

Introduction

ANZ is one of the main banks in New Zealand and Australia, with thousands of customers in New Zealand. The ANZ Website is used to promote and provide information of the services that ANZ provides, such as Loans, Credit Cards and Bank Accounts. The website also allows Customers to apply and join ANZ to use these services while providing existing customers the ability to login to the Internet Banking Portal, allowing them to see the state and amount of money in the accounts. For this discussion board I will be analysing the HCI Principles in use on the website, while also analysing the aspects and interaction of the website. ANZ pride themselves as being one of New Zealand's leading Banks, bringing new technology and design to their customers on a regular (but stable) pace.



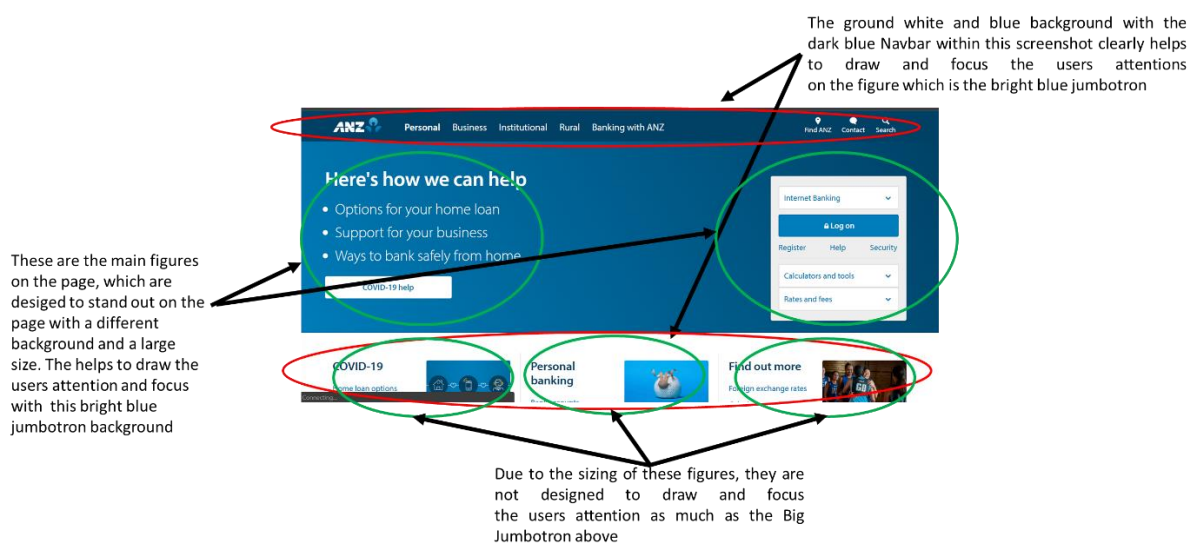
1. Screenshot of the ANZ Website Homepage

Overall Perception:

The ANZ Website features a clean modern look with contrasting blue and white colours with small hints of silver present throughout the home page and other web pages that make up the ANZ Website.

Figure Ground Perception

The figure-ground perceptual group can be clearly seen within the below screenshot of the ANZ Homepage. The ANZ Website has a clear visual hierarchy that is predominantly seen first when visited through the contrasting light to dark blue background of the jumbotron with the white text.



