

# Interaction Design Fundamentals IT5505

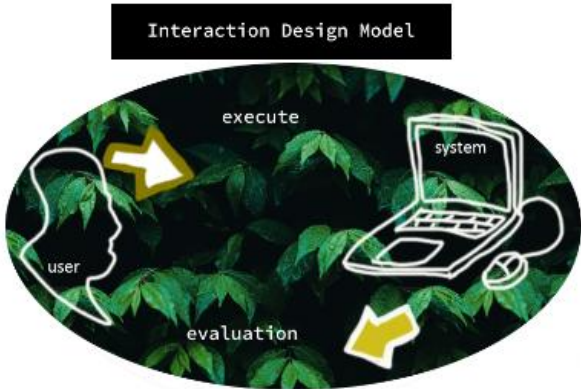
## Assignment 1

Overview – Three parts to this assignment.

1. Interaction Design and Processes  
(Journal of activities, Class notes, screen shots of digital exercises)
2. Historic analysis and user experience
3. Investigate and plan a web based product for an interaction design and development company

## Interaction design and processes and history

Table 1. Journal activities gaining an overview of interaction design, testing the effectiveness of a product.

Journal Activities	
<ul style="list-style-type: none"><li>• <b>What is interaction Design? Create a diagram of HCI process or lifecycle</b></li></ul>	
<p>Interaction Design are products to support the way people communicate and interact in their everyday working lives.</p>	 <p>The diagram, titled 'Interaction Design Model', is set against a background of green leaves. It features a central cycle with four components: 'user' (represented by a white outline of a head), 'system' (represented by a laptop and mouse), 'execute' (top), and 'evaluation' (bottom). Two yellow arrows indicate a clockwise flow: one from 'user' to 'execute' and another from 'evaluation' to 'system'.</p>
<p><b>Research</b> <i>(Identify user goals by reflecting what the user is after)</i></p>	
<p><b>Analysis</b> <i>(Translate goals to tasks a step into path after accumulating needs of user)</i></p>	
<p><b>Design</b> <i>(Sketching/Visual Design)</i></p>	
<p><b>User Testing</b> <i>(Usability Testing, testing the design from a user perspective)</i></p>	

- **What is reflective journaling? Describe why it is useful. Does academic research support the use of reflective journals?**

*Reflective journalling is personal documenting in a way that reflects our thought process. This is useful as it provides a clear and easy overview of what was involved during the creation process. These are before, during and after.*

*Below are examples of academic researches that support and show the effective use of reflective journals*



**Doodle note taking journal** - A drawing/sketch type journal. Usually "pictures/objects/fonts" depicting information, ideas or creativity.

This doodle reflective journal shows a range of pictures either in text or objects with a mix of colours.

Handwritten sketches often show writers mood, feel and creativity process. It could be bold letter for a dominate part in the journalling process. This could

reflect a time of confusion or importance.

Felt pens were used to show contrast in the colours this could be warm or cold colours dependent on writers mood.

Doodling reflective journaling is a style I enjoy to use as you are able to compartmentalise and categorise notes as seen here. It enables write to make up all spaces of the page and with nothing to spare.

This could be time saving as certain pictures could mean many words such as the picture of an umbrella. The umbrella could be time of rainy weather, being indoors or a sympathetic feel of emotion during the journalling process where you are at comfort (not getting wet)

Designers/Artistic backgrounds I've found use this method a lot including myself to journal notes for lecture study.

**Bullet Journaling** – an organised type journal with bullet points kind of like a listed journal. Key points recorded and categorised.

This is a good organised way to be able to go back to certain dates in time to see what information need to retrieve or recap.

A list option to tick off particular events, or tasks involved in the reflective journalling.

The left alignment appears to be neat and tidy although a lot of space here is unused.



**Video Journaling** – A “Gen Z” type journalling (current generation).

In 2020 onwards some users are journalling through the lens by either phone, video camera or webcam. These are visual expressions journaled and are sometimes uploaded on the internet and shared through various social media websites.

Video journalling is proven to attract a variety of users but most importantly the persons documenting.

There are cases of video journalling private as progress through perhaps fitness journeys, building, a step by step process. Or also just a communication recording tool to capture moment of thoughts in that time.

I have used video journalling as part of a fitness journey process which has encouraged myself with accountability towards health and wellbeing.

This enables me to visually scale back and appreciate the small progress through this style of reflective journalling.

## **UX, UI, the process. Discuss design that works; design that does not work. Find real world artefacts and consider how people are effected through strong design. Can you find examples of metaphors, digital or otherwise?**

UX: A brief description of UX (User Experience) is as indicated in the name. An experience by the user from how you feel when you explore the system. This is how you navigate through the system and its fluidity. UI: User Interface Design; leans towards the decoration/style of the design. The overall appeal of the system with a combination of product, brand, type, face and look.

Whilst there are differences between UI and UX they do work cohesively with each other as the user experience is impacted from the interface design (and vice versa) of the product. Architectural overview of the product is inclusive of UI and UX.

### ***Here are some examples of designs that works and designs that do not work***



In this image which is an example of designs that *do not work*. Here is an elevator panel with what appears to be four buttons.

Two of which have up and down arrows.

This is a bad design because the person may be misled to believing the arrow is pointing to the white square button presumably functioning "going down"

This is not the case as the arrow button positioning and the choice of colours are likely to be confusing for the user.

This can be unsafe as it could prove an unsettling experience for the user. For example to exit in cases of emergency and pressing the wrong button can cause crucial time delay and stressful emotions.

The arrow itself is the functioning button.

<https://medium.com/interactive-mind/the-ux-of-up-and-down-elevating-the-elevator-851d3bf5eb4e>

## Metaphor design

Here is an image of a shopping cart. A design interface metaphor.

As per design of a shopping cart its function is to shop online and “add items to cart”.

This provides close similarities to shopping in the grocery store add items to your trolley (metaphor). This enables the user to identify this cart symbol and understand its function.

The circle, contrast in colours and icon resemble a badge appeal. The “badge” like appeal may encourage users to add items to trolley. A user reward feel once shopper is satisfied with selection.

This is a good design however perhaps the overlapping shadow tone may have overcrowded the design.

<https://th.bing.com/th/id/OIP.S7b6f8rMY6sKGpE6zHm5QgHaHa?pid=ImgDet&rs=1>

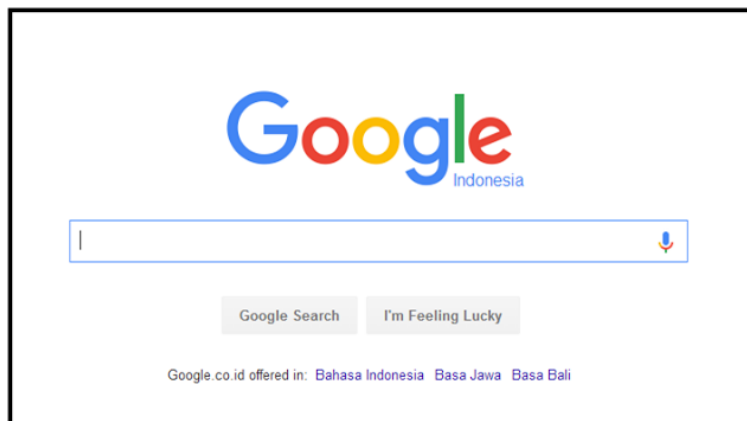


## Digital design

Here is a digital design of a well known website search engine.

It has bright colours, simplicity and focus point proves usability

The primary colours standout and the text logo has a smooth balloon type feel

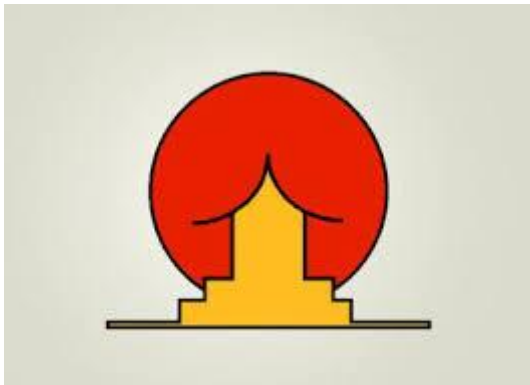


The enlarged search bar is the focus point, a centre of attention captivating the user attention (experience) and flow. An easy to use factor and less difficult for the user to operate

This design has a welcoming interaction and experience complimenting each other. I really enjoy this design as it reminds me of when I first used a computer and the first search I ever typed was “Google”.

The speed of generating all sorts of information by relating to a few typed words within seconds is still magical and still today encompasses that fast and easy user experience.

## Designs that do not work



## Designs that do work

Here is an example of a graphic design amazon. An online retailer where you can buy books, electronics, movies and many other goods. The arrow which points from A – Z depicts what may be seen as a smile but also an image showing categories of what is selling from A – Z.





## An introduction to graphic design principles

Graphic Design is visual communications usually from a combination of visual elements such as text, pictures etc to convey a message to an audience. These often have nice bright colours and pictures.

The elements of graphic design principles are known as the rules of design; Contrast, Balance, Repetition, Proximity, Alignment and Unity.

### Contrast



A picture of many umbrellas. Although the contrast seen here is seeing many black umbrellas and one bright green umbrella. This feature distinguishes from other elements and here colour was used.

### Balance

An image of a pawn used in the game chess. The main colours used are black and white which balances out. It appears as an evenly distribution of weight as where one area is black and opposite side reflects white. This feature shows balance.



