1. General ethos:

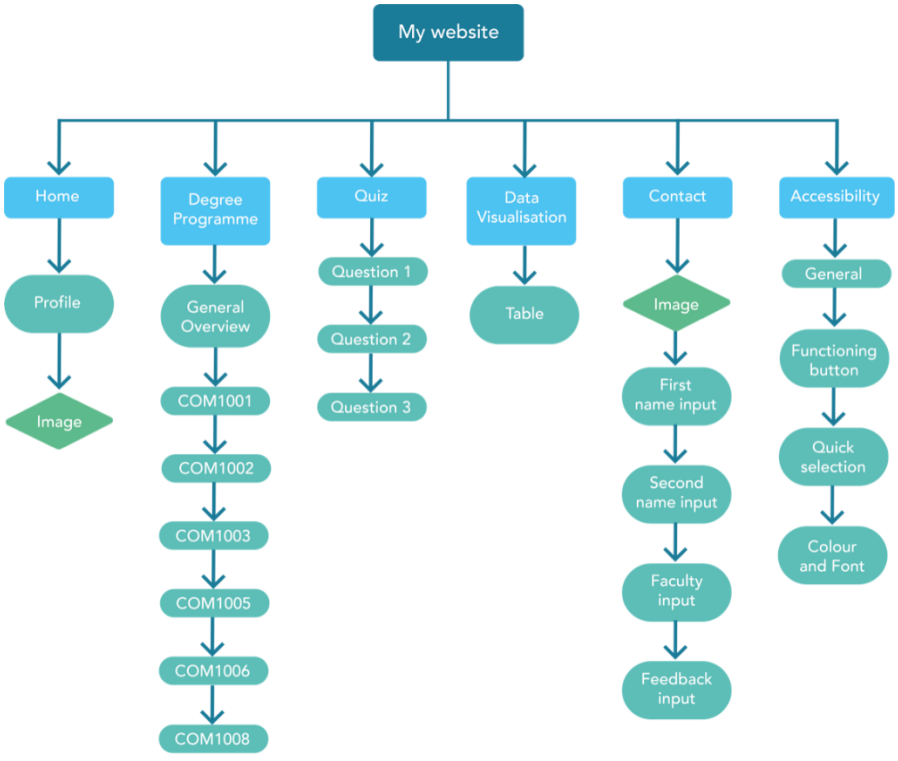
For the design of the website, I want to make it as conveniently access and entertaining to the browsers as possible. (e.g.: a short-cut to a particular paragraph of the page in Degree Programme page).

For the colour of the page, I set the website to be of dark theme with bright letter colour on it, which is my top favourite style and according to a survey on Google, 95% of the population prefer this theme to the traditional bright one, and the top of the page, which also consists of navigation bar, I set it deep green and bright yellow, which I am inspired by a Vietnamese Instagram account I follow. They create their templates with such colours and those templates are really attractive to me at the first sight.

Every page will have Next/Back buttons to direct users to the next/previous page at one click.

Every page ends with a footer which consists the site of Accessibility, name of the author, which is me and a link directing to contact via my email address.

2. Site Map:



I choose this structure for the site map because it looks straightforward and it is also a typical style when I refer to online templates. From this site map, I can also plan up the contents and their orders for my specific web pages (it can be modified while I am designing the website yet it is still apparent for me to follow).

3. Accessibility:

On my Accessibility page, I attempt to follow the Worldwide Web Consortium (W3C) guidelines and use alt element property for image elements, which indicate the content of a specific image.

+ Functioning button:

At the end of each page, there are two buttons "Next" and "Back" for users to click when they are browsing at the end of the page while the usual buttons are at the top of the browser.

+ Quick selection:

On Degree Programme page, there are boxes of lines with which the users can reach a specific part of the page at one mouse click.