2. How the Figure-Ground Principal is used on the ANZ Homepage

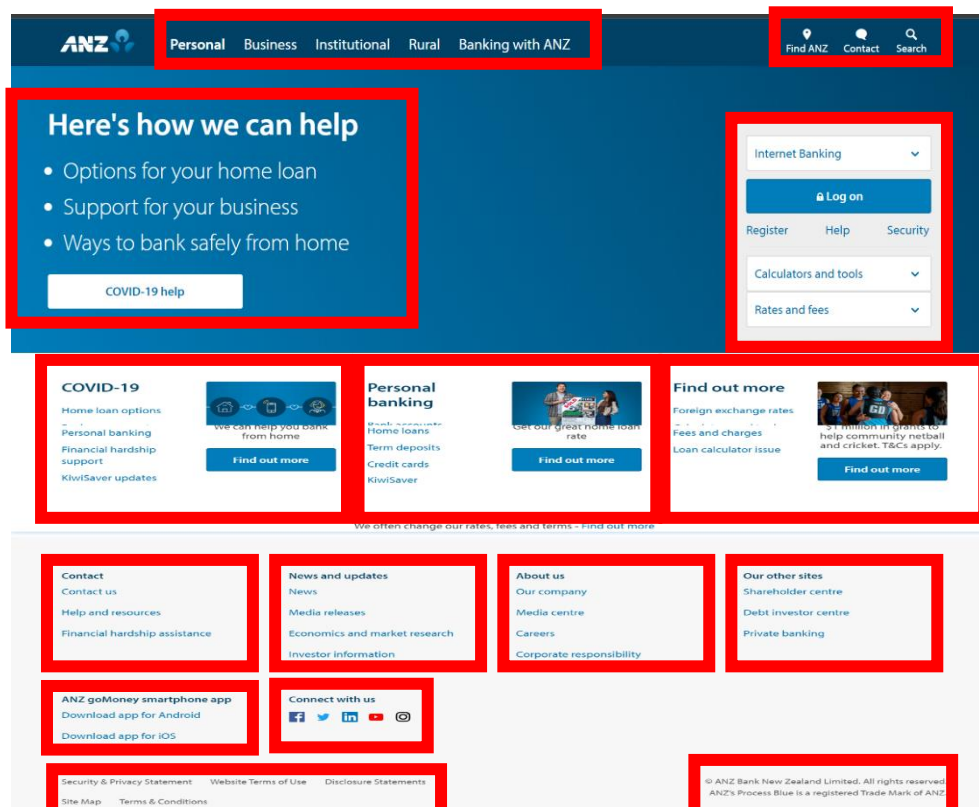
The figures and background seen in the screenshot clearly draw the attention and focus on the user, with the bright blue background immediately drawing the users attention, while the figures within it stand out from other figures on the page such as the **Covid 19, Personal Banking** and **Find out more**.

The ANZ Website uses the Figure-Ground perception in several different ways. This is firstly done through the use of the white text of **Here's how we can help** and the below text, with how it is immediately seen by the user as the figure, with the blue colour as a background. This is also used in the options to the right, where the user can select several options such as Login to Internet Banking, **Calculators** and other options. Through the user of having a different grey background within this box to stand it out, this immediately draws the user's attention to it with the supplementary colours of blue and grey. This area also contains several sub-figures such as the drop-down option as well as the blue button and the hyperlinks.

There is also the use of figures and background below this blue shaded area. The user's attention when scrolling down to see this is immediately drawn to the images and text, easily identifiable to the user as the figure. The white background is clearly seen as the background, contrasting with the blue and white colour.

Groupings and Proximity

Another part of the perception used on the ANZ Home Page is the proximity of objects, with groupings of similar items and information being present.



3. Screenshot of the Groupings on the ANZ Website

These groupings are highlighted and shown on the screenshot above, where similar objects have been grouped by the red boxes overlaid on the screenshot. These groupings are present through the

use of columns and the whitespace on the webpage, helping to split up different information while similar information is grouped together.

One of the most obvious groupings on the page is on the navbar. As seen by the screenshot the **Personal, Business, Institutional, Rural** and **Banking with ANZ** links are all grouped together, allowing the user to see that there is similarity with these text, with how that these are all hyperlinks to appropriate webpages.

There is also on the navbar a smaller grouping of **Find ANZ, Contact** and **Search** options, which are supplemented with icons. This group helps the user to identify that these links help to perform actions, such as Find ANZ which once selected this will show how to find the locations of branches and ATMS of ANZ, while selecting the Contact option will provide the user with the contact details of ANZ. The Search Icon will allow the user to search the website, performing another action.

There is also the grouping of figures on the blue jumbotron that is immediately brought to the user's attention. There is a grouping to the left of the figures including the text related to Covid19, with links and a button that relates to ANZ and Covid19. All this information is relevant to Covid19, grouping it together to avoid confusing the user. There is also a grouping to the right, which contains several dropdown options allowing the user to quickly access tasks and options such as online portals and online calculators.

