

# Rationale of Front-end Website Project

## Introduction

This rationale portrays how I build the 'Norfolk Island' website of this semester's front-end website project using HTML 5 and CSS. During the developing process, I've learned lots of knowledge and techniques about building formal webpages for the audiences. In the past five years, smartphones and tablets have influenced the habits of using technologies to people all over the world. Since it is easy to access the internet through mobile devices, a website developer has to consider more when structuring the website than a few years before. The following rationale will explain my ideas of developing the website, the accessibility audit, and how I conquer the technical issues when doing HTML 5 and CSS coding.

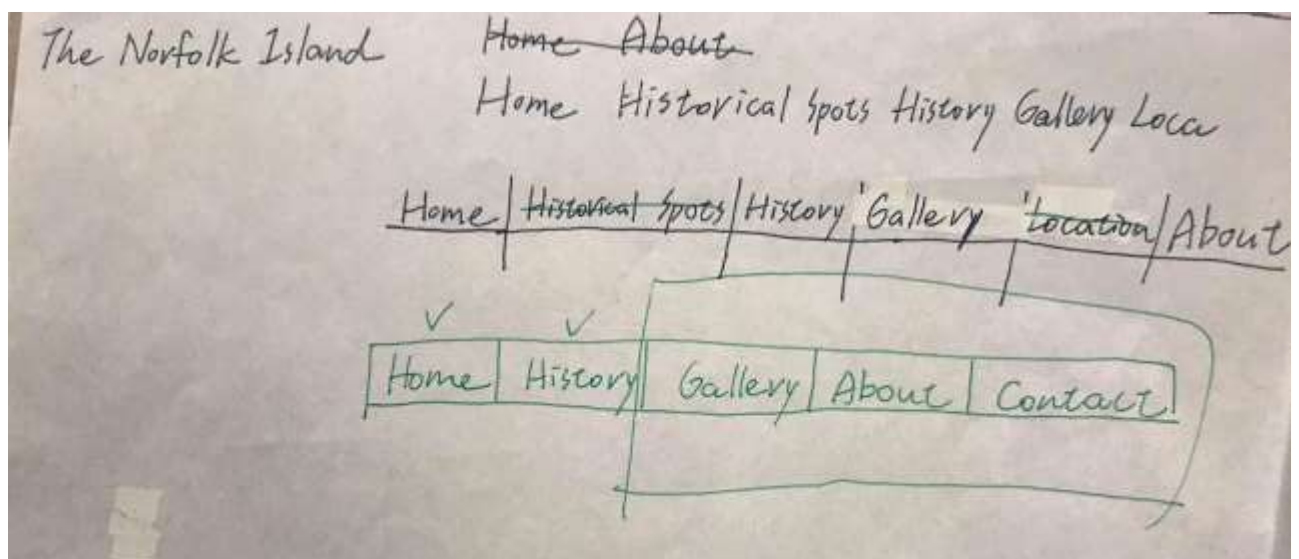
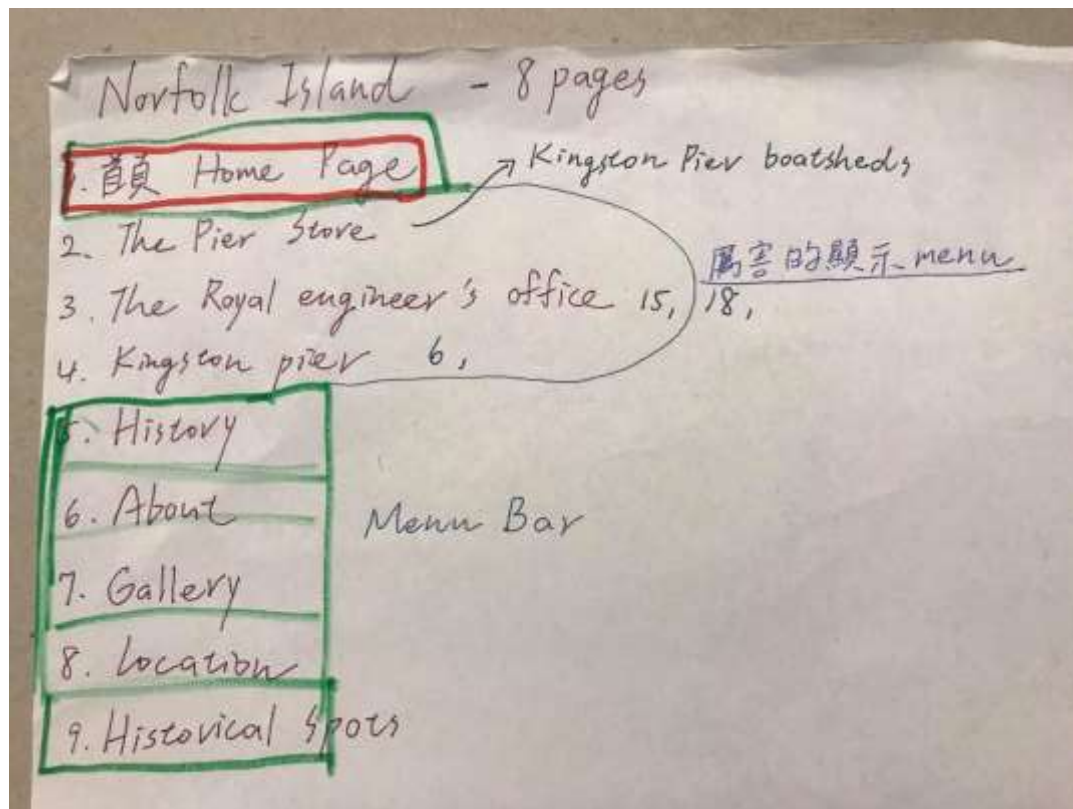


