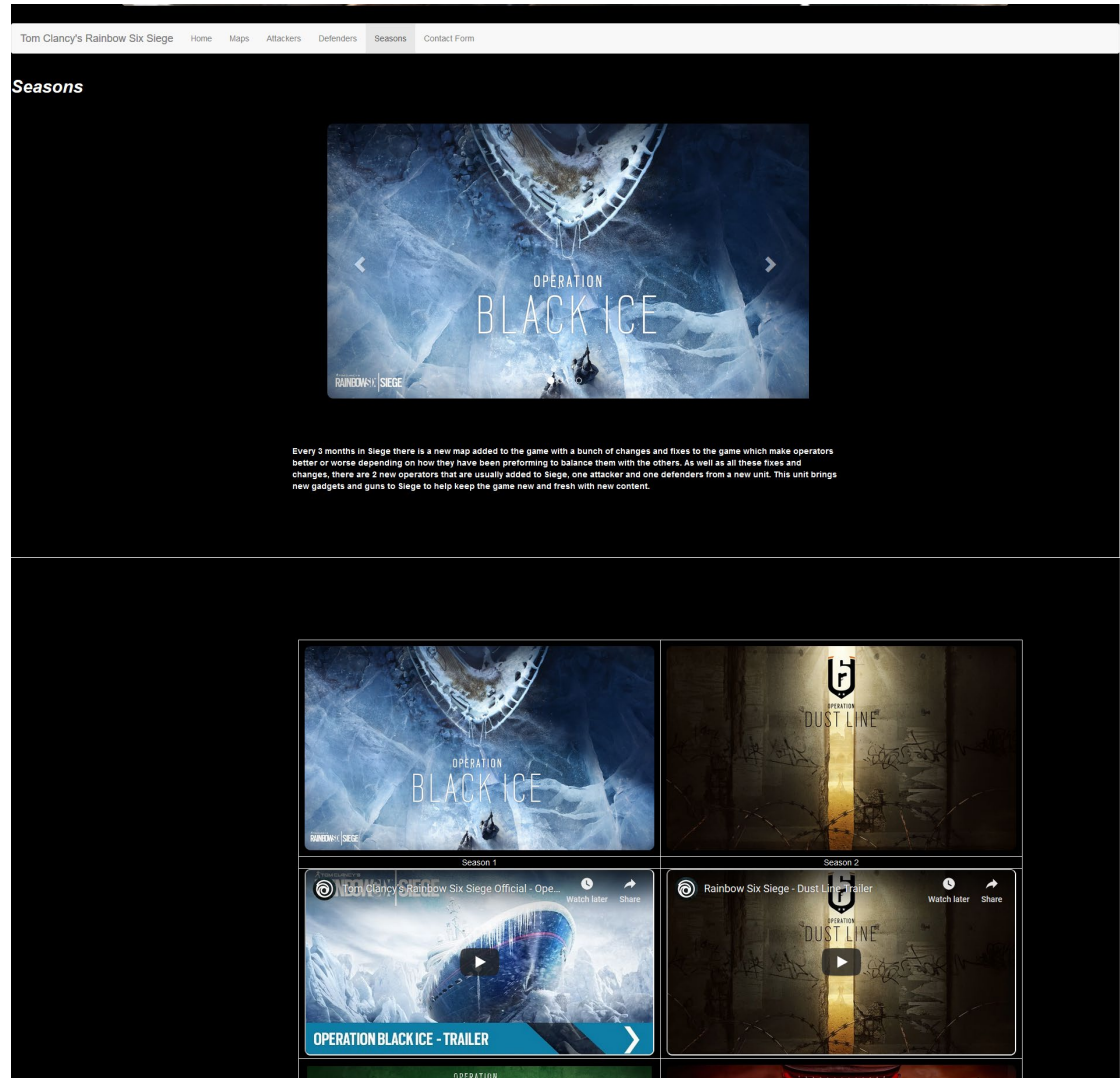
On this webpage this displays the playable attacking operators in the game with their stats and a description of what they can do, this helps to inform the user of what to expect if they play them or come up against them.