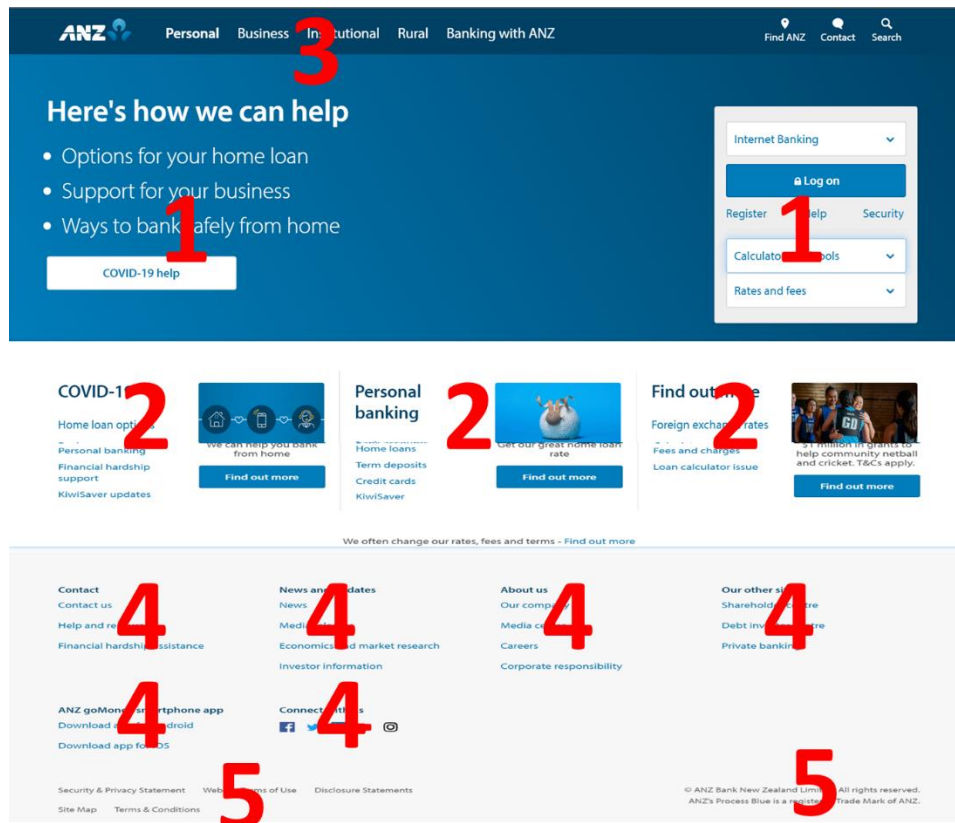
All of these HCI techniques help to focus and point the user's perception around the website to relevant information and tools.

Visual Hierarchy

As previously discussed, the ANZ websites uses several different techniques to gain the users focus and attention.

Another important HCI Principal that ANZ uses on their website is Visual Hierarchy. Visual Hierarchy is made up of items that grabs the user's attention, with the first item that grabs the user's attention is at the top of the visual hierarchy list.

Visual hierarchy is shown on the ANZ Homepage through the use of sizing, colours and display of figures on the website.



4. ANZ Homepage Visual Hierarchy

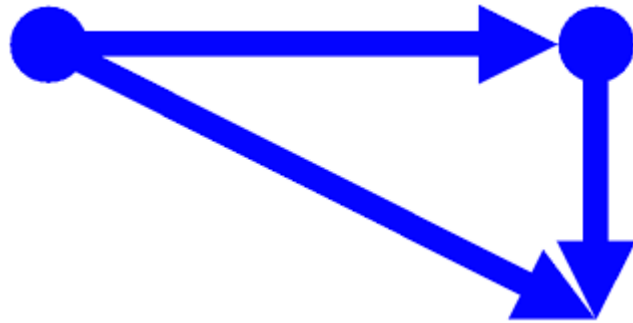
(Screenshot of ANZ Homepage)

The first figure and background (labelled as 1 on the screenshot) that attracts most of the user's eye is the big blue jumbotron, which is centre on the screen. The figures within it attract the user's attention, with the large bold font of the **Here's how we can help** text, as well as the text below it. This helps it to attract more attention compared with the smaller font of the navigation bar and the columns of text below the jumbotron.

Another figure and background that will also predominantly attract most of the user's attention is the white box to the right of the text in the jumbotron which contains links to important services and tools such as Internet Banking and Calculators (labelled also as 1 on the screenshot). The contrast of the white and blue background helps to make it stand out predominantly, increasing its visual impact on the visual hierarchy. Due to the layout and design of these 2 figures (Covid Text and Selection Boxes area) I have labelled them as the top of the Visual Hierarchy, due to how they will be the first thing seen by the user. Due to how we all tend to read left to right, the text to the left is mostly likely to be seen first, however it is possible that the options on the right will be equally focused on as well.

The second figures (labelled as 2 on the screenshot) which help to attract the user's attention are the options below the jumbotron. These options allow the user to easily see information related to **Covid-19**, **Personal Banking** and **Find out More**, which are grouped together allowing the user to see the similar information, while helping to stand out information that isn't relevant.