## Evolution of the Design

To start up the design, the first example that comes to my mind is the Bruny Island Safaris tourist website. As the image above shows, the colour of the homepage looks calm and outgoing at the same time. Using a picture of scenery as the banner and an

eye-catching font on the banner image, it looks attractive for the audiences who want to go to Tasmania to navigate the website in order to find out more information. The item I want to apply most is the button on the images on the right-hand side. On the other hand, the source contents provided on Canvas are full of natural pictures, so this will be a good example since the type of visual contents is similar.

Base on this example, I wrote a quick draft of my menu bar:



The layout of the website is a traditional style since many websites use this kind of menu bar. The advantage of this kind of layout is that the menu bar sticks to the top,

so the users can jump to any pages they want even though they already navigate until the bottom of the page. I choose a dark blue as the hover colour of the menu bar as it matches the colour with the banner of most pages.

### Insight into the Design Process

This is my first time building a responsive website, so I've faced lots of technical issues with coding during the process.

The first challenge is that I don't know how to put the banner into the webpage. Also, I want to change the banner within different pages, and the size of those images differ, so I spend time watching YouTube video Tutorial 2 - Header Banner - HTML / CSS to sort out the issue. Apart from that, other technical issues are linking the button to the external pages and producing a hover effect on the menu bar. After reading the example articles on W3Schools, these problems have sorted out.

There are several obstacles I haven't sorted out, such as aligning the image with the text in the About page. I also have difficulty to make the Gallery page looks nice because the ratio of some of the images I want to put in the grids differ. In the end, I delete the images that have different ratios to make the display look better, that's why there are only four images in the gallery. Unfortunately, all of them are black and white because the images with different ratios are colourful. If I got more time to work on the Gallery page, I will adjust the footer since it looks bad overlapping the images.

For the menu bar part, the Contact webpage doesn't exist because I don't have enough time to create it. The reason that I keep the Contact item is that it will make the design of the menu bar looks prettier. Also, the colour of the banner image of the gallery page is black and white, so if the users don't take a look carefully, they might think the image mix with the menu bar since the base colour of both of them are white.

