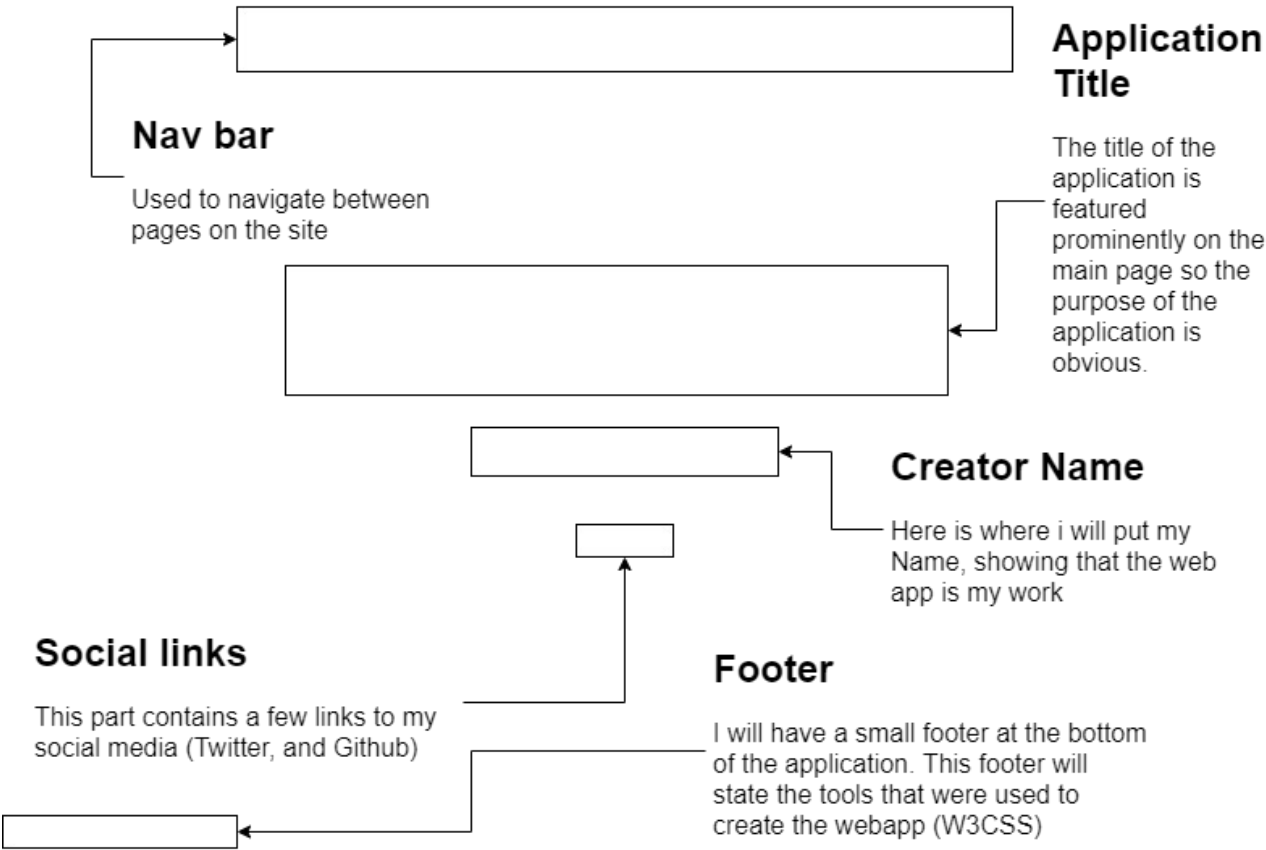


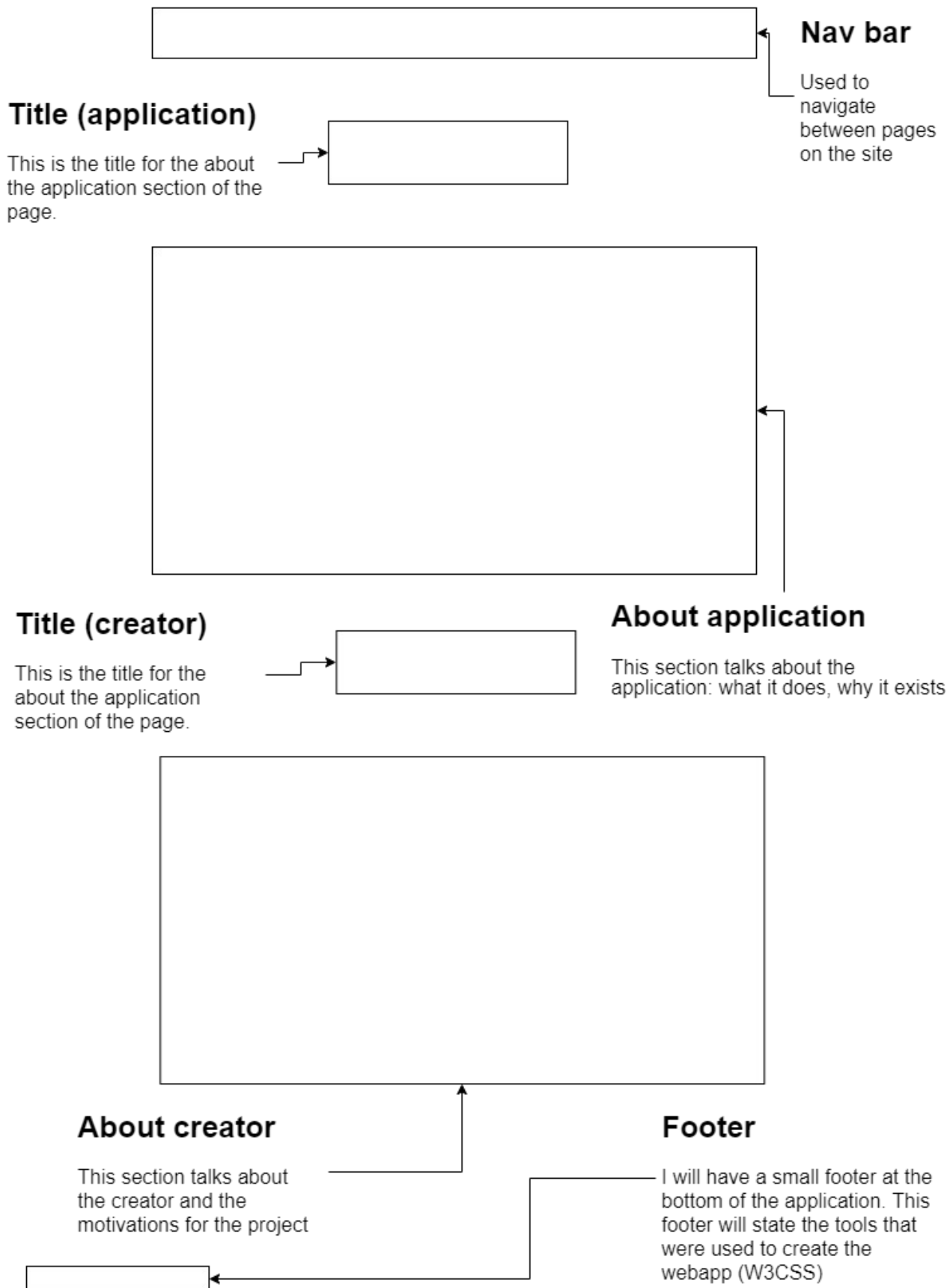
Web Design document
Jasper Cox – SOFT166
WEB DEV