The third visual element (labelled as 3 on the screenshot) visible on the page is the navigation bar, allowing the user to access different pages on the website. This is one of the least important hierarchy items due to how the background colour of the navbar blends into the rest of the page with the contrasting blue colour of the jumbotron. The navigation bar allows the user to access other parts of the website, with icons to the right of the links, such as the **Find ANZ, Contact and Search** helping to decrease the hierarchy of the navbar due to the smaller font and icons. However, it will still draw the user's attention due to how most people in New Zealand read websites top to bottom, left to right.



The fourth visual elements (labelled with a 4) that are visible on the page are the links in the footer of the page. These have a lower visual Hierarchy due to how the user must scroll down the page to view them, and they have a smaller font than most of the other visual elements on the page.

The fifth and final visual elements that rank the lowest on the visual hierarchy are the small disclaimer and website links at the bottom of the page. These rank the lowest on the visual hierarchy due to their smaller font, and the font colour being a dark grey helping it to blend into the background of the page. These links are likely to be used less often by the user due to how they are hyperlinks to pages such as the Site Map and the Terms & Conditions.

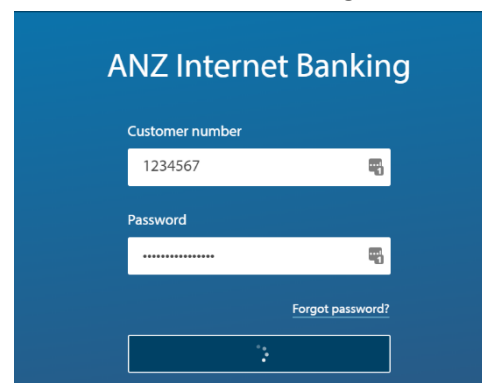
Usability, Accessibility and User Experience

Usability

The ANZ website incorporates several features from the Heuristics of User Interface Design of Jakob Nielson.

Visibility of System Status

While the ANZ Website does not really have any status screens due to how it is a website displaying content, when a user goes to use the Internet Banking and logs in, there is a loading icon that appears as the system tried to login the user to the Internet Banking. If the system is unable to login, it then displays a message informing the user.

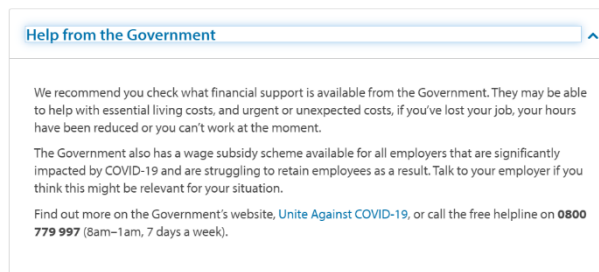


5. The state of the system is shown in this loading icon as the system attempts to login the user

Match between system and the real world

The ANZ Website uses icons such as Pins and Message Bubbles to match hyperlinks of information to the real world. This is accomplished through using a Pin, which is universally recognised as a location pointer on a map, message bubbles which are universally recognised as contacting a person or business, and a Magnifying Glass which is universally recognised as a way to search for information.

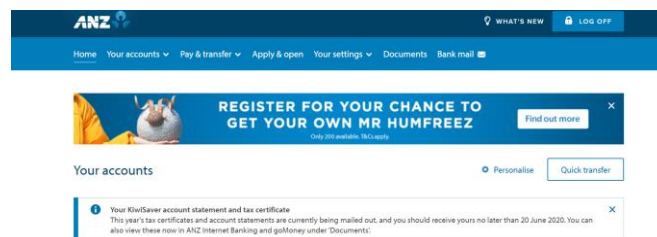
The System also matches between the real world by ensuring that the links on the website are in a different colour (blue) then the rest of the font on the page, easily allowing the user to see what text is a hyperlink that can be clicked to go to another webpage.



6. Hyperlinks are clearly identified by a different colour from the other text

User control and freedom

User Control and Freedom is present throughout the ANZ Website through the use of the navigation bar at the top, easily allowing the user to access a hyperlink to another page. On the Internet Banking Portal there is a clear option to log off the Internet Banking, which will log the user off the system and redirect them to the ANZ Homepage. User Freedom and Control is present throughout the system with how they can easily leave and go to another page without having to go through a complicated process to reach it.