### Accessibility Audit and Usability

According to the content of Module 3, web accessibility means creating web content that can be used equally by any type of user. As the University of Washington stated, as web developers, we cannot assume that all our users are accessing our content using the same web browser or operating system as we are. As a result, the accessibility audit is an essential step before providing a functional website with good quality to the users. On the other hand, usability makes the contents easy to find and minimize the time the user learning site functions and navigation.

For the accessibility audit, I've used the WAVE tool and ACHECKER website to check the webpages. After checking the code through the online tool, it shows that there

are two common issues in the HTML code. The first issue is that lots of images don't have the 'alt' attribute to the image. The second issue is the header nesting of the page topic isn't correct. The errors in all the pages are putting class after 'h1', and the solution is to delete the class since inside the h1 tag cannot follow any other code. The two issues were corrected by following the instruction that appears on the checking website, as the attached screenshot below.

## 2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are.

### Success Criteria 2.4.6 Headings and Labels (AA)

#### Check 37: Header nesting - header following h1 is incorrect.

**Repair:** Modify the header levels so only an h1 or h2 follows h1.

#### ❌ **Line 46, Column 9:**

```
<h1 class="newfont">The Gaol Wall</h1>
```

## 1.1 Text Alternatives: Provide text alternatives for any non-text content

### Success Criteria 1.1.1 Non-text Content (A)

#### Check 1: img element missing alt attribute.

**Repair:** Add an alt attribute to your img element.

#### ❌ **Line 41, Column 4:**

```

```



#### ❌ **Line 52, Column 9:**

```
<img class="history1">
```

#### ❌ **Line 68, Column 9:**

```
<img class="history1">
```

#### ❌ **Line 76, Column 13:**

```

```



#### ❌ **Line 82, Column 9:**

```
<img class="history1">
```



**WAVE**  
web accessibility evaluation tool

Styles No Styles Contrast

**Documentation**

**Errors**  
**Missing alternative text**

**What It Means**  
Image alternative text is not present.

**Why It Matters**  
Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable.

**How to Fix It**  
Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

**The Algorithm... In English**  
An image does not have an alt attribute.

**Standards and Guidelines**

- [Section 508 \(a\)](#)
- [1.1.1 Non-text Content \(Level A\)](#)

[Icon index](#)



### Welcome to the Norfolk Island!

The place is rich in aesthetic qualities due to the combination of spatial structure, visual quality and the strong relationship between built elements and their setting. Some of which are listed below:



### Reflection

After constructing the website project, I realize the process of making a website is time-consuming but interesting at the same time. Even though it takes a lot of work to check the code, adjust the design and audit the accessibility since the websites are developed to be user-friendly and “mobile device-friendly” nowadays, once the pretty interfaces of the webpages are built, I start to enjoy playing with the code and adjusting the style by CSS.

To sum up, before selecting this unit, I thought it's easy to build a website because I always use the back-end interface by blogging website. After the front-end class this semester, I understand how important is the operable website for the audiences, especially when it comes to commercial or governmental use. As the web developer can follow the Web Content Accessibility Guideline, it will be easier to build up a standard website.

## References

<https://www.brunyislandsafaris.com/>

[https://www.w3schools.com/css/css\\_image\\_gallery.asp](https://www.w3schools.com/css/css_image_gallery.asp)

<https://guide.freecodecamp.org/html/tutorials/how-to-create-an-html-button-that-acts-like-a-link/>

[https://www.w3schools.com/css/css\\_positioning.asp](https://www.w3schools.com/css/css_positioning.asp)

[https://www.w3schools.com/css/css3\\_images.asp](https://www.w3schools.com/css/css3_images.asp)

<https://developer.mozilla.org/en-US/docs/Web/CSS/transform-function/rotate>

<https://fonts.google.com/>

[https://www.w3schools.com/cssref/sel\\_hover.asp](https://www.w3schools.com/cssref/sel_hover.asp)

[https://www.youtube.com/watch?v=X\\_skOPBsYZE&t=142s](https://www.youtube.com/watch?v=X_skOPBsYZE&t=142s)

<https://wave.webaim.org/>

<https://achecker.ca/checker/>