Wire-frames

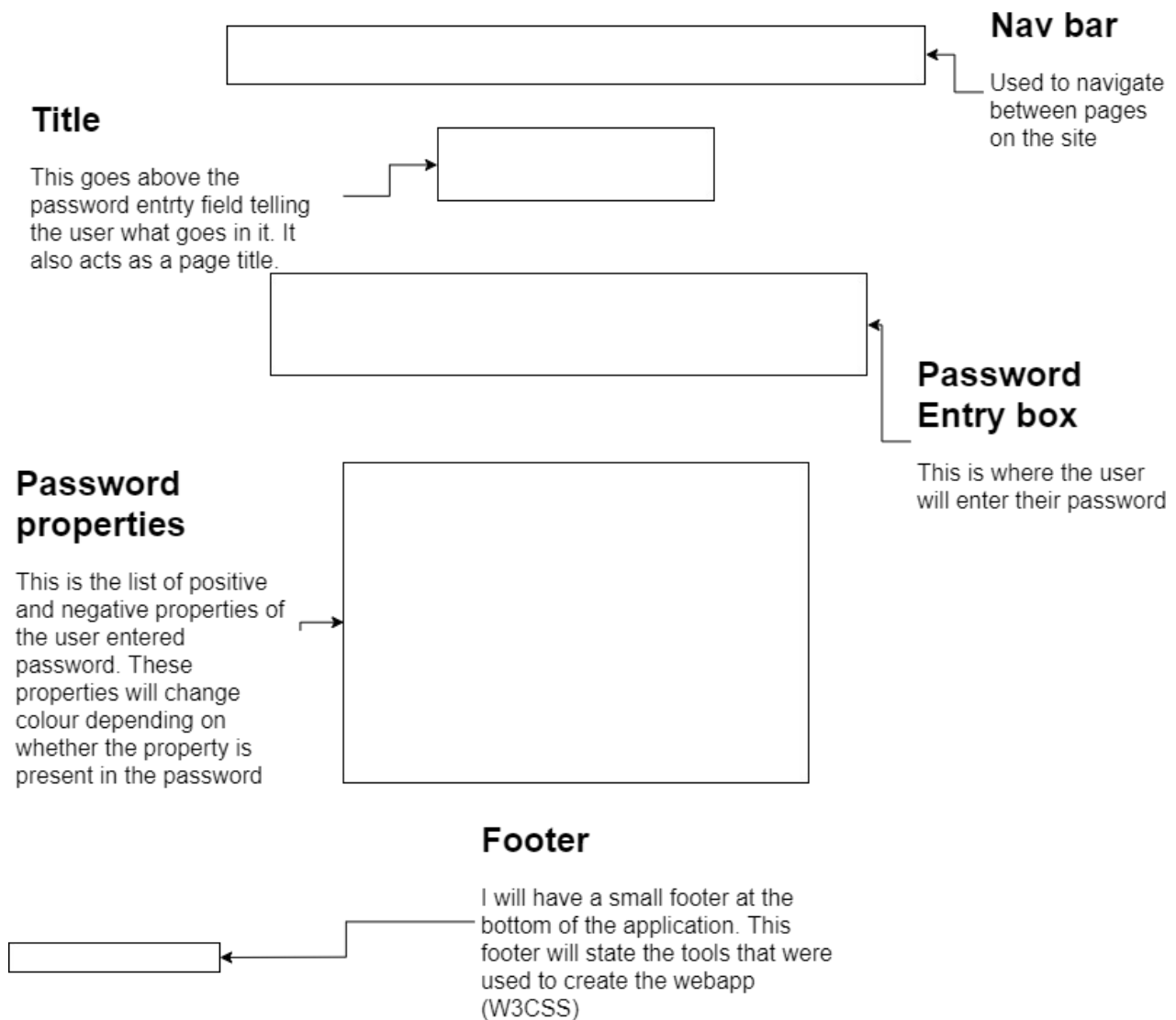
Home Page



About Page



Application Page



Key Page

Nav bar

Used to navigate between pages on the site

Title

This is the page title. It will tell the user that they are on the Key Page

Page Description

This tells the user what the key corresponds, and explains the diagrams

This section is repeated 7 times

One for each light plus one for all properties set to negative.

Diagram

This is the diagram that represents the lights in SMB109. like the lights the diagram will show two columns of three lights

Key Description

This section describes what the course and affect is that leads to the situation displayed in the diagram

Footer

I will have a small footer at the bottom of the application. This footer will state the tools that were used to create the webapp (W3CSS)

Wireframe feedback:

The main feedback I got for my wireframes was that on the Application page there is no way to clear the password. This is not much of a problem on desktop as it is easy to “ctrl-A, backspace”, but on mobile clearing a password is difficult. To counteract this issue I have added a clear screen button to the design. (figure 1) .