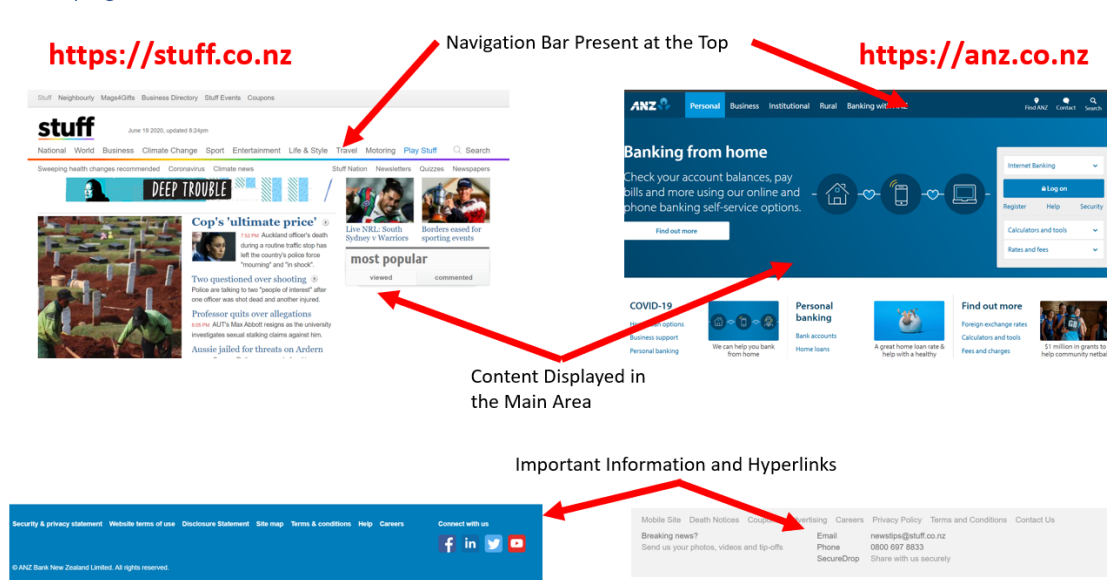
7. The User can easily logout of Internet Banking by clicking the Log Off Button, and access links via the Navigation Bar

Consistency and standards

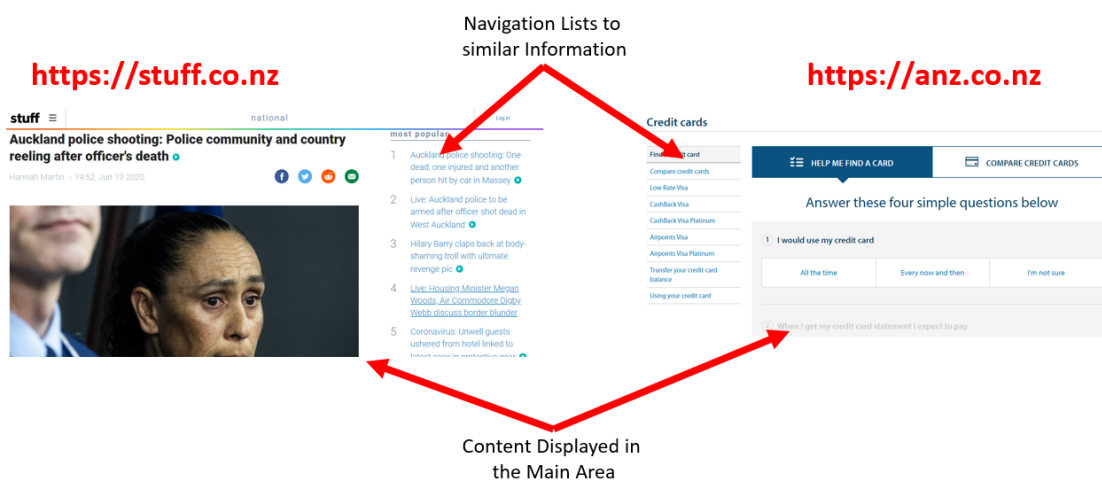
The ANZ Website applies consistency and standards by following a consistent layout throughout the website, which is quite recognisable with other similar websites. The ANZ anchors the navigation bar at the top of the webpages, easily allowing the user to scroll up and access other links. The body of the website contains information and content that is relevant to what the user is viewing, with navigation lists to similar webpages (and sub-pages) at the side of the content. The footer contains website hyperlinks to important webpages on the ANZ Website, as well as containing important information about ANZ.

To compare this with another website, Stuff NZ uses a similar consistent layout. The Stuff NZ Website has a navigation bar at the top, with Navigation Lists at the side to similar information. The body of the webpage contains information and content that is relevant to what the user is viewing, with the footer containing important links and information about Stuff NZ.