### Repetition

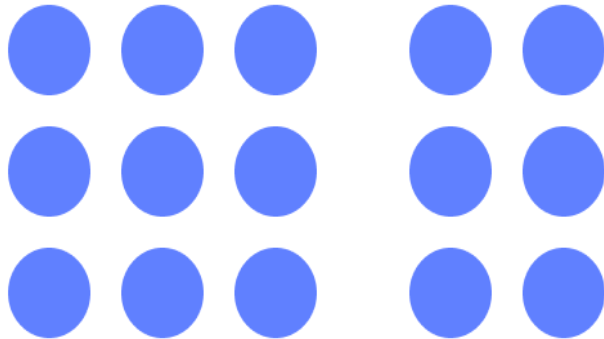


To the left here is a repetition feature used. We are able to see the hexagon design repeated many times. Repetition may create a wallpaper type effect.

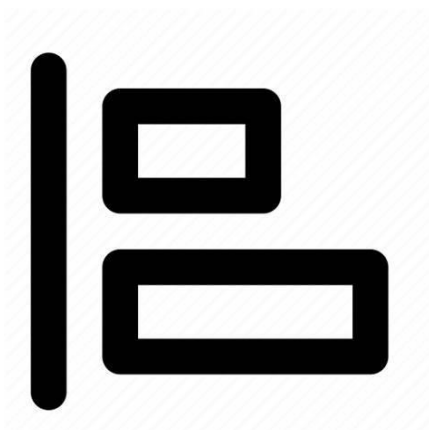
## Proximity

The blue circles are all similar elements and the proximity principle gives us the perception of either two groups of blue circles or a column of blue circles.

This is because of how close these elements are together.



## Alignment



This principle is lining up of elements on a page. These can be seen as an invisible line. The alignment on the left image are left aligned. There are four types of alignment.

Symmetry (proportioned alignment of object on opposite sides)

Asymmetry (objects are not aligned proportionally)

Rule of thirds (rules of alignment 2 horizontal, 2 vertical lines evenly spaced to form 9 boxes)

Justified (Spaced out so left and right edges are straight)

## Unity

Last element/principle here is Unity. It is a unifying colour effect where the correct balances of colour and compositions are used.

This heart shaped image connected with puzzles and choice of colours reflect this element.





Vocab Term	Definition	
Graphic Design	Graphic design is visual communications usually from a combination of visual elements such as text, pictures etc. to convey a message to an audience.	
Elements of Design	Building blocks of design. These are what a visual artist or graphic designer use to create. It's a combination of; Line, Color, Shape and Texture.	
Line	Lines can be straight or curved.	
Color	hierarchy	Shown in order of importance such as dominant colors "black, white, red, etc."
	hue	Both a colour and shade or a colour. Slight gradation.
	saturation	Level of intensity of a colour these are often between low and high ex; muted/bright colours.
	tint	Colour mixed with white
	tone	Colour mixed with grey
	shade	Colour mixed with black
Color Wheel Relationship	primary	Red, Yellow and Blue
	secondary	Orange, Green and Violet
	monochromatic	One Color (varying intensities light – dark)
	complimentary	Includes Hues – directly across from each (high contrast)
	analogous	Two to six colours that sit next to each other
	triadic	Three colours which appears bold and balanced. Any three colours which form a triangle at centre of wheel.
Shape	Objects created by colours or lines that are enclosed showing edges.	
Texture	Surface quality in a work of art. The visual tone of the design.	
Principles of Design	These elements are some of the principles of design also known as the rules of design; Contrast, Balance, Repetition, Proximity, Alignment and Unity.	
Contrast	A feature that is distinguished by different elements in design	
Balance	Balance is where two things are compared like an even distribution of visual weight	
	White Space	Known as negative space that allows the design to breathe to reduce clutter. These are unused space.
Repetition	Repeating a single element many times usually to unify the design	
	Movement	Rhythm and repetition are used to simulate movement
Proximity	Process of placing similar elements together where objects become one single element	

Alignment	Design principle of lining up elements on a page. These can be seen as an invisible line to focus readers attention.	
	Symmetry	Proportioned alignment of objects on opposite sides
	Asymmetry	Objects are not aligned proportionally
	Rule of Thirds	Rule of alignment. 2 horizontal and 2 vertical lines evenly spaced to form 9 boxes.
	Justified	Also refers to the arrangement of text alignment on a page. Justified is where words are spaced out so left and right edges are straight
Harmony	A unifying colour effect that is produced when correct balances of colour and compositions are used.	

Question	Answer
In one sentence, describe the historical origins of graphic design.	Graphic design originates back to pictorial forms of human writing which were to communicate and interact dating back in 15 <sup>th</sup> century.
What single invention changed the nature of design as we know it today?	GUI – Graphical User Interface (Computers) because of its capability and high efficient design processing. The introduction of colour TV/Computers high end design
What is the purpose of graphic design?	Effective communication for the user to visually see and do
Which text alignment is considered weakest? Why?	Justified as it is more commonly used for books

## Journal exercise 3B What does W3 do well

This exercise is to get you in pairs to do a **walk-through of W3 Schools**. The best way to assess this product in terms of how well it works as a learning environment is to have an experienced user observe somebody who has not used it at all or very little.

### What goes well for them what does not?

Create a table like the one below and document the processes and the user goes through the site.

Remember that the user is not being tested the website is, do not make them feel awkward and work together to find issues with the site. Try to get three or four pages of testing done.

You may wish to document if the issue relates to content, UX or UI or a combination.

Website Page	Initial Thoughts	Problems	Solution Suggestion
Initial page	<ul style="list-style-type: none"><li>Nice colours, appealing and good touch of simplicity. Seems relatively straight forward.</li><li>Pretty basic and easy access</li><li>Various option for code language</li><li>Its free for basic knowledge</li><li>You can subscribe to learn more</li><li>You can get certified and go professional</li></ul>	<ul style="list-style-type: none"><li>Unaware to scroll down to see entire website. (There was a lot more to the website than initial glance)</li><li>Difficult to follow through with the website compared to other websites</li><li>Heaps of ads popping up</li></ul>	<ul style="list-style-type: none"><li>Prompt user to explore entire page as many options were discovered during scroll down.</li><li>Website upgrades</li><li>More tools to the website</li><li>Make it ad free</li></ul>

<b>Learn HTML 5 Tutorial</b>	<ul style="list-style-type: none"> <li>• Able to identify the example of HTML</li> <li>• Can see a physical tutorial and a video tutorial</li> <li>• Different options</li> <li>• HTML references are ordered from the top</li> <li>• Monthly certified for a fee to be paid</li> <li>• Shows progress during the usage of the site</li> <li>• Gives you quizzes as options to take</li> <li>• Shows definitions</li> </ul>	<ul style="list-style-type: none"> <li>• Bombardment of text on left hand column. Although this is a website to learn HTML and it's relevancies.</li> <li>• Website appears compressed</li> <li>• Basic formatting</li> <li>• No specifications on which HTML currently browsing</li> <li>• You have to sign up to use online program</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction in text appearance.</li> <li>• More pages to spread out information</li> <li>• More colours and website tools with options</li> <li>• Make it free for users</li> </ul>
<b>HTML Images</b>	<ul style="list-style-type: none"> <li>• Vibrant colours</li> <li>• Can see three images together</li> <li>• Heaps of information and different texts which appear to be HTML language</li> <li>• Left column shows other HTML tutorial functions</li> <li>• Able to see HTML Syntax</li> </ul>	<ul style="list-style-type: none"> <li>• There is no dark mode available to bring text to life more</li> <li>• A lot of scrolling, to see other information</li> <li>• Unable to adjust the side tab</li> <li>• No practical video to walk through</li> </ul>	<ul style="list-style-type: none"> <li>• Offer dark mode</li> <li>• External type view so we can overview the information</li> <li>• Settings to adjust the tab accordingly</li> <li>• Video tutorial to add practicality to what is being shown</li> </ul>

	<ul style="list-style-type: none"> <li>• Few advertisements are shown</li> <li>• Try it yourself options are apparent</li> <li>• Many subheadings for HTML Images and its various operations</li> </ul>		
HTML CSS	<ul style="list-style-type: none"> <li>• An example is shown of what HTML Style CSS is</li> <li>• Initial reading shows me that CSS stands for Cascading Style Sheets</li> <li>• Understand it is to format the layout of a page</li> <li>• Plenty examples of how to use and operate this function</li> <li>• CSS Colours, Fonts and Size which match quite similarly with what we are doing at the moment</li> <li>• Try it yourself takes me to a different webpage</li> <li>• Two split columns on working pages – one with the initial code and column showing the output</li> </ul>	<ul style="list-style-type: none"> <li>• Perhaps appealing the characters text more</li> <li>• Make the text a lot bolder</li> <li>• Each function is not separated clearly enough to distinguish function</li> </ul>	<ul style="list-style-type: none"> <li>• Use bold text for the characters</li> <li>• Show importance of dominant characters by focus either table or colours to highlight</li> </ul>

<b>CSS Colours</b>	<ul style="list-style-type: none"> <li>• Primary colours are shown on the main page</li> <li>• Can see colours are specified using predefined color names</li> <li>• These are RGB, HEX, HSL, RGBA and HSLA</li> <li>• Many colours in this section which stands out to me</li> <li>• Different type of colour borders etc</li> </ul>	<ul style="list-style-type: none"> <li>• Color is spelt differently here in NZ "Colour"</li> <li>• As mentioned before the middle page could be adjusted to be wide</li> <li>• No borders for each title</li> </ul>	<ul style="list-style-type: none"> <li>• Add subheadings to top of page as a contents form</li> <li>• Perhaps when running the program to run on same page than opening up another tab</li> </ul>
<b>OpenSea</b>	Introduced with a video Mayfair promotion. Appears to be an NFT market buy/sell place. Looks like an application store.	Website does not exactly say what it is, or an about/introduction. Discovered this information at the bottom of the page.	Perhaps ideal to have the "about" information of the website at the top.
<b>Shopify</b>	Fonts are clear, images are in good size and quite spaced out for readability.	Choice of colours are on the light side.	Offer a dark mode – as per many websites have today.



# Journal exercise 4: UI Elements and Principles of Design

You have discussed the difference between UI and UX design. Whilst we are not training you to be graphic designers UX designers work with UI designers. It is useful to understand some of the language associated with graphic design as well as the processes. 1 exercise is a taste.

In this exercise you will define the terms below. In pairs go through this sheet and fill it in. Make sure you all get a copy for your journals. Find some examples of images and evaluate them in relation to these terms. The images can be examples of graphic design, art or interfaces.

When you have finished considering the elements and principles go through the Moodle page on type and

Create a test page of notes on color and type in html internal CSS and inline CSS. Take a screenshot for your journal.

Create a webpage of divs using percentages showing some color palettes. Eg triadic color, analogous color, primary color. Take screen shots for your journal.

Create HTML test page

**This is my colour theory page**

**This is my complimentary example**

**Red and green should not be seen**

**These three "Divs" make analogous colour**

colour 1

colour 2

colour 3

**These three are triadic colours**

colour 1

colour 2

colour 3

**My split-complimentary example**

**Yellow-Green + Purple**

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What is the purpose of graphic design?	Effective communication
Which text alignment is considered weakest? Why?	Justified as it is more commonly used for books

## These topics include:

- **How well does w3 explain the concept of a skeleton. Does it make it clear what goes in each part? Does it make it clear what each part is for?**

Typing “HTML skeleton” in the search bar gives us options to choose from. We selected HTML Skeleton which took us to a page. W3 explains the skeleton is the supporting framework of an organism. In HTML terms; it advises every Web developer should have an HTML skeleton. W3 explains each part quite clearly.

- HTML Skeleton; starts with an html tag – informing the browser this is an HTML document:

`<!DOCTYPE html>`

- HTML tag and converting to English `<html lang = “en”>` “closing”

- HTML (everything before the body becomes the head) Meta Charset

`<meta charset=“UTF-8”>`

“defines character set”

- HTML standard requires a proper page title `<title>Page Title</title>`

- Meta viewport tag makes the page look good on all screen sizes (Laptop, Mobile)

`<meta name=“viewport” content=“width=device-width,initial-scale=1”>`

- The link tag links to stylesheet

`<link rel=“stylesheet” href=“name”>`

- Start tag and end tag surround future CSS styling

`<style></style>`

- The script tag links to a script

`<script src=“name”></script>`

- Start tag and end tag surround the visible body of the HTML document

`<body></body>`

- Image tags define HTML images

`<img src=“img_la.jpg” alt=“LA” style=“width:100%”>`

- Make it a habit to pack HTML sections in div elements (give each section a class name)

`<div class=“class name”></div>`

- Heading tags define HTML headings

`<h1>This is a heading</h1>`

- Paragraphs tag define HTML paragraphs

`<p>This is a paragraph.</p>`

`<p>This is a another paragraph.</p>`

- **Does w3 cover headings well? Can your subject make headings?**

`<h1>This is a heading</h1>` (Mentioned in the skeleton)

- **Does it cover paragraphs well?**

`<p>This is a paragraph.</p>`

- **We know that each element of type can have; an attribute, a property and a value does it explain this well? Can your subject say and point to these things in an example of code**

The selector which is used to select elements with a specified attribute and value

[attribute=“value”]

example; `a[target=“_blank”] {`

`background-color:yellow;`

“This means it selects all <a> elements with a target=“blank” attribute:

href attribute specifies the URL of the page and link `<a href=http://www.w3schools.com>`

- We looked early on at lists and found that they could be ordered and unordered and each list item needs an `li` tag. Can your subject make a list. If they forgot how to do this can they find it on W3 schools

Unordered lists start with `<ul>` tag. Each list item starts with the `<li>` tag.

Example

<pre> &lt;ul&gt;   &lt;li&gt;Coffee&lt;/li&gt;   &lt;li&gt;Tea&lt;/li&gt;   &lt;li&gt;Milk&lt;/li&gt; &lt;/ul&gt; </pre>	<pre> &lt;ol&gt;   &lt;li&gt;Coffee&lt;/li&gt;   &lt;li&gt;Tea&lt;/li&gt;   &lt;li&gt;Milk&lt;/li&gt; &lt;/ol&gt; </pre>
<ul style="list-style-type: none"> <li>• Coffee</li> <li>• Tea</li> <li>• Milk</li> </ul>	<ol style="list-style-type: none"> <li>1. Coffee</li> <li>2. Tea</li> <li>3. Milk</li> </ol>

- Tables are only used in current times for tabular data. At one point people used to lay out websites this way but it was difficult to style this way. Can your subject find where to get a table

```

<table>
<tr>
  <th>Company</th>
  <th>Contact</th>
  <th>Country</th>
</tr>
<tr>
  <td>Alfreds Futterkiste</td>
  <td>Maria Anders</td>
  <td>Germany</td>
</tr>
<tr>
  <td>Centro comercial Moctezuma</td>
  <td>Francisco Chang</td>
  <td>Mexico</td>
</tr>
</table>

```

## A basic HTML table

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Centro comercial Moctezuma	Francisco Chang	Mexico

To understand the example better, we have added borders to the table.

There are HTML Table, Table Cells <td>stands for table data(cell in a table), Table Rows (<tr></tr>) Table Headers <th>Email</th>

- Does w3 explain the concept of a URL the tag element is "a". Can your subject do this?

<a href=<https://www.w3schools.com>>

The <a> tag defines a hyperlink that is used to link one page to another

Most important attribute to the <a> element is the (href) attribute

- Unvisited link is underlined and blue
- Visited link is underlined and purple
- Active link is underlined and red

if href is not used, it is only a placeholder for a hyperlink

- Can they link images and find out how to do this quickly. Are there any tips for new players?

<a href=<https://www.w3schools.com>>

</a>

- Does w3 explain early on the difference between inline, internal and external styles?

Inline: using the "style" attribute inside HTML elements

Internal: using the <style> element in the <head> section

External: using the <link> element to an external CSS file

- Do you get to style text in terms of color and heading early on?. A good way to start doing this is inline. Can your subject find how to do this on the w3 site?

```
<!DOCTYPE html>
<html>
<body>

<h1 style="color:blue;">A Blue Heading</h1>

<p style="color:red;">A red paragraph.</p>

</body>
</html>
```

A Blue Heading

A red paragraph.

- In class we touched on doing a thing called a combinator selector. Can you find this? This could be to style two sizes of a heading in the same color. Can your subject do this or find out how to do this on the page?

A combinator is something that explains the relationship between the selectors. Below is Descendant Selector used in "divs".

```
<!DOCTYPE html>
<html>
<head>
<style>
div p {
background-color: yellow;
}
</style>
</head>
<body>

<h2>Descendant Selector</h2>

<p>The descendant selector matches all elements that are descendants
of a specified element.</p>

<div>
<p>Paragraph 1 in the div.</p>
<p>Paragraph 2 in the div.</p>
<section><p>Paragraph 3 in the div.</p></section>
</div>

<p>Paragraph 4. Not in a div.</p>
<p>Paragraph 5. Not in a div.</p>

</body>
</html>
```

### Descendant Selector

The descendant selector matches all elements that are descendants of a specified element.

Paragraph 1 in the div.

Paragraph 2 in the div.

Paragraph 3 in the div.

Paragraph 4. Not in a div.

Paragraph 5. Not in a div.



- When we view the page in a browser will it be all over the show because we have not put the text inside any page divisions. Can you make these?

Yes – colour will not appear if `<div></div>` are removed or if text then it would say “Not in a div”

- Does w3 explain the concept of class well? See if your subject understands this.  
HTML class is used to specify a class for an HTML element. Often used to point to a class name in a style sheet. Class contains attributes to style
- We have used the saying "Mary's brother paddles canoes to remember the box model. It stands for margin border padding and content. What is this about?  
The styling of the element.

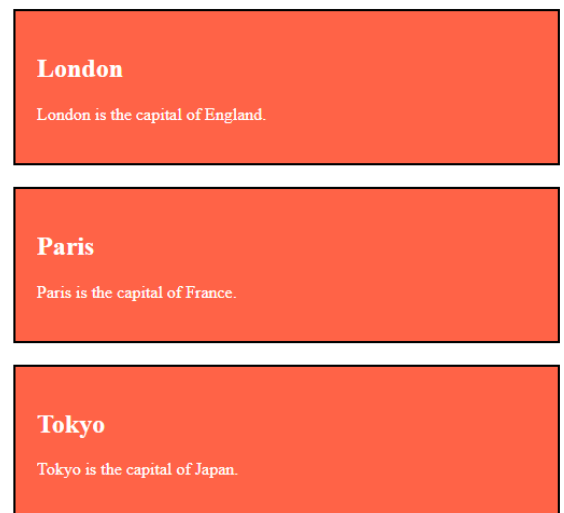
```
<!DOCTYPE html>
<html>
<head>
<style>
.city {
  background-color: tomato;
  color: white;
  border: 2px solid black;
  margin: 20px;
  padding: 20px;
}
</style>
</head>
<body>

<div class="city">
<h2>London</h2>
<p>London is the capital of England.</p>
</div>

<div class="city">
<h2>Paris</h2>
<p>Paris is the capital of France.</p>
</div>

<div class="city">
<h2>Tokyo</h2>
<p>Tokyo is the capital of Japan.</p>
</div>

</body>
</html>
```



There are other things not yet covered such as pseudo classes and floats even to make a navigation bar you need to understand these. How well is covered early on.

As you go through these concepts in pairs write down how well each is explained

Pseudo Classes: Special state of an element. Style an element when a user mouses over it, styled visited and unvisited links differently and style an element when it gets focus.

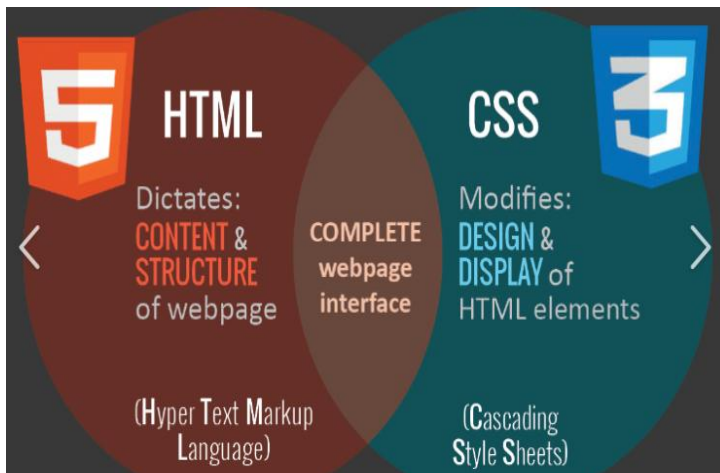
Floats: Specifies whether an element should float left, right or not at all.

Below is an example

```
selector:pseudo-class {
  property: value;
}

img {
  float: right;
}
```

- Can your subject explain these term and examples



```
HTML
<html>
<head>
  <style>
    body {
      background-color: red;
    }
  </style>
</head>
<body>
  <h1>Welcome to GeeksForGeeks!</h1>

  <p>This page has red background color</p>

</body>
</html>
```

- Output:



- Log your findings in the word table you stated last class. Suggest and improvement if you can think of one.

**This lesson includes the final part of journal exercise 4 and is about type**

**There are many ways we can size type these include:**

- sizing in pixels
- sizing in percentages
- sizing using em (each em is a relative to the foot size ie 2 em is double the original)
- sizing heading h1 to h6

**Type styling is always about**

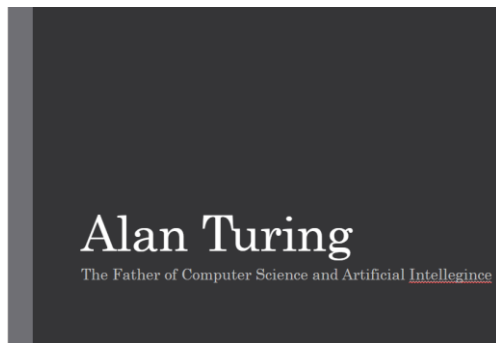
**communication. We will constantly style our heading to create hierachy. For this reason we will do this in internal css.**

This page will discuss and explore type and the web. This page could cover:

- a little bit of history
- web safe font
- recommended number of characters for devices
- type and colour
- laying out type

Feel free to make and create

## Journal Exercise 6: Historic Content (PowerPoint presentation)



### Early Life

- Alan was born in Maida Vale, London
- During primary school Alans the headmistress considered him a genius
- He was also an Olympic-level runner and used to run 10 miles between the two places where he did most of his work
- He had a slight stutter not as bad as the dramatic portrayals but more he took his time finding the right words
- He didn't keep his sexuality a secret among his friends
- When Alan was 13 he rode his bike 97kms to his first day of school as it coincided with 1926 General strike he even stayed overnight at an inn
- Alan had an IQ of 185

### Enigma

- Enigma was a cipher device used by the Nazis
- Alan designed and built the Bombe for the British Government
- The Bombe was cracking 84,000 enigma messages each month
- It is estimated that Alan Turing saved 14 million lives by breaking the Enigma
- The breaking of the U-Boat Enigma is said to have ended the war 2-4 years earlier
- The cracking of Enigma also helped the Allies in the pacific as the Germans gave their cipher device to the Japanese

### After The War

- After the war Alan worked on the development of the first electronic digital computers.
- Alans design the Turing machine was only a theory until he died and it was created by
- After the war no one knew about Alan and his co-workers
- Alan was convicted of Homosexuality and Indecency
- He was told he could either go to jail or be on probation which had a condition of being chemically castrated
- In 2009 a petition to apologise for Turing's prosecution was signed by more than 30,000 people, the Prime Minister of England Gordon Brown released a statement apologising on the 10<sup>th</sup> of September 2009

## Conclusion

- Alan Turing was a British Mathematician
- He played a crucial role in World War 2 cracking the nazi codes
- He is widely considered the father of computer science and artificial intelligence
- Turing was openly gay, which was illegal at the time in Britain
- Alan died by suicide in 1954 at the age of 41
- Queen Elizabeth II granted him a posthumous pardon

## Journal Exercise 7: Informal evaluation

Go to the websites that suck page and consider  
<http://www.webpagesthatsuck.com/index.html>

The site critiques a range of sites for all kinds of bad practice. In pairs explore this site and find some examples that fail under the following categories.

1. First Impression / Big Picture
2. Text and Links
3. Graphics, Video, Audio
4. Navigation
5. Content

Investigate their checklist of mistakes.

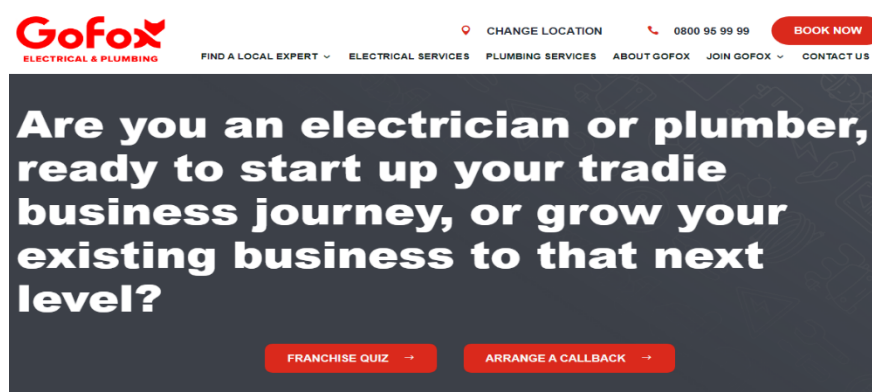
Choose a site to discuss with the group.

Do some screen captures of web pages, place in your journal and put some notes as to why these pages failed.

(finish your timelines.)

### 1. First impression/Big Picture

*Here you can see the letters in a paragraph bold text which make up the most of the web page.*



#### Why become a GoFox Electrical or Plumbing Franchise?

**1**

Belong to an organisation with proven industry leadership success.

**2**

Enhance your journey to becoming a successful business owner.

**3**

Access systems, training & support to help run your business more effectively.

**4**

Enhance your local reputation, delivering professionalism & customer service.

**5**

Combine your local capabilities with nationally leveraged advantages.

**6**

Connect with a team of like-minded business owners, learning & sharing knowledge.

## 2. Text and Links

***Text is quite thin which is lacking the dominant bold for the important input.***

***Last part appears to be cut off not showing the full text.***

***Also the links are not currently working or is safe to use.***

## 3. Graphics, Video and Audio

***Majority of this HTML is text input with only one piece of graphic.***

***Graphic is on the right side which is insignificant to the volume of text***

### Who We Are and What We Do

Maintain and sustain the number of developers, maintainers, and contributors, companies must increase their participation in and engagement with the open-source community. Here are three strategies to get started with open-source programs: Our Role and Functioning is 1927Events.com is a 2019 creation that provides you with pertinent product information prior to purchasing online. We strive to provide you with a time-saving online shopping research platform. 1927Events.com's primary objective is to make your shopping adventure hassle-free, stress-free, easy, and enjoyable. Using our site, you may look for any product without any hassle or complexity. We have created an data-driven system for online consumers and shoppers. We have a team of expert data analysts, product reviewers, and writers who work together to provide you with the best products online. Every day, we publish new articles, purchasing guides, and product evaluations—all supported by extensive research and real customer feedbacks. We are trustworthy because... We at 1927Events.com don't seek to tell you what you should purchase, nor do we market a specific brand or item. We strive to deliver you with the most truthful info available on every item. 1927Events.com collects data on a certain product from a variety of sources using machine learning algorithms, and then our specialists analyse it. We can provide you with accurate and clear assessments of every item. Our writing staff consists of experts with decades of experience who can guarantee high-quality content. We have several groups, such as the research group, data collection group, analysis group, content development group, and review group. Before posting anything online, we carefully evaluate it. [Readmore](#)

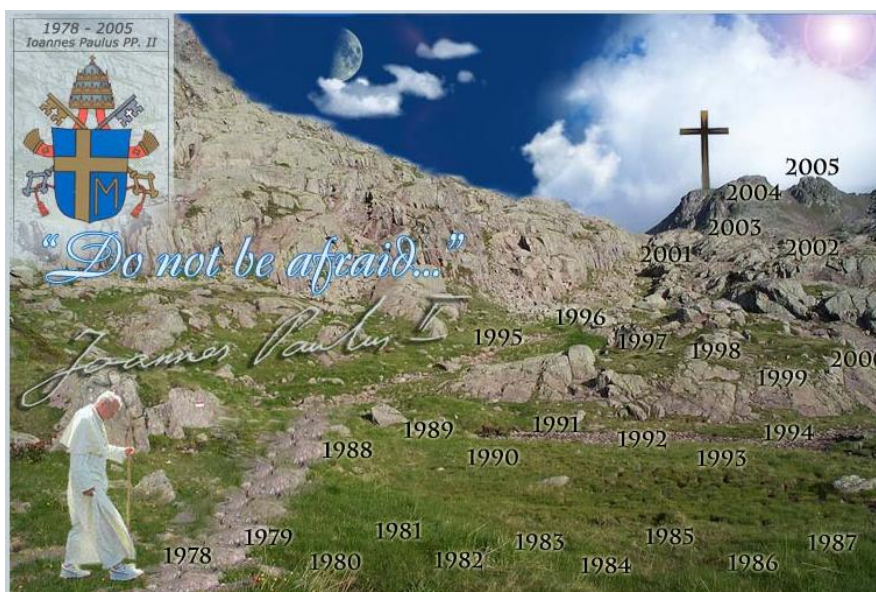


## 4. Navigation



*This website has a bombardment of text and links everywhere which makes it difficult to actually navigate the website.*

## 5. Content



*Confuses viewer of the content and the website appears to be a nice picture only.*



## Journal Exercise 8: Usability

Below is a link to Neilson Norman Group:

<https://www.nngroup.com/articles/ten-usability-heuristics/>

You will see a list of the ten usability heuristics.

Briefly paraphrase some definitions for these terms.

### **10 Usability Heuristics for User Interface Design (Used by UX designers)**

#### **1. Visibility of system status**

Communicates clearly to use of what the system state is etc your location at a shopping mall

#### **2. Match between system and the real world**

Order you do things should match. Etc stovetop controls matches the layout without needing to explain. Familiarity.

#### **3. User control and freedom**

Being able to undo and retrack steps

#### **4. Consistency and standards**

Consistency meets customers expectations. Building trust with users

#### **5. Error prevention**

Slips and mistakes (unconscious errors) and (conscious errors based on mismatch) between users mental model and design

#### **6. Recognition rather than recall**

Simple as can be, recognizing than recalling it helps memorizing

#### **7. Flexibility and efficiency of use**

Accelerators like keyboard shortcuts, customization. Ex regular routes shown on maps, locals with knowledge of area can take shortcuts

#### **8. Aesthetic and minimalist design**

Keep it simple, focussing on essentials

#### **9. Help users recognize, diagnose, and recover**

Use tradition error messages and temporary solutions

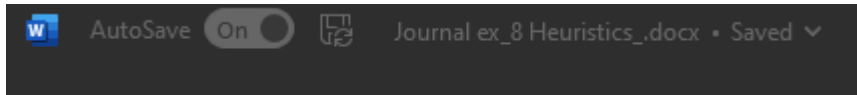
#### **10. Help and documentation**

Links to help on the page, be able to find the help needed.

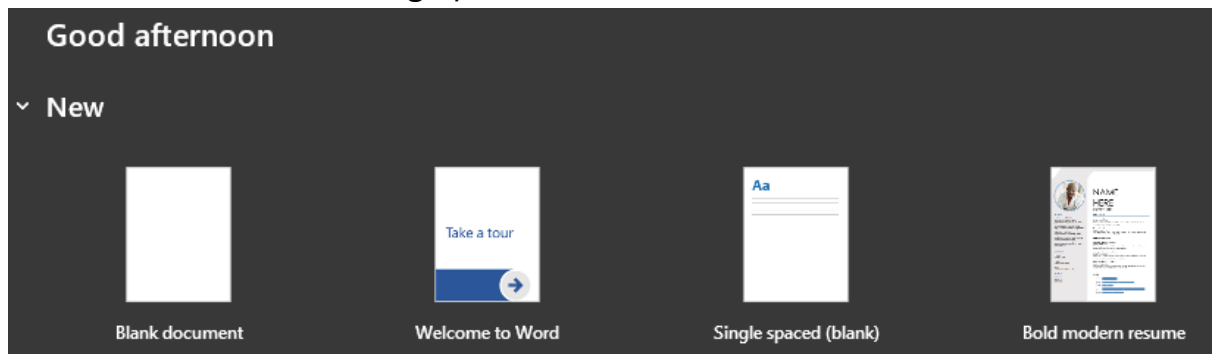
# Heuristic Evaluation Worksheet

## Project evaluating: Microsoft Word

### 1. Visibility of system status (Auto save on/saved)

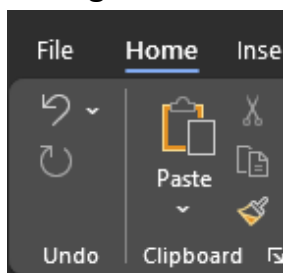


### 2. Match between system and the real world (Introduces good morning and blank document to begin)



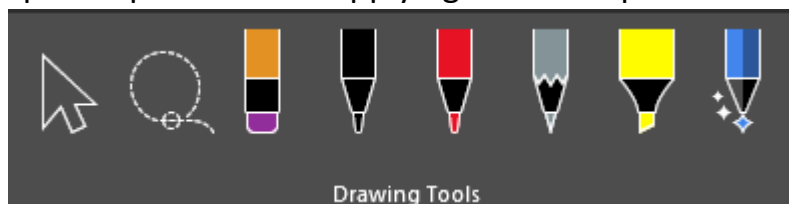
### 3. User control and freedom

Being able to undo and retrack steps



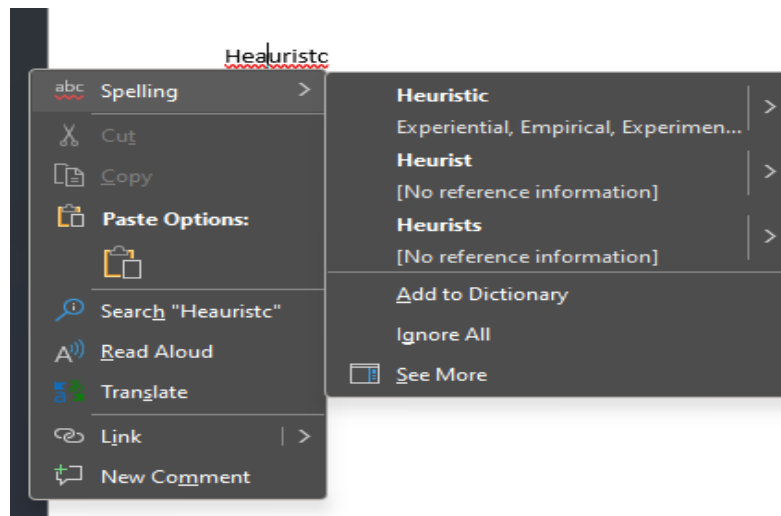
### 4. Consistency and standards

Consistency meets customers expectations. Colours matching the colour, specific pen or brush applying texture expected.



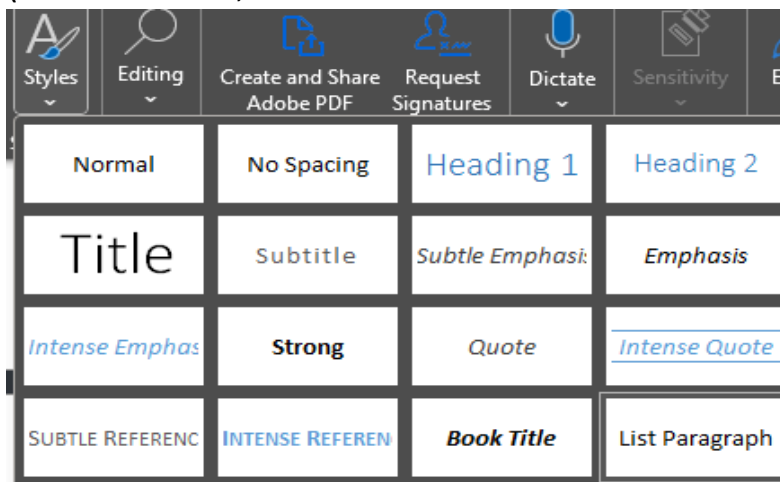
## 5. Error prevention

Slips and mistakes (unconscious errors) and (conscious errors based on mismatch) between users mental model and design



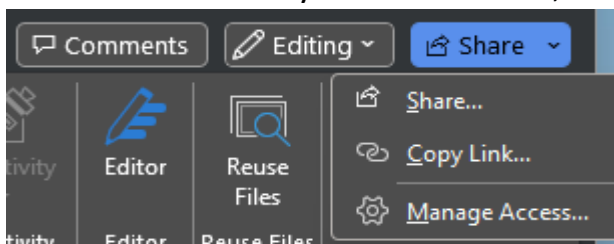
## 6. Recognition rather than recall

Simple as can be, recognizing than recalling it helps memorizing  
(Different fonts, when unknown name can select fonts)



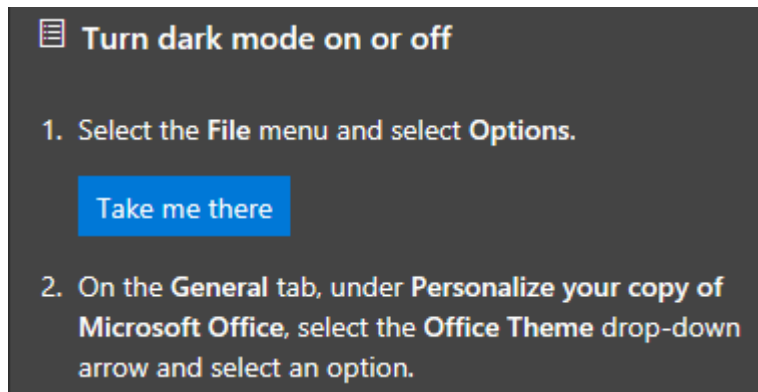
## 7. Flexibility and efficiency of use

Accelerators like keyboard shortcuts, customization. Ex regular routes



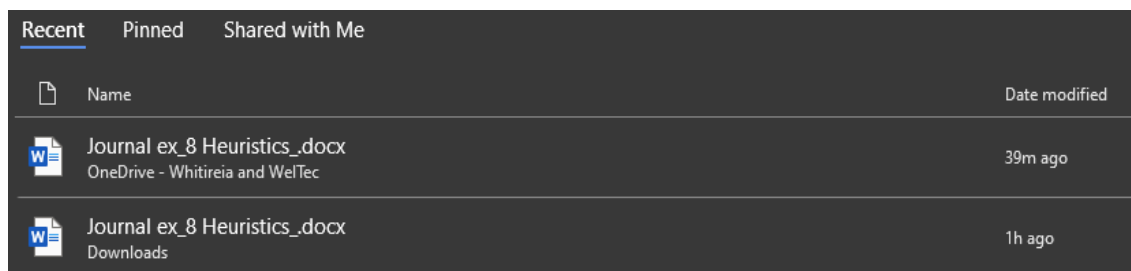
## 8. Aesthetic and minimalist design

Keep it simple, focussing on essentials. Switching to dark mode for a more effective nice contrast look.



## 9. Help users recognize, diagnose, and recover

Use tradition error messages and temporary solutions. Able to see recent documents saved, and last recently modified.



## 10. Help and documentation

Links to help on the page, be able to find the help needed.



## Journal Exercise 10 From ideation and requirements

Together we will analyse the information, content and goals for creating a website that offers web building services. This website will inform clients and users about some of the processes involved in interaction design.

Use some ideation (ideas generation) or brainstorming techniques included on Moodle or others you source on line. Produce some mind maps or use other techniques to document your process. You may do one mind-map or several, the choice is yours. You are welcome to source software to support you with this thinking.

Some topics to consider are listed below:

- Consider a metaphor for your web company

<b>Incredabull</b>	<b>Webmate</b>
<b>Waka</b>	<b>CreationHub</b>
<b>Writeone</b>	<b>Scriptstore</b>
<b>Park</b>	<b>Clickit</b>
<b>DrStudent</b>	<b>CyberSee</b>
<b>Moblink</b>	<b>Grab’N’Go</b>
<b>ThinkLab</b>	<b>Slimy</b>
<b>UceJuice</b>	<b>Keys</b>
<b>RedTooth</b>	<b>StrongZone</b>
<b>Fresh</b>	<b>Zebro</b>
<b>TeKaha</b>	<b>Data Dino</b>
<b>Up2</b>	<b>Tools4U</b>
<b>ProLifts</b>	<b>Mecca</b>
<b>Multiverse</b>	

- Consider a name for your company

# ThinkLab

- **Consider user requirements for this environment**

Page divisions, content, colour, images, information about the website, logo, how we work lifecycle, services, logo, who we are, portfolio, UX, UI, processes, overview, gathering requirements.

- **Consider functional requirements for this environment**

What features does ThinkLab need to meet those goals. Simple and effective. Confirmation emails, registering links, creating an account, calendar, availability schedules.

- **Consider ways that these could be mapped**

Able to brainstorm ideas using mind mapping techniques. You can make a diagram and link to each part of the website and its usability. Starting with Mecca in the centre and branching off all the ideas/relevant links from it.

- **Consider pages for this site**

**Home page**

**About page**

**Services page**

**Register page**

**Contact page**

- **Consider content for this site**

**Designs**

**Area of expertise**

**Inspiration/Motivation clips**



## Journal Exercise 10b Background Research

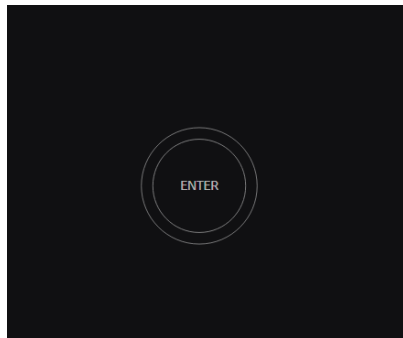
*Look at other websites that relate to interaction design and web design.*

*Note how they have communicated the processes they use to support their clients and the design of their website.*

*You may also get ideas from other types of websites.*

*Create some screen captures and describe what works well and what does not.*

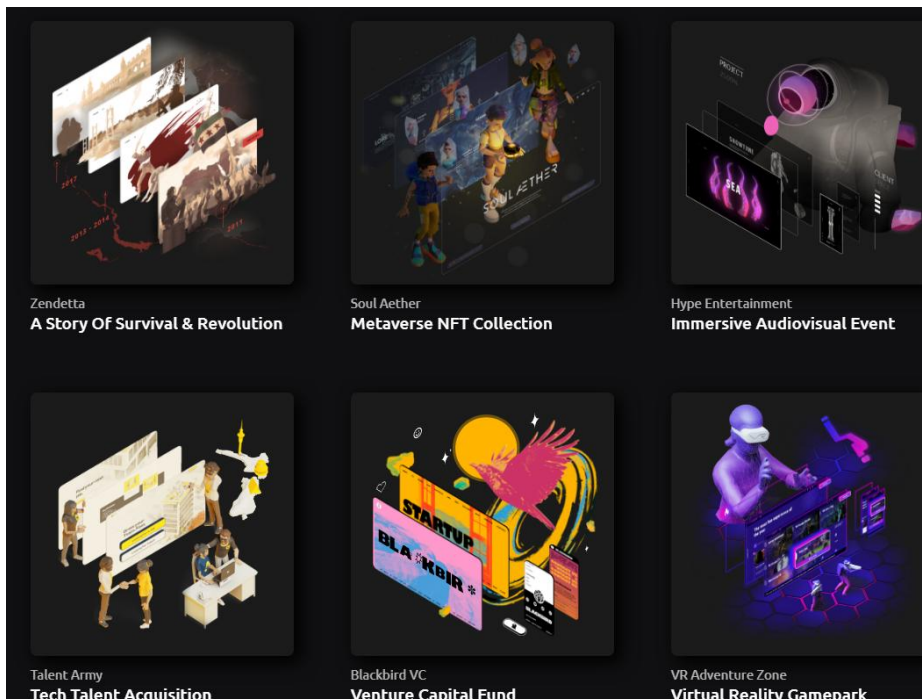
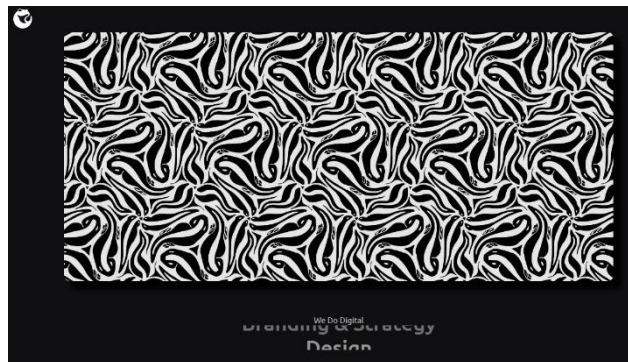
*You will use this thinking in your planning.*



### Psychoactive.co.nz

The illuminating glow of the button was quite cool. Which digitally and visually animates into the main home screen. This is by far one of the coolest websites I've come across.

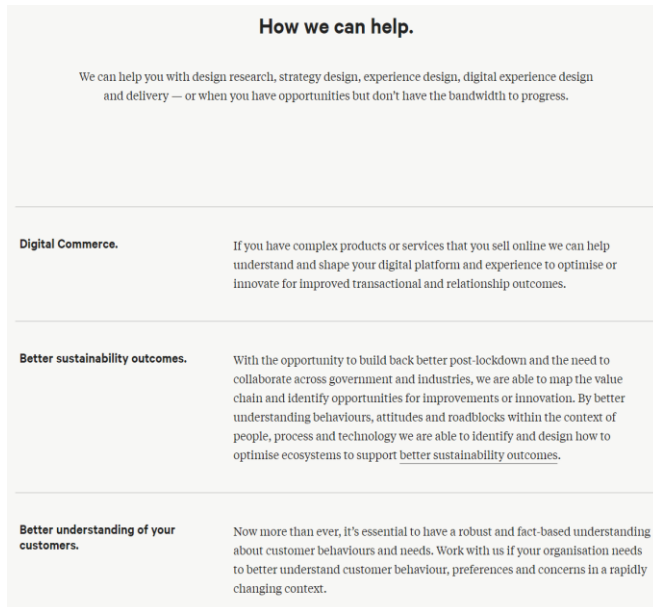
As you progress through to the next page, you are welcomed by a musical background theme and many animated pieces.



Each of these boxes, have slight animation. The dark background brings attention to the different links of this website.

## DNA.co.nz

You are greeted to a large photograph picture with DNA on top left hand corner, a sentence in the main centre of page and picture

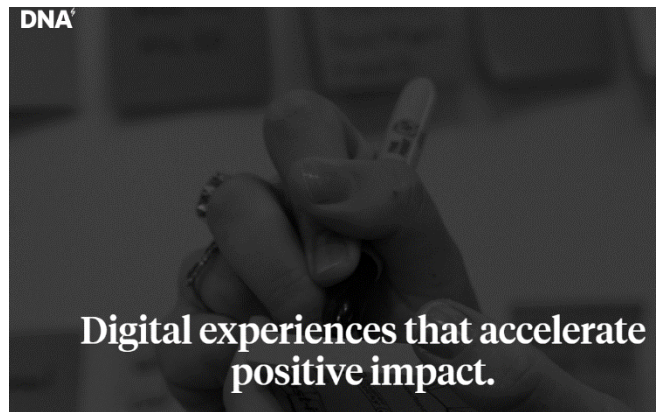
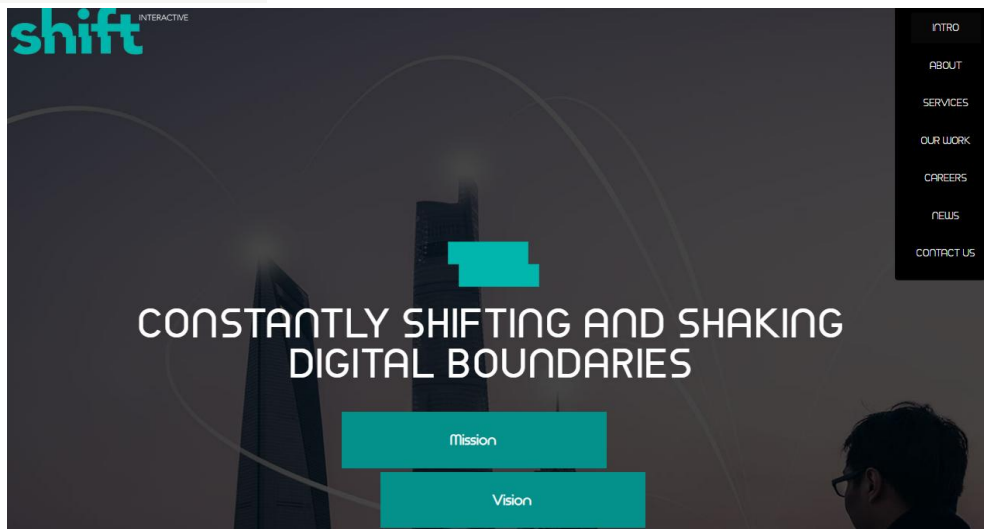


## Shift-interactive.com

A futuristic background wall paper. Shift logo looks like it has shifted.

The top hand right alignment of content is ideal for quick simple access.

Mission and Vision boxes to choose from.



background.

As you scroll down the page, each paragraph appears to hover in motion. This is a nice effect.



## FuelDesign.nz

A nice change from the typical black and grey contrast. Here is a nice hot red lava type back ground. Words of dominance along the bottom. Again website name on the top left hand corner.

## Journal Exercise 11 Digging deeper – Personas of people who could want to use the services of a web interaction design company.

You have briefly considered personas and viewed some examples.

In your second assignment you will be using the knowledge gained from your usability study to develop a product for a web development company that perceives co-creative processes and educating its clients/users integral to its processes. Many of the personas you have viewed are created in order to discover specifics in relation to this group of users.

Consider the type of person that may wish to use your web design company start with age occupation and general characteristics. Consider a range of personality characteristics, life constraints, values and experience. In considering who they are ask what attributes could influence your design. Use persona tools such as the one in the link on Moodle but add to it. Questions could include but are not limited to:

- what visual material appeals to them and what could we think about to assess this?
- What time restrictions do they have? This could influence device choice.
- Who are their clients ie. their target market?
- What websites do they visit and what do they think about these?
- How much travel do they and their clients do?
- What do they know or understand about interaction design?
- What level of experience do they have, consider both digital and life experience?
- What information could be useful in terms of culture and language?

It is suggested that you do three personas two primary ie direct users and one secondary ie people who could influence their use.

### Primary Persona (Direct Users)

**Name:** Boxing Bill

**Age:** 20

**Occupation:** Building apprenticeship

**General Characteristics:** Works hard, labourer,

Life Constraints: Budget, Living on allowance and minimum wage

Values: Family, Health, Travel

Experience: Student, Local gym goer

Interest: Crossfit

Motivations: Rich Fronin (Crossfit Athlete)

Goals: Own property

Attitude: Relaxed

Family Status: No children, live with Parents

Availability: After school hours

Visual material that interests is physical exercise, people moving and working together.

Time restrictions would be 6 weeks. Target market is construction workers, builders to get

into boxing. Websites visited are fitness type websites such as Fittek, Crossfit, Fit Competitions and Running. They really enjoy the fitness motivation video. Client knows nothing about interaction design. Both persona and clients travel locally. Minimum experience in digital but some experience in life. Hip hop music listened to and a cultural background.

**Name:** Squat Sandy

**Age:** 35

**Occupation:** Personal Trainer

**General Characteristics:** Gym goer, Health, Yoga

Life Constraints: Raising a young family

Values: Fitness first

Experience: 5 years PT

Interest: Teaching

Motivations: Children

Goals: Own Gym

Attitude: Perfectionist

Family Status: 3 children under 8

Availability: Weekends

Social media influenced websites such as general websites, myprotein and health post. The bright colours and seeing healthy food. Knows a good amount of interaction design. We have a time restriction of 1 year. Target market is young parents with children. 10 years experience in the fitness industry. Enjoys rock music and easy clean lifestyle background.

**Name:** Heavy Henry

**Age:** 50

**Occupation:** Real Estate Agent

**General Characteristics:** Post heart surgery, Church goer, Club Rugby

Life Constraints: Health implications

Values: God first

Experience: Played sports

Interest: Rugby

Motivations: Life

Goals: Losing 50kgs

Attitude: Trying

Family Status: Family of 7

Availability: Weekly

Biggest loser website and the weight loss transformation before and after photo's. Really enjoys seeing transformations. Little information about interaction design. Time restriction of 3 months. Target market those in the health high risk zone. Listens to church music and has had dietary issues with overeating.



## Journal Exercise 12 Mood Boards-style guide

Mood boards are part of the process involved in branding and establishing identity for businesses and people. Often a branding manual is created that states how things such as Logos, Type Faces colours etc are used in terms of marketing materials and communication materials for people and businesses.

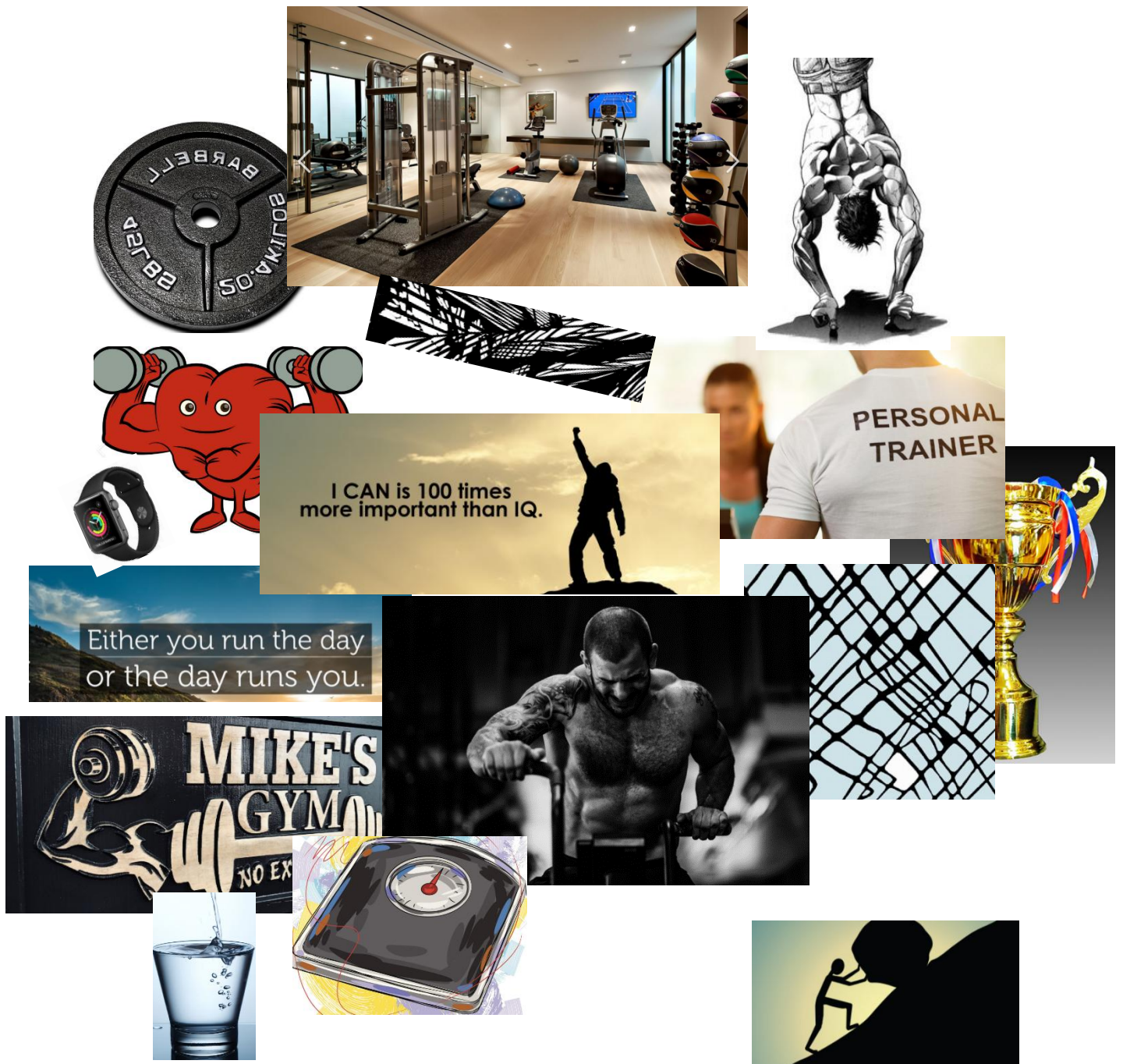
Investigate the links on the moodle page to mood boards and style guides and why we do them. In photoshop or any other software or even using paper a scissors create a mood board for your interaction design company website.

Do not forget to include the names of fonts and the RGB or hexadecimal color values for any swatches you have chosen.

Discuss what you have done with the group and do some evaluation.

See if you can find some examples of experience maps online.

Sketch a diagram of an experience map. (for your project)



## Journal Exercise 13

### Organise content and requirements, develop a site map

We have considered the concept of a website for a company that designs and builds websites for small businesses. This company perceives that their client's understanding of their processes in terms of interaction design is important. For this reason they would like their website to communicate these processes.

(You have seen through examples that a number of Interaction design based companies have websites that engage their stakeholders in their processes, this makes good reference material.)

Create a list of functional mainly content requirements for this company. You may want to use some of the brainstorming techniques you worked on earlier, you may also have included these are part of your brain-storming include these requirements. You will likely find that your journals will cover some of this content. (NB this may be used as content for the website but site the source of content that is not yours in your journal or online should you use it.)

As part of your user requirements consider how these ideas could be grouped. Thinking about scenarios, user stories and or mapping could help. (mentioned previous worksheet) Use any information that you have found through your usability research and personas, to consider the structure of a site map for this web design company.

### Mecca (Web interactive design company) Site Map



## Journal Exercise 14 Wireframes

After completing a site map for an interactive design company, you need to consider how your content is going to be laid out on each page. Go online and gather some screen shots of pages from websites that you believe work well.

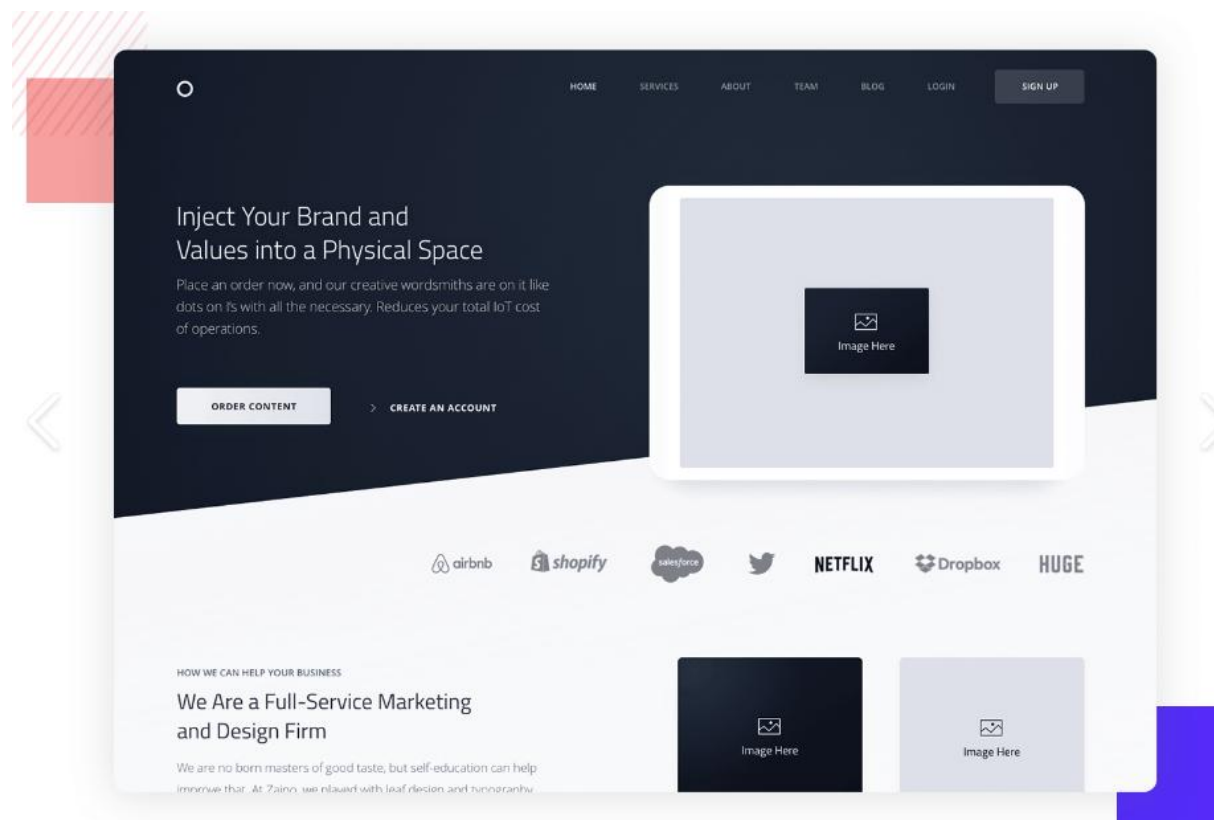
Consider some of the types of content that your site map should cover. Generate some ideas about how this content could be laid out, create some final wireframes.

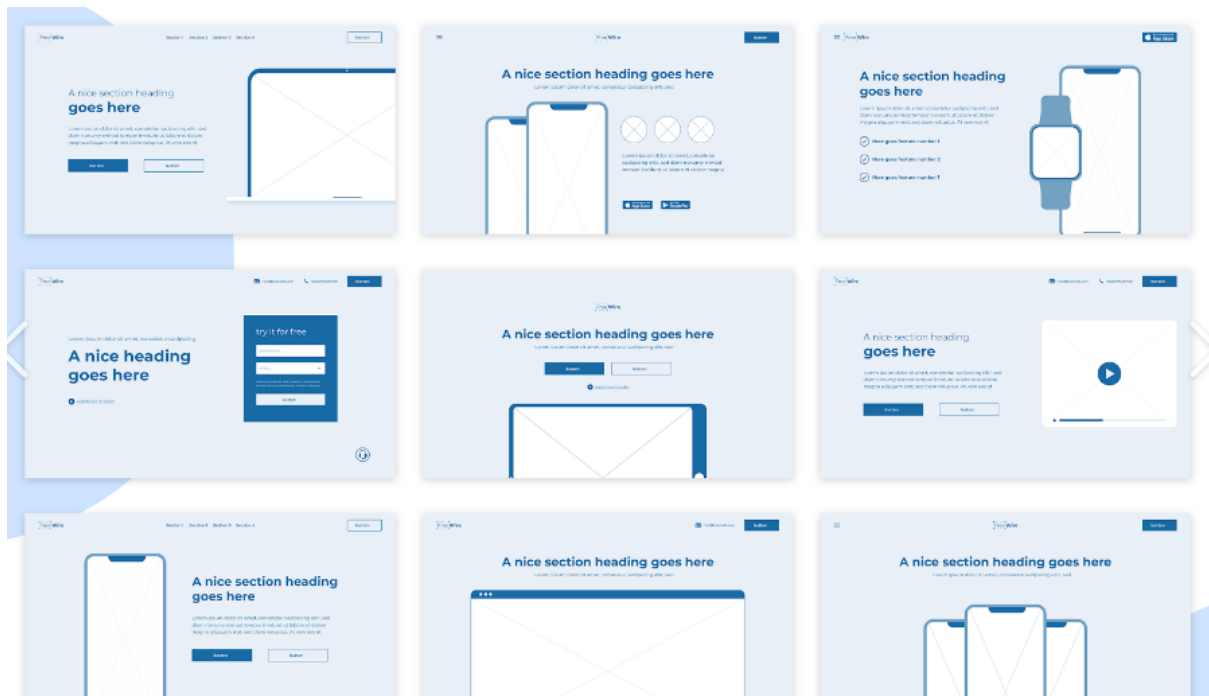
Remember the heuristic principles you explored particularly consistency. If the layout of every page is different this will create problems for your users and technical work for you.

Keep your page layouts consistent unless there is a reason for a particular page to be different. You may sketch out lots of ideas but cut this down to no more than 3 page layouts.

**Mecca is an interactive design company – specialising in fitness/sports/athletic style type and can broad out to other mediums.**

**Here are some inspiration for some wireframe Mecca layouts**





## Design Wireframe for Mecca

### Home Page

### About the Team

### Services/Pricing

### What we do – Interaction Design Processes

- Ideation
- Requirements Gathering
- Planning
- Testing