+ Colour and Font:

For the colour of the pages, I use dark theme with the content of brighter colour to make sure sufficient contrast for users. Furthermore, I mainly use colour of tone blue green, yellow, purple or red, which are recommended to be friendly colour to colour-blinded people.

Some texts have special functions (i.e. lead to a website) will be presented in different colours in the paragraphs or appear with different colours when hovering the mouse.

The font are set at a relatively large size so the users can read easily, even they are the elderly.

+ Background contrast:

I use this website (https://webaim.org/resources/contrastchecker/) to determine how good my web pages' contrast is, and the ratio is really high, tend to be more than 8:1. I believe this means the users can be comfortable and satisfied when browsing me website with my colour options.

4. Legal issues:

+ For referencing details for colouring options of the website, I refer to the following links, which are top results and easily found links:

*colour for website to be friendly with colour blinded people

https://venngage.com/blog/color-blind-friendly-palette/

https://thenode.biologists.com/data-visualization-with-flying-colors/research/

+ For images, I will either use the images taken by myself and my personal resources which is from my modules or from my personal data storage, yet one GIF I downloaded via Google image, which is the publicly accessed information.

+ Especially on the Quiz page, the first two images for the questions and the one in page Contact are drawn by myself, with the information gained from my course lessons and extracurricular activities.

5. Design mock-ups:

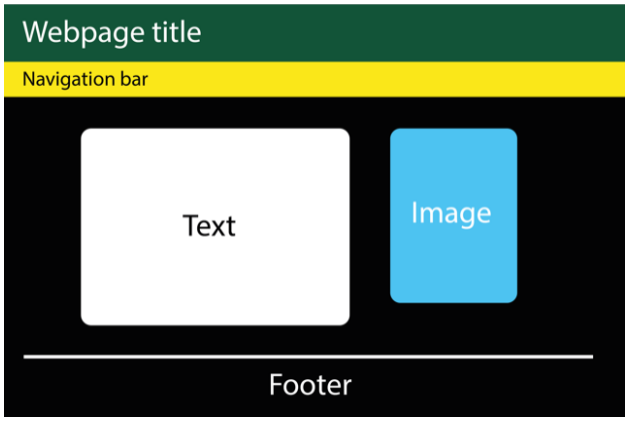
+ I create a CSS templates which has a break point, so every page will have at least a break point.

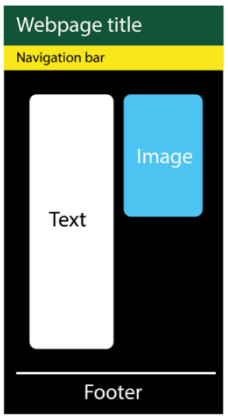
+ For Degree Programme page, I has created 2 breakpoints for desktop and tablet sizes as it is rather wordy in that page and I also make space for the short-cut section in the page.

+ Due to the breakpoint, at a smaller screen scale, my navigation bar can be scrolled horizontally.

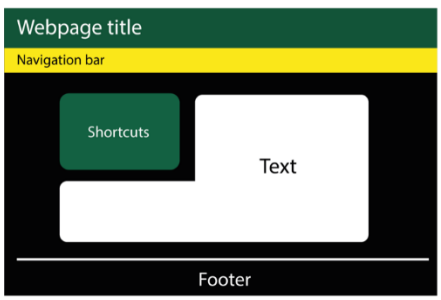
These are the design I plan initially, it may change slightly in my actual website.