Homepage



Article/Content Webpage



This layout and standard is used universally on a lot of websites, with frameworks such as Bootstrap built around them.

Error Prevention and Help users recognize, diagnose, and recover from errors

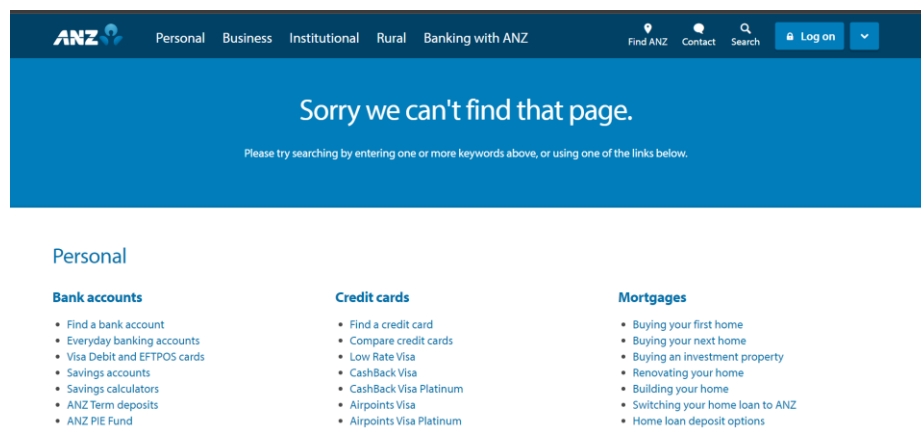
Error Prevention is achieved on the ANZ Website by using hyperlinks in the navigation bar or content on the website, which allows a clear flow of webpages.

Error Prevention is achieved by validating information that is entered, such as displaying informative texts when information is missing, such as no username or password when logging into the ANZ Online Banking. Helpful Text is provided to users to allow them to see what they have done wrong



8. Messages are displayed when input fields are not filled in

Error Prevention is also achieved on the ANZ Website with how if a user were to go to an invalid page, an informative error message is displayed. This message specifies the error **“Sorry we can’t find that page”** with several long lists of hyperlinks to webpages on the ANZ website. By providing these hyperlinks, this allows the user to attempt to access their intended page, and not requiring them to have to attempt to find the page through a complicated method. This message is displayed in plain text with no jargon, allowing users with little technical experience to understand what the error is that has occurred.

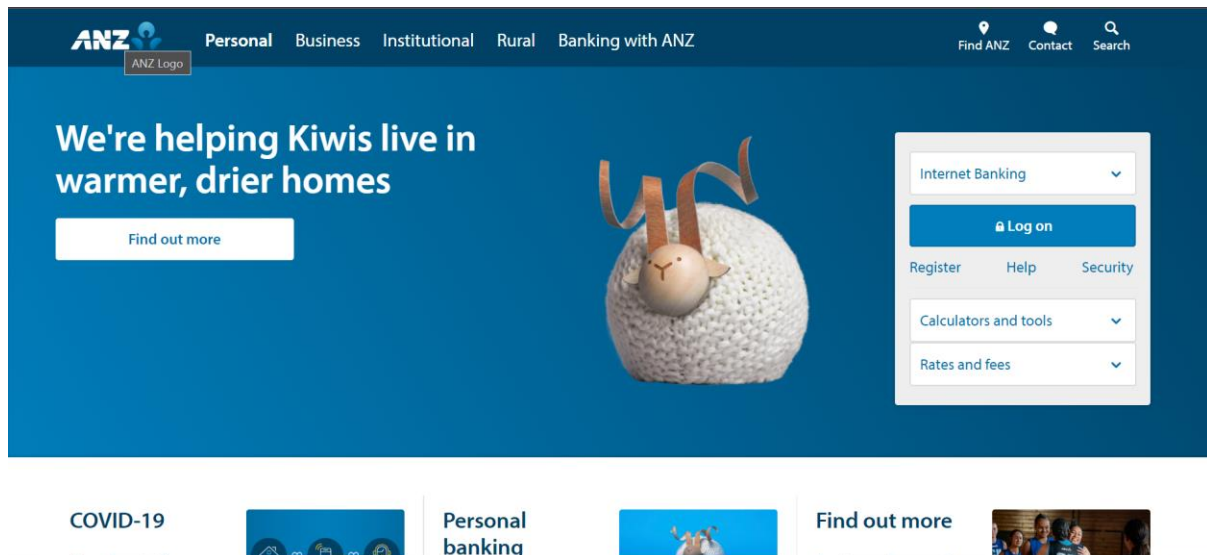


9. Screenshot of Error 404 ANZ Webpage

Accessibility

Accessibility of the ANZ Website is achieved through a range of different ways such as through following the W3C WAI Guidelines.