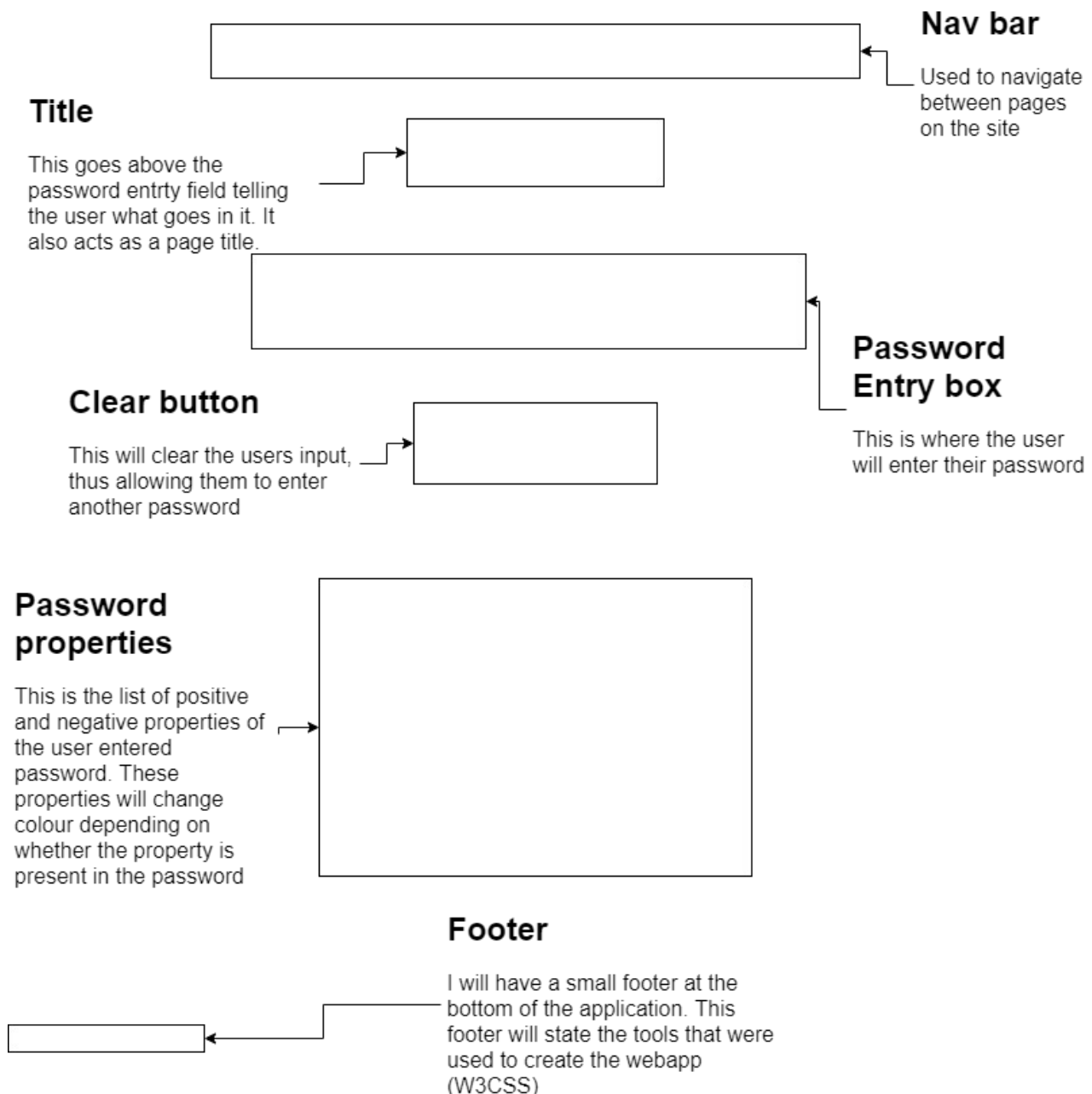


Figure 1

Site feedback

Poor use of space on the key page

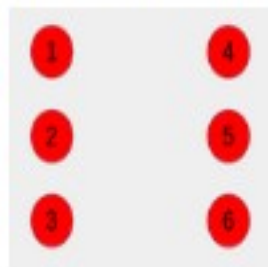
It was pointed out to me that the key page made very poor use of space, as there is a single column of both diagram and image (Figure 2). I agree with that point and have decided to follow the person in questions suggestion by separating the column into a grid. This grid would have to be able to adapt to smaller screens (become a single column again)

I achieved this using the “w3-third” class which allowed me to position three divisions next to each other when there was space, and automatically place them one on top of the other, when there was not. This is shown in figure 3.