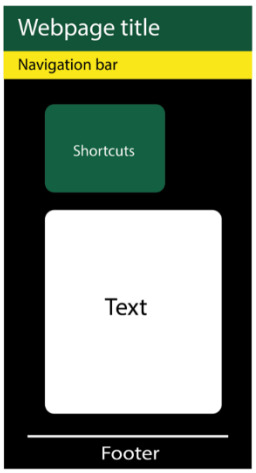
+Home page:



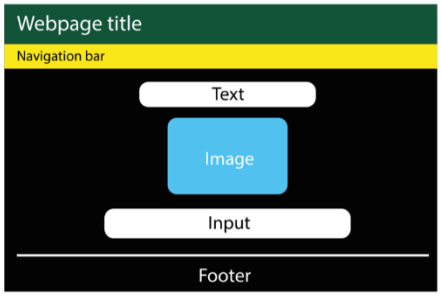


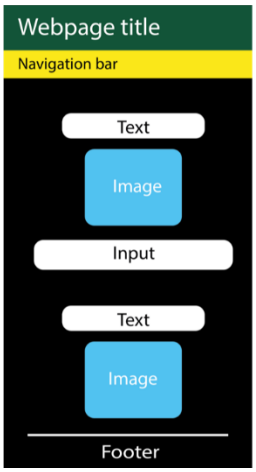
+Degree Programme page



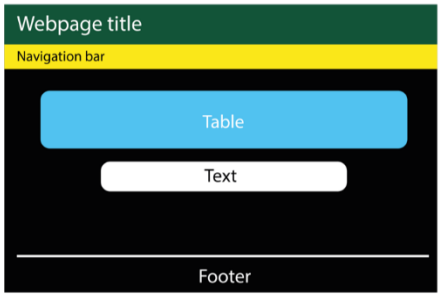


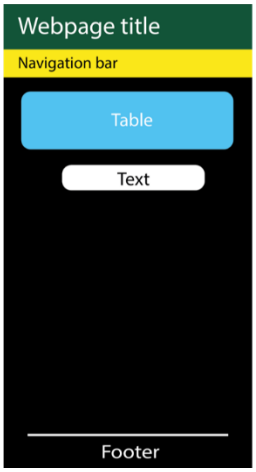
+Quiz page



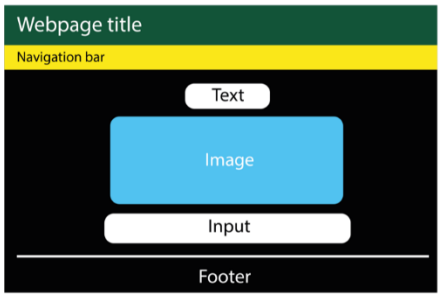


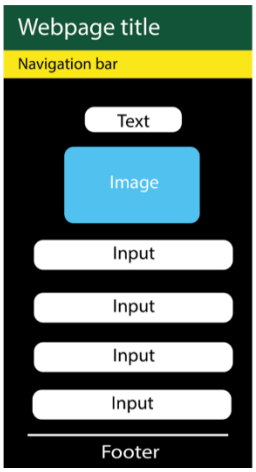
+Data visualisation



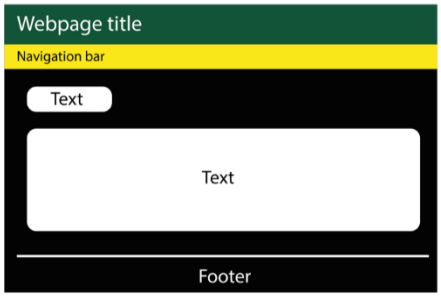


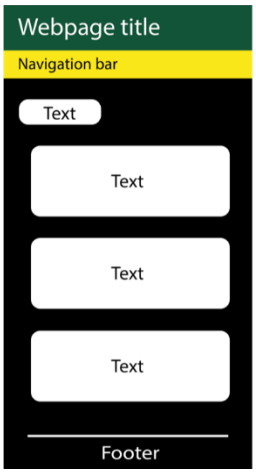
+Contact





+Accessibility





6. Menu System:

For the navigation bar, I choose the inline-block style, which has always been of my favourite when I use websites, as everything are shown up above and the users just need to click. To make it more appealing, I add a hovering function, which helps the users determine if they are clicking at the right section they want.