Alternative (Alt) text is present on the images on the ANZ Website, showing text alternatives for all non-text content. This helps the ANZ Website to achieve Guideline 1.1 of the W3C WAI Accessibility Guidelines of using *Providing text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language*. (Henry, Abou-Zahra, & White, 2016)



10. An ALT Tag is seen on the ANZ Logo Image

Transcripts are available for videos on the ANZ Website, providing alternatives for time-based media such as pre-recorded video. This helps the ANZ Website to achieve Guideline 1.2 of the W3C Schools Accessibility Guidelines of providing alternatives for time-based media. (Henry, Abou-Zahra, & White, 2016)








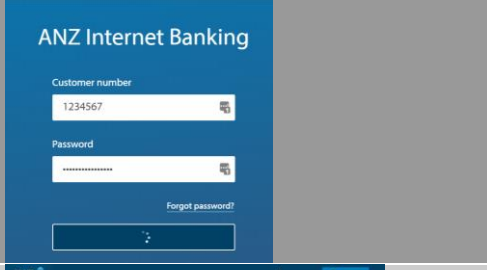
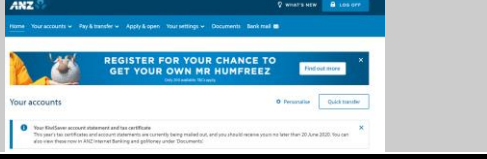
11. There is a link to the Transcript of each video directly below the video

All Functions on the ANZ website are easily accessible with keyboard shortcuts, improving the accessibility of the ANZ Website. This helps to achieve Guideline 2.1, by *Making all functionality available from a keyboard*. (Henry, Abou-Zahra, & White, 2016)

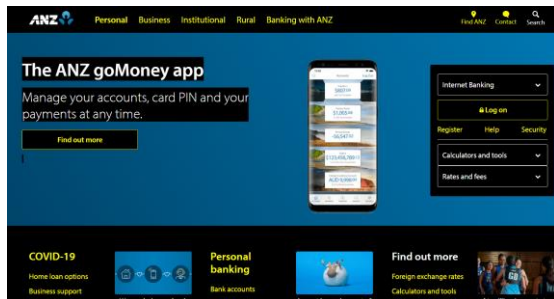
This is accomplished by allowing the user to easily access the key options on the ANZ homepage by pressing the Tab Button. On first Press the user is presented with an option to **Skip to Login**, or to **skip to Content**. Selecting the **Skip to Login** option allows the user to automatically focus on the **Login** with Internet Banking Button, allowing the user to select to login. The Internet Portal Login Screens different figures (2 input forms and a button) can be navigated through by pressing the Tab key to access the Password Input Field and the Log on Button. Whenever the user has the focus on the screen (where they can press the enter key and it will click that action), there is a highlighted border around the Button/Input Field, helping to achieve Guideline 2.4.7 by having *Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible*. (Henry, Abou-Zahra, & White, 2016)

Headings and Labels are present above the Internet Portal Input Fields, describing the topic or purpose of the input box, helping to achieve guideline 2.4.6 of *Headings and labels describe topic or purpose*. (Henry, Abou-Zahra, & White, 2016)

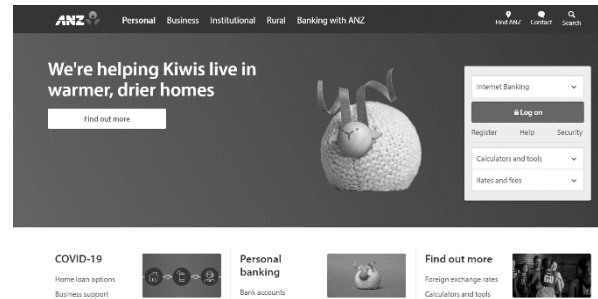
This is documented in the below table:

Logging into ANZ Internet Banking			
Step	Action	Result	Screenshot
1	Normal Navigation to ANZ Homepage	Loading the main ANZ Website	
2	Tab Key	Option to Skip to Log on	
3	Enter Key	Click the Log On Button (automatically selected)	
4	(Focused on by Default when the page loads)	Enter the Customer ID	
5	Tab Key	Enter the Password	
6	Enter Key	Click the Logon Button. <i>Enter Key can be pressed either in the login or password input field to achieve the same action</i>	
Successfully Logged in			
Features Visible: <ul style="list-style-type: none"> • <i>Focus Visible</i> • <i>Link Purpose (The button's text specifies its purpose)</i> • <i>Labels and Heading</i> • <i>Keyboard Accessible</i> 			

The ANZ Website also supports good accessibility with the design and look of the website created to support High Contrast and Greyscale Mode. It is important for the ANZ to support these different visual looks, due to how there are a range of different medical conditions which require users to use them.



High Contrast Mode



Greyscale Mode

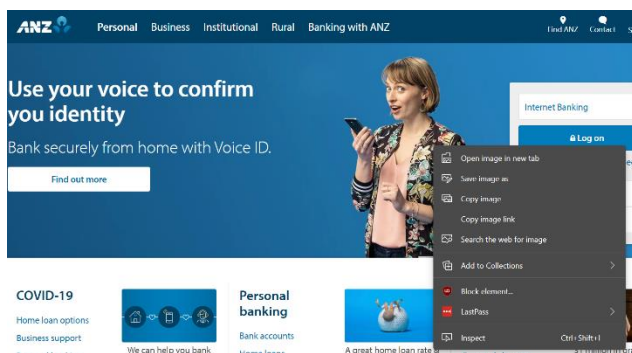


Regular Mode

Despite the different colour modes, the ANZ Website still allows the user to see all the features and options that are present in the regular mode. There is good contrast between elements on the website, allowing different figures to still be seen on the different backgrounds of the website.

User Experience

The user experience on the ANZ Website is consistent and reliable compared with other websites. There is still the option to right click and screenshot content (which some websites disable through JavaScript), allowing people to continue to access the website like other websites.



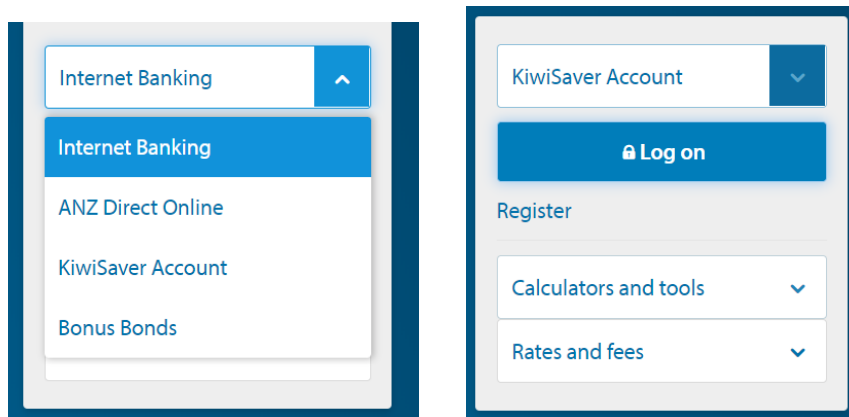
12. The User is still able to right click and to take screenshots of content on the website

Buttons and Hyperlinks act like they should, directing the user and performing actions. The Logon Button for the Internet Banking is an HTML Element Button (not a div stylized to look like a button), as shown in the below screenshot of the HTML Code

```
<div class="logonbox--right-home">
  <button class="btn btn--icontext login"><span class="icon icon_padlock"></span>Log on</button>
  <a href="#" class="btn login-button" role="button" aria-label="Login to other services" aria-haspopup="true" aria-expanded="false">
    <span class="icon icon_arrow_down"></span>
  </a>
  <div class="login-list">
    <ul>
```

13. Screenshot of the ANZ Homepage HTML File

The ANZ Website easily allows the user to select which online portal they wish to login to, by allowing the user to easily select the preferred type, such as KiwiSaver Account. This changes the function of the button, while keeping the page consistent by not altering all of the HTML Elements on the page.



14/15. Different Options do not alter much of the HTML Elements

References:

Eggert, E., & S., Abou-Zahra. (2019, October 4). How to Meet WCAG (Quick Reference). Retrieved from <https://www.w3.org/WAI/WCAG21/quickref/#principle1> Version 3.5.1

Henry, S. L., Abou-Zahra, S., & White, K. (Eds.). (2016, May 6). Accessibility, Usability, and Inclusion. Retrieved June 19, 2020, from <https://www.w3.org/WAI/fundamentals/accessibility-usability-inclusion/>

Nielsen, J. (1995). 10 usability heuristics for user interface design. Nielsen Norman Group, 1(1).