defenders.html



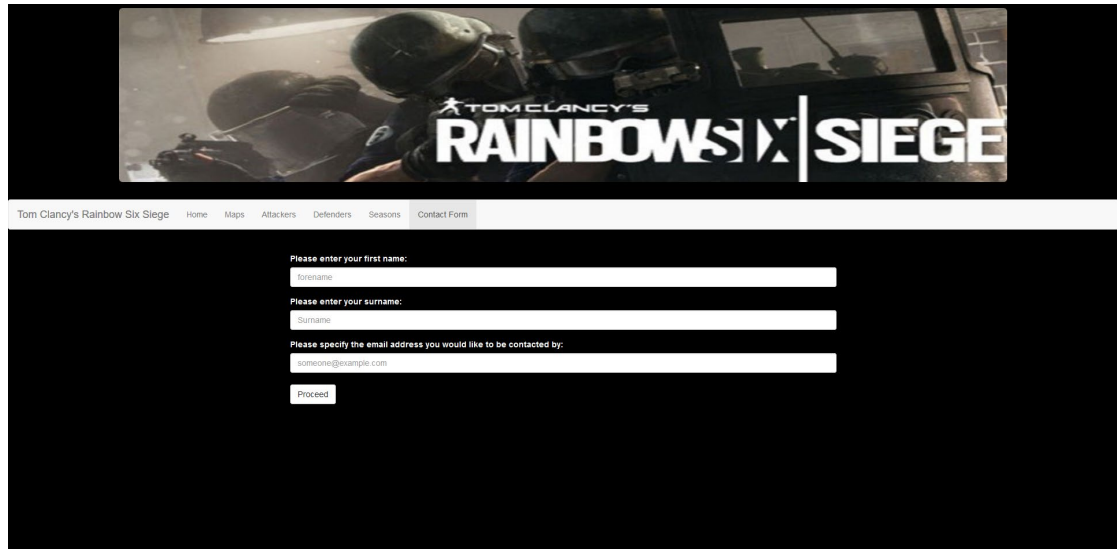
On this webpage this displays the playable defending operators in the game with their stats and a description of what they can do, this helps to inform the user of what to expect if they play them or come up against them.

seasons.html



On this webpage this displays the seasons that have been in Rainbow Six Siege, with each season they add new content which will also be shown on this page to show what was added to the game and when.

contact.html



The screenshot shows the 'contact.html' page for Tom Clancy's Rainbow Six Siege. At the top is a banner image featuring the game's title 'TOM CLANCY'S RAINBOW SIX SIEGE' over a tactical scene. Below the banner is a navigation menu with links: 'Tom Clancy's Rainbow Six Siege', 'Home', 'Maps', 'Attackers', 'Defenders', 'Seasons', and 'Contact Form'. The 'Contact Form' is the active page, containing three input fields: 'Please enter your first name:' (with placeholder 'firstname'), 'Please enter your surname:' (with placeholder 'surname'), and 'Please specify the email address you would like to be contacted by:' (with placeholder 'someone@example.com'). A 'Proceed' button is located at the bottom of the form.

On this page the user can enter their details onto the contact form so we can get into contact with them and update them on any new content that is released for the game.

Validation 3.2

HTML Validation:

To validate my website, I will be uploading the html file for my homepage into a validator online and screenshotting the results I get from it, along with any fixes I do to correct the errors if possible.

- Error** Element `head` is missing a required instance of child element `title`.

From line 2, column 17; to line 4, column 8

```
lang="en"></header><tit
```

Content model for element `head`:

If the document is an [iframe xdoc document](#) or if title information is available from a higher-level protocol: Zero or more elements of [metadata content](#), of which no more than one is a [title](#) element and no more than one is a [base](#) element.

Otherwise: One or more elements of [metadata content](#), of which exactly one is a [title](#) element and no more than one is a [base](#) element.
- Error** Element `title` not allowed as child of element `header` in this context. (Suppressing further errors from this subtree.)

From line 5, column 2; to line 5, column 8

```
<header><title></title></header>
```

Contexts in which element `title` may be used:

In a `head` element containing no other `title` elements.

Content model for element `header`:

[Flow content](#), but with no `header` or `footer` element descendants.
- Error** Attribute `charset` not allowed on element `meta` at this point.

From line 6, column 2; to line 6, column 23

```
</title><meta charset="utf-8"></meta></html>
```

Attributes for element `meta`:

[Global attributes](#)

[name](#) — Metadata name

[http-equiv](#) — Pragma directive

[content](#) — Value of the element

[charset](#) — Character encoding declaration
- Error** Element `meta` is missing one or more of the following attributes: `content`, `itemprop`, `property`.

From line 6, column 2; to line 6, column 23

```
</title><meta charset="utf-8"></meta></html>
```

Attributes for element `meta`:

[Global attributes](#)

[name](#) — Metadata name

[http-equiv](#) — Pragma directive

[content](#) — Value of the element

[charset](#) — Character encoding declaration
- Error** Attribute `name` not allowed on element `meta` at this point.

From line 8, column 2; to line 8, column 69

```
utf-8"><meta name="viewport" content="width=device-width, initial-scale=1"></meta></html>
```

Attributes for element `meta`:

[Global attributes](#)

[name](#) — Metadata name

[http-equiv](#) — Pragma directive

[content](#) — Value of the element

[charset](#) — Character encoding declaration
- Error** Element `meta` is missing one or more of the following attributes: `itemprop`, `property`.

From line 8, column 2; to line 8, column 69

```
utf-8"><meta name="viewport" content="width=device-width, initial-scale=1"></meta></html>
```

Attributes for element `meta`:

[Global attributes](#)

[name](#) — Metadata name

[http-equiv](#) — Pragma directive

[content](#) — Value of the element

[charset](#) — Character encoding declaration

7. **Error** Start tag `<body>` seen but an element of the same type was already open.
From line 30, column 1, to line 30, column 6
`</header><body><center>`

8. **Error** The `<center>` element is obsolete. [Use CSS instead.](#)
From line 31, column 2, to line 31, column 9
`<center><img>`

9. **Error** Bad value `80%` for attribute `width` on element `<img>`: Expected a digit but saw `%` instead.
From line 32, column 2, to line 32, column 177
``

10. **Error** End tag `<p>` seen, but there were open elements.
From line 61, column 102, to line 61, column 105
`<container></p>`

11. **Error** Unclosed element `<b>`.
From line 58, column 5, to line 58, column 7
`<br><p><b>Tom Cl`

12. **Error** Element `<div>` not allowed as child of element `<p>` in this context. (Suppressing further errors from this subtree.)
From line 63, column 2, to line 63, column 115
`<p><div id="myCarousel" class="carousel slide" height="1000" width="1000" style="margin: 20px;" data-ride="carousel">`
Contexts in which element `<div>` may be used:
Where [flow content](#) is expected.
As a child of a [div](#) element.
Content model for element `<div>`:
[Phrasing content](#).

13. **Error** Element `<h4>` not allowed as child of element `<p>` in this context. (Suppressing further errors from this subtree.)
From line 105, column 2, to line 105, column 26
`</button><h4 style="margin: 5px;"> What`
Content model for element `<p>`:
[Phrasing content](#).

14. **Error** End tag `<div>` seen, but there were open elements.
From line 109, column 2, to line 109, column 7
`<frame></div><div>`

15. **Error** Element `<div>` not allowed as child of element `<p>` in this context. (Suppressing further errors from this subtree.)
From line 110, column 2, to line 110, column 23
`</div><div class="col-md-3"></div>`
Contexts in which element `<div>` may be used:
Where [flow content](#) is expected.
As a child of a [div](#) element.
Content model for element `<div>`:
[Phrasing content](#).

16. **Error** End tag `<div>` seen, but there were open elements.
From line 111, column 1, to line 111, column 6
`3"></div></div></body>`

17. **Error** End tag for `<body>` seen, but there were unclosed elements.
From line 112, column 1, to line 112, column 7
`<div></div></body></html>`

1. For the first problem it couldn't find the tag "head" in my html file, "head" is the same as "header" which was being used in my html file so I renamed the "header" tag to "head" which fixed this problem along with 6 others listed.
2. For problem 8 the tag `<center>` is obsolete and isn't an efficient tag to use in html5 so it was recommended to be replaced with something else.

I fixed this by creating an ID in my CSS file called “banner” and which gave my image margins on its left and right which helped center it on the screen rather than using <center>

3. For problem 9 it was expecting a value in pixels for the width instead of a percentage which was inefficient for the webpage. I simply changed the Width value from 80% to “1500” which resolved the issue.
4. For problem 10 since the text was already bold from the css file the tag wasn’t needed. I simply removed a unneeded tag from a paragraph tag which resolved this and another 4 problems.
5. For the last 2 problems the height and width tags are not needed as the carosell resizes itself for the image. I simply removed the Height and Width tags from my Carosell div tag which solved the issue.

CSS Validation:

Next to validate the CSS I will be uploading the CSS file for my website to W3C’s Validator to check it for any errors or uneficiencies.

 The W3C CSS Validation Service
W3C CSS Validator results for style.css (CSS level 3 + SVG)

[Jump to:](#) [Warnings \(2\)](#) [Validated CSS](#)

W3C CSS Validator results for style.css (CSS level 3 + SVG)

Congratulations! No Error Found.

This document validates as [CSS level 3 + SVG](#) !

To show your readers that you've taken the care to create an interoperable Web page, you may display this icon on any page that validates. Here is the XHTML you could use to add this icon to your Web page:



```
<p>
<a href="http://jigsaw.w3.org/css-validator/check/referer">
  
</a>
</p>
```



```
<p>
<a href="http://jigsaw.w3.org/css-validator/check/referer">
  
</a>
</p>
```

(close the img tag with > instead of /> if using HTML <= 4.01)



Interested in "developing" your developer skills? In W3C's hands-on Professional Certificate Program, learn how to code the right way by creating Web sites and apps that use the latest Web standards.
[Find out more!](#)

[Donate](#) and help us build better tools for a better web.

If you like, you can download a copy of this image to keep in your local web directory, and change the XHTML fragment above to reference your local image rather than the one on this server.

If you would like to create a link to this page (i.e., this validation result) to make it easier to re-validate this page in the future or to allow others to validate your page, the URI is:

There were no errors found in my CSS file so there was no changed that need to be made to it.

Evaluation 4.1

Accessibility-

Overall the accessibility of my website is good with reference to WCGA 2.1 with regards to the four principles. The first being Text Alternatives, all of the parts of my website are able to be seen and still understood without any images. So even if people with slow internet access were to try and access my website then they will still be able to use it efficiently. I have also made sure the font used on my website is bold and uses non-serif as this will make it easier for people who have difficulties reading text easier for them.

With these text alternatives, even if the webpage was to fail loading all the images/videos the user will still be informed of what the image/video was with a brief description. Also, throughout the website for any non-simple language used I have also made sure that on the first time it was used there is a parenthesis next to it with the simple language inside of it, for example ADS (Active Defence System).

The second principle for accessibility is time-based media, this covers any video or audio I have on my website. For the videos that are on my web pages there are text alternatives that people can read if they are unable to watch the videos for various reasons. The audio on my website is only the ones from the videos so it will be covered with the text alternatives on the web pages.

The videos on the websites are tutorials for the operators in game which contain a narrator speaking over the video which can help explain to people who might have trouble viewing the video. Also, what is said in the video is available in text form with more in-depth descriptions and explanations.

The third principle for accessibility is Adaptable which means that the content of the website is able to be accessed and used in different ways like a software reader a user might have will have to be able to read it out to them. This is done in my website as all the text on the web pages are in the correct tags so they will be recognised as text.

The fourth principle for accessibility is Distinguishable which means that it is easy to see the different parts of the page and the information. To follow this, I have made the colour on the website contrast with the text so people with difficulties reading screens should find it easier to read what is displayed on the screen.

I have also not used any information popups on the website as this might cause some confusion if someone was moving their mouse fast around the page and it suddenly pops up with some more information randomly.

Search Engine Optimisation-

For my website I have done multiple things to make sure that my webpages are optimised for the search engines that people use, some of the things that I have done are:

Making the pages on my website for the users and not the search engine, this is useful as Google checks to filter out any webpages that use 'Cloaking' against users. Cloaking is when webpages display different content to the search engine from which is displayed to the user.

Another thing I have done is made sure that all the pages on my web site can all be accessed from at least on link on every page. This allows the users to freely navigate around the pages easily and freely.

Another thing that Google likes is an information rich site with a good <title> tag which is relevant to what is on the webpages. This also goes for all the ALT attributes on the page and them being relevant to the webpages.

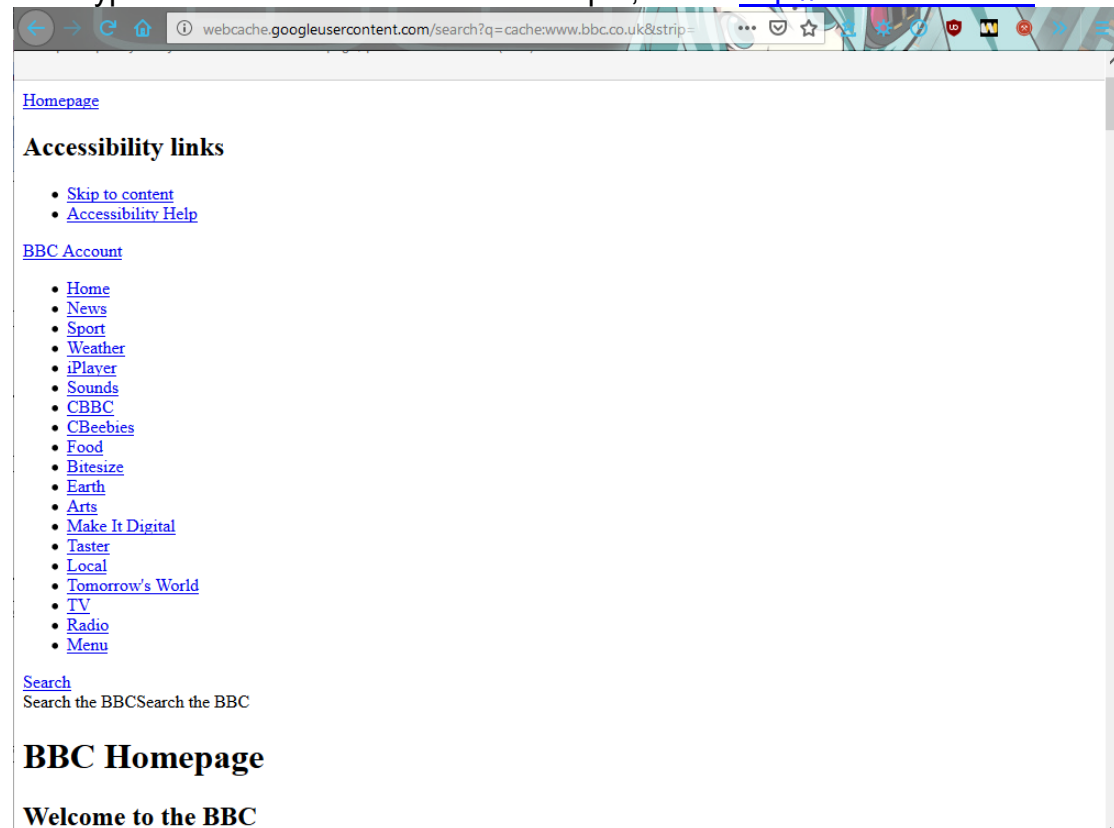
Another thing that almost all search engines like is using key words throughout the webpages as this will show that all the information on the pages are relevant to what the user is looking for.

One thing that Bing looks for in webpages is that the pages contain matching keywords and are kept up to date with relevant terms related to the subject of the pages.

Search Engine Optimisation matters because this is what makes the website showup first on search engines, people when they look for websites hardly ever go past the second page of results when looking for websites, so it is really important for your webpages to be one of the first few to come up.

The way search engines work is they look in a database which will have all the information about your website which has been collected by crawlers online. Crawlers (Spider Bots, Indexing) are bots which always monitor the web and collect information on all websites that are created and updated to make it easier for search engines to locate the sites they need with relevant terms etc...

How search engines see our websites is not how we see them, Crawlers only see a stripped-down version of your webpages which only contains the text and hyperlinks on the website. For example, this is <http://www.bbc.co.uk>:



This website shows what the Crawlers will see of your website if they were to look at it so any pictures you put on there do not help with relevance as they can't see that.

References 5

HTML and CSS Eighth Edition: by Elizabeth Castro, Bruce Hyslop (Book)
Used to get a better understanding of JavaScript and get some more tips on how to use it more efficiently.

Bibliography 6

<https://rainbow6.ubisoft.com/siege/en-gb/home/index.aspx> Information source about the game.

<http://validator.w3.org/> Website HTML Validator.

<http://jigsaw.w3.org/css-validator/> Website CSS Validator.

<https://www.w3schools.com/> Information and Tutorials for help with HTML, CSS, Java Script and JQuery.

<https://cachedviews.com/> This is the website used to show what the webpages looked like from Crawlers.

<https://www.bbc.co.uk/> This is the website I used as an example for the Crawler view.