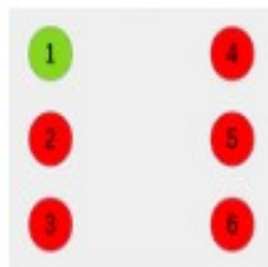
People kept clicking the home page title

While asking for feedback on my application I noticed that most of the people I asked tried to click the title on the home page of the application, when I asked them about this they assumed it was a button but did not think it was much of a problem. I decided to make it a button anyway because that would make navigating the site far more intuitive for the user. It also makes accessing the main purpose of the web-app, the password strength tester itself) far easier for the user, especially on small touch screen devices such as a mobile phone.

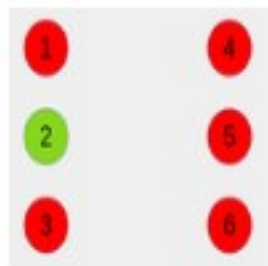
When there are no secure password features present in the password all lights will show red.



When the password length is over 8 characters, light 1 will be illuminated in green.



When the password length is over 16 characters, light 2 will be illuminated in green.



When the password is multicas (contains both letters and numbers) light number 3 will illuminate in green.

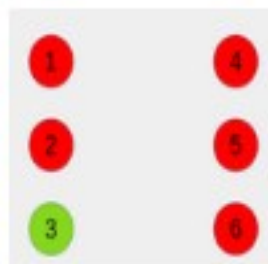


Figure 2

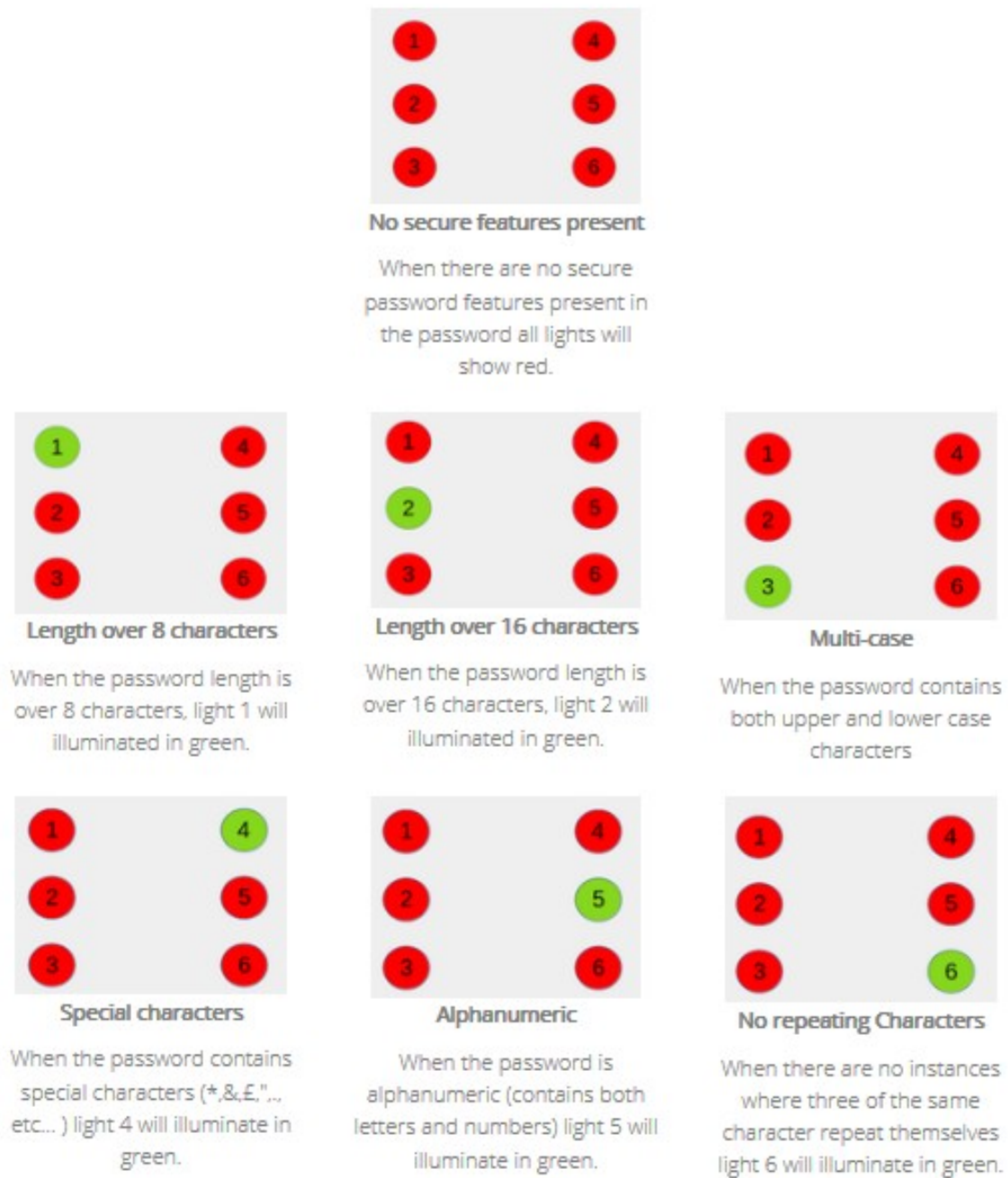
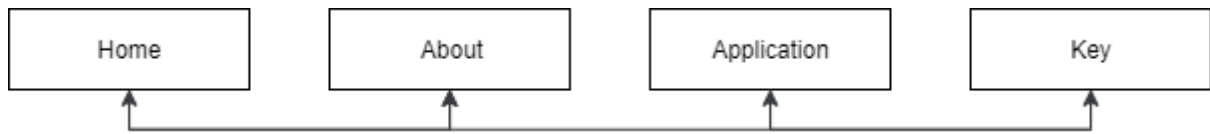


Figure 3

Sitemap

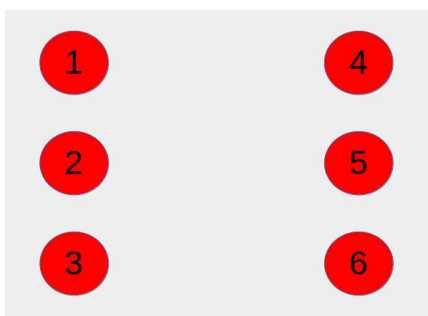


I have chosen to use a navigation bar as the sole method of navigating the website. This navigation bar is available on all pages which means that each page is capable of directing the user to any other page. I have done this as it makes navigating the site quicker and less frustrating for the user. An alternative method I could have used is to only have a navigation bar on the home page, and have every page have a back button. I did not choose that design as I found it annoying having to go to the home page every time I had to go to another page. Having a single navigation bar across all four pages allowed me to maintain the three click rule.

Image documentation

Images used in key:

I have used seven total images on my site. All of these images are in the Key page. The images are used as a visual representation of which lights (in SMB109) will be lit in which colour. All of the images used in this web-app were created by me using LibreOffice draw.



This image is used to show that when there are none of the six password features present in the password that the user entered into the site; all the lights are set to red.



This image is used to show that when the user's password is over 8 characters in length the first (top left) light will illuminate.



This image is used to show that when the users password is over 16 characters long the third (middle left) will illuminate.



This image is used to show that when the user enters a password which is multi-case (both upper and lower case characters) the third (bottom left) light will illuminate



This image is used to show that when the user enters a password which contains a special character (*,&,\$,",, etc...) light four (top right) will illuminate



This image is used to show that when the user enters a password which is alphanumeric (contains both numbers and letters) the fifth (middle right) will illuminate.



This image is used to show that when the user enters a password which contains no repeating characters the sixth (bottom right) light will illuminate in green.

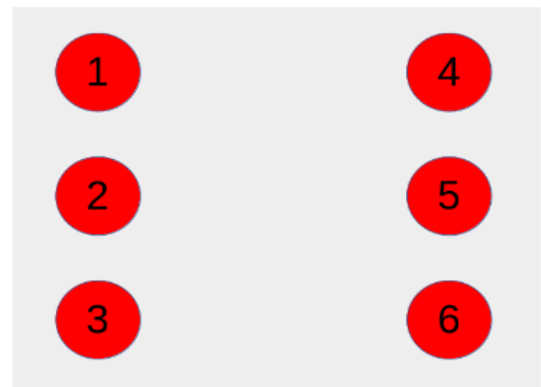
Web Accessibility Initiative (WAI)

“Text alternatives for non-text content”

I have included alternative text for every image on the site. Including this text will allow users who for whatever reason cannot access the image file. This may be due to lack of compatibility of a disability on the users part.

The image on the left shows the user “alt text” for the image which is shown on the right, as you can see the text describes the content of the image.

All lights set to red
No secure features present
When there are no secure password
features present in the password all lights
will show red.



No secure features present
When there are no secure password
features present in the password all lights
will show red.

“Colour is not used as the only way of conveying information or identifying content “

I have used greyscale for the majority of the site. Colour is only used in two places: on the key page, and on the application page (depending on your browsers fonts).

On the key page the colour is used to show which lights are which colours. There is a description that goes alongside the image as well as the alt text. (Figure 4)

The only other place where colour is used is on the main application. But this colour is used in conjunction with emoticons, and only when the users font does not support pre coloured emoticons (Figure 5). Including this colour was necessary as it indicates the state of the mentioned property even if the users browser does not support emoticons of any sort.



Length over 8 characters

When the password length is over 8 characters, light 1 will illuminated in green.

Figure 4

Features of a strong password

More than 8 characters:	😊	Uses Special characters:	😬
More than 16 characters:	😬	Has numbers and letters:	😬
Makes use of multi-case:	😊	No repeating charecters:	😊

Figure 5

“Default foreground and background color combinations provide sufficient contrast”

My website uses a white (#FFFFFF) background and grey (#808080) text. These two colours have a contrast of 3.94 (contrast-ratio.com). This is above the minimum contrast ratio of 3.1 recommended by recommended by the W3C (W3.org, n.d.).

The contrast is shown in figure 6.



Password
Strength Tester

Made by Jasper

Figure 6

“When users resize text up to 400% or change text spacing, no information is lost” and “Text reflows in small windows (“viewports”) and when users make the text larger”

No information is lost when resizing text on my site (up to 400%) as the site automatically wraps text when there is not enough space (Figure 7, shows site zoomed in 400%). This allows the website to deal with the user resizing text and zooming in. The text will also “reflow” when the user has a phone sized screen (Figure 8).

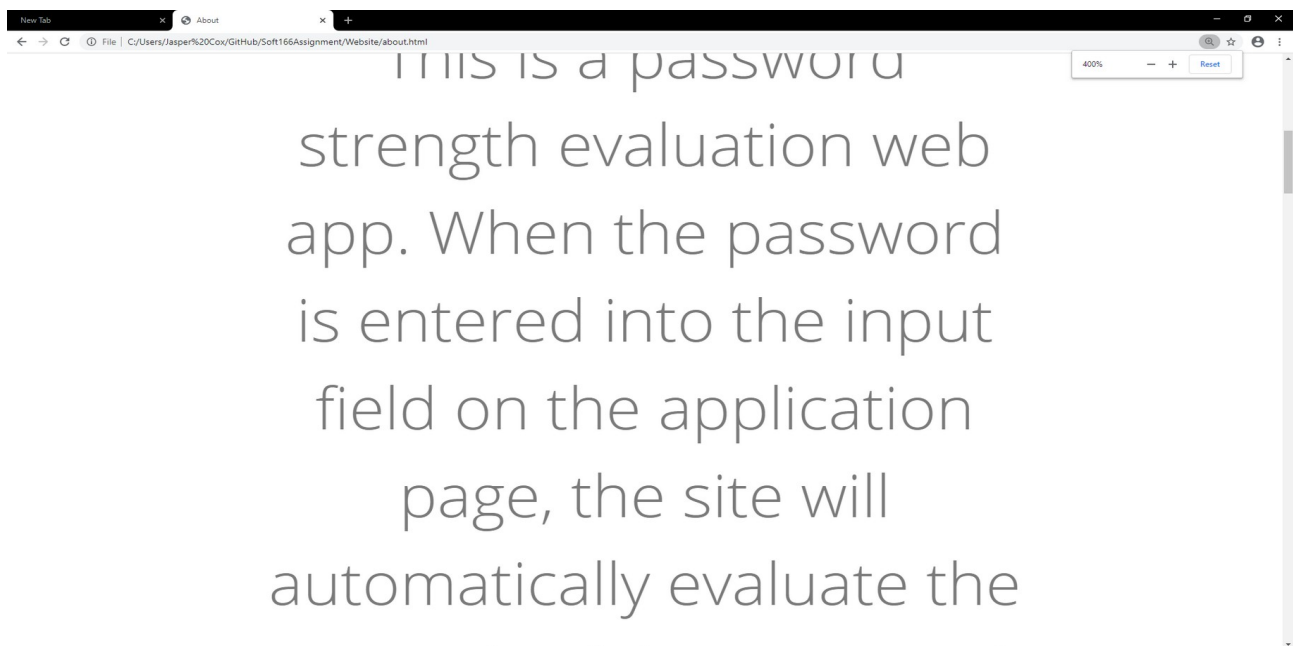


Figure 7

[Home](#) [About](#) [Application](#) [Key](#)

Password

Clear

Features of a strong password

More than 8 characters:	😊
More than 16 characters:	😊
Makes use of multi-case:	😊
Uses Special characters:	😊
Has numbers and letters:	😊
No repeating charecters:	😊

Figure 8

Feedback acquired from the Demo session

“The middle row of the results table [on the application page] is highlighted, this is confusing as it makes it look like that row is important”

I have removed the highlighting from that row. The highlighting was originally there to make it obvious the rows were separate. But it has caused more confusion than good. Having no separation between the rows does not seem to damage usability. Figure 9 is before and figure 10 is the after.

Features of a strong password

More than 8 characters:	😊	Uses Special characters:	😊
More than 16 characters:	😊	Has numbers and letters:	😊
Makes use of multi-case:	😊	No repeating charecters:	😊

Figure 9

Features of a strong password

More than 8 characters:	😊	Uses Special characters:	😊
More than 16 characters:	😊	Has numbers and letters:	😊
Makes use of multi-case:	😊	No repeating charecters:	😊

Figure 10

“It would be nice if there was an option to view what the password is you have entered. As sometimes you might mistype the password”

I have added a show password button bellow the password clear button. Pressing this button will change the input field from a password type, to a text type, thus allowing the user to view the characters of the password in plain text. Pressing this button again will turn re-hide the password.

Home About [Application](#) Key

Password

Clear

show

Features of a strong password

More than 8 characters:	😊	Uses Special characters:	😬
More than 16 characters:	😬	Has numbers and letters:	😬
Makes use of multi-case:	😬	No repeating charecters:	😊

“The smiley faces on the application page are a bit small”

I have increased the size of the smiley faces to 40px. This makes them far easier to see. Having the smiley faces a larger size will improve usability on smaller screens and for people who have worse eyesight.

More than 8 characters:	😊
More than 16 characters:	😊
Makes use of multi-case:	😊

Figure 11

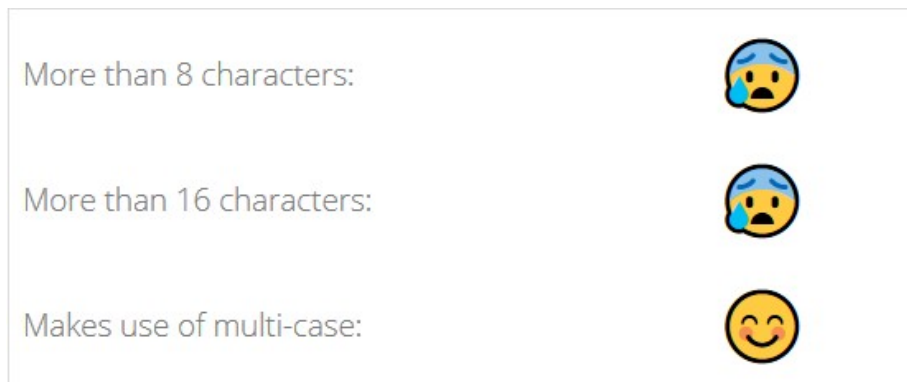


Figure 12

“There should be a better indicator showing the strength of the users password”

I added a password strength indicator between the entry box and the results box. This strength indicator scores the users password out of six. The password strength indicator can be seen in figure 13.

Password

Clear

show

Password Score:
0/6

Features of a strong password

More than 8 characters:	😬	Uses Special characters:	😬
More than 16 characters:	😬	Has numbers and letters:	😬
Makes use of multi-case:	😬	No repeating charecters:	😬

Figure 13

URLs

Trello: <https://trello.com/b/Zs2Zzbjb/soft166-website>

Github: <https://github.com/Jasper-27/Soft166Assignment>

References

contrast-ratio.com: Site used to find contrast ratio: <https://contrast-ratio.com/#%23808080-on-%23FFFFFF>

W3.org. (n.d.). *Understanding Success Criterion 1.4.3: Contrast (Minimum)*. [online] Available at: <https://www.w3.org/WAI/WCAG21/Understanding/contrast-minimum> [Accessed 1 Jan. 2020].