7.Canvas and JavaScript demo:

I plan to arrange all the charts vertically in order of table and the canvas of pie chart, bar chart and line graph. I would prefer not to put any two charts next to each other as my aim is to make each section as large as possible with sufficient contrast, so even the short-sighted people can view at ease.

On the mobile phone scale, it should also looks vertically and in the same arrangement, not be in any different orders or any parts of the charts should be missing.

For the pie chart, the percentage of hours devoted on each of three selected modules should be visualised alongside with indications for each pie colour.

For the bar chart, there will be three separate groups of bar columns, every seven of which will stand for one module, each column represents the different amounts of time I have spent on each selected module within a random week I recorded.

For the line graph, each line will represent each module and each tip point indicates different amount of time devoted to the corresponding module.

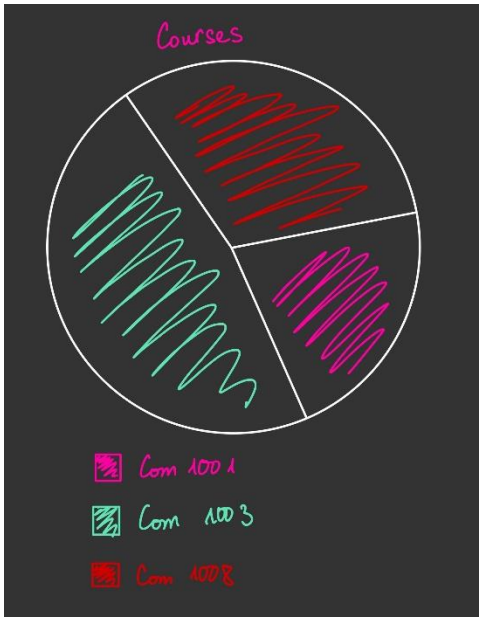
I will design every two buttons for each diagram, which will result in two different colour modes of the corresponding chart and a clear button to clear the canvas when displaying another chart.

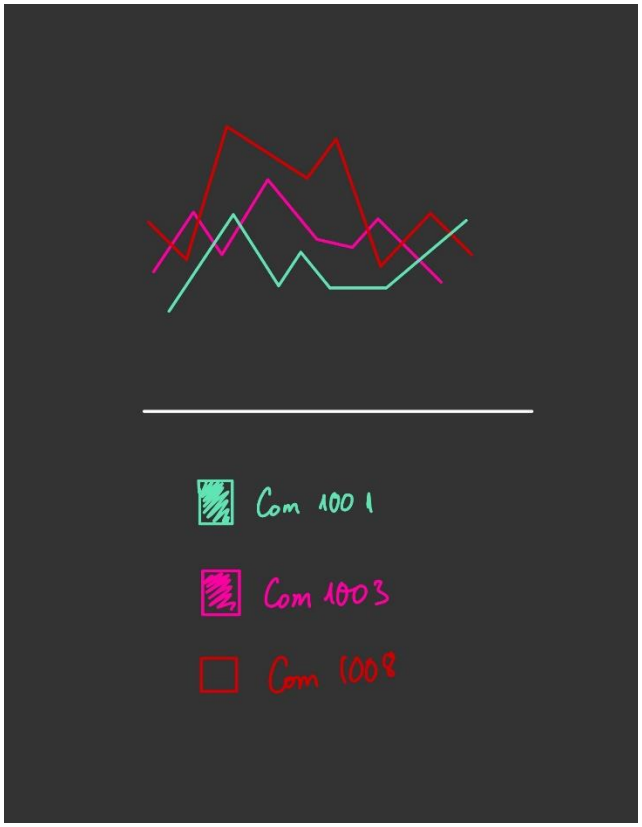
I will use different colour for each presentation on the chart, which all should be of contrasting colour with the background colour.

For the menu, I use the inline style together with hovering effect which might be helpful to the users, yet I do not apply JavaScript to this section.

- Demo version of Data Visualisation page:

  - Pie chart



- Bar chart:

- Line graph: