

CHAPTER II

LITERATURE REVIEW

2.1 Website

Websites are one of the forms of interactive media which are accessible on any digital tools if equipped with internet connection. Beginning with its usage as static un-interactive pages with written text, websites soon evolve into an e-commerce platform and further blossomed as the usage of social media and blogs arisen. From the static computer-based websites, modern websites have adopted new layouts depending on the devices it is accessed with, enabling further reach and convenience (Griffey, 2020).

2.1.1 Educational Website

Websites are categorized as an internet based informational medium, and can convey various information. One of the information types that can be conveyed through websites can be educational, therefore websites if designed with education in mind can provide information to improve learning (Astuti et al., 2020). Educational websites have been developed to provide instructional materials to support the grasp on certain topics whether it is by inserting instructional graphics or interactive medias.

2.1.2 Micro-interaction

Micro-interactions are moments in which a simple interaction between the user and the product enhances the user's experience. The use of micro-interactions can greatly impact user satisfaction, creating a pleasurable effect depending on how it is executed. Micro-interactions are commonly used in single use case, or a tiny piece of interaction that does one role (Saffer, 2013, P.1-3). Micro-interactions can be seen in our daily lives or in medias used in daily life, for example by using a toggle in an application or device.

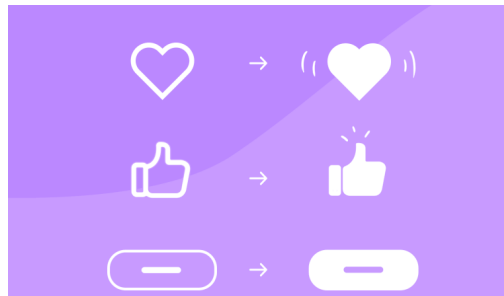


Figure 2.1 Example of Micro-interaction

Source: <https://www.justinmind.com>

Based on the micro-interaction theory, it can be concluded that micro-interactions between the user and digital media increases user satisfaction. Therefore, the author will be implementing the micro-interactions to increase user experience while engaging with the author's design.

2.1.3 Website Components

Websites require components to properly function as a design, as it contributes to a website's overall usability (Hong, 2018, P.57). Website components are important on each their own degree, and understanding these components yield to an effective website. The following are explanations of components used in websites.

1. Navigation

Navigation or menu is a tool which allows users to find their needed information without unnecessary hassle, the most common areas where navigation is placed are at the top of a website which promotes simplicity (Hong, 2018, P. 53-54).

a. Global Navigation

One of the universally used navigation style is the Global navigation, which can be found on the top left or right of a website as menus, sidebars and tabs. these navigational tools can often be compacted into "hamburger menus" or a row of

(Tidwell et al., 2020) three dots, when interacted with these tools often unravel and reveal various navigational directions

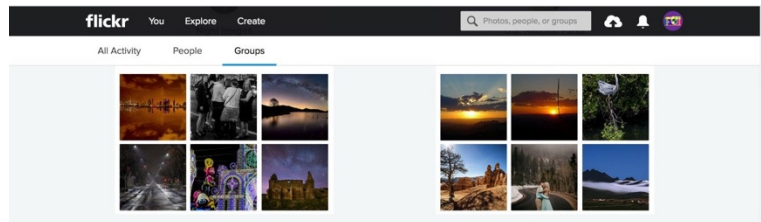


Figure 2.2 Example of global navigation

Source: <https://www.interaction-design.org>

b. Hamburger Menu

One of the most commonly used design of a global navigation is a hamburger menu, which are commonly placed on the top left or right of a website that unravels into a series of navigation or link buttons. They are shaped like three stacked horizontal lines, or in a set of three dots that functions the same way (Tidwell et al., 2020, P.132).



Figure 2.3 Example of Hamburger Menu

Source: <https://www.flowmatters.com>

2. Icons

Icons are simplified symbols which essentially summarize the context of the information about to be consumed. They can be found on things such as various interfaces or even road signs. Interpretation of information has been much easier with the use of icons as a visual aid (Hong, 2018, P. 37-38). The use of icons has been popularized due to its power of pulling viewer's attention by briefly describing the contents of a text.



Figure 2.4 Example of Icons

Source: <https://uxcel.com>

3. Header

Headers are one of the components of web design that improves navigation structure, and user engagement. A header acts as a navigation structure, providing users a way to navigate on a website or application by directing them into their desired paths (Tidwell et al., 2020, P.174).

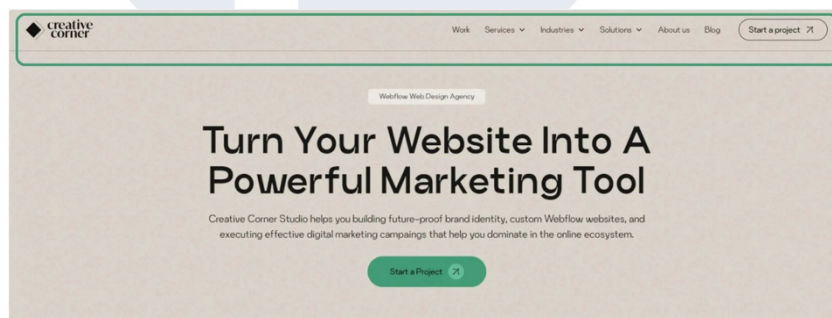


Figure 2.5 Example Of header

Source: <https://www.creativecorner.studio>

4. Footer

Footers much like headers, function as a navigational tool commonly placed on the utmost bottom of websites. Footers make complex informational sites much easier to navigate, and offers pathways to viewers into the next subpages after reaching the end of their current scroll on one page (Tidwell et al., 2020, P.180). By

giving more options after completing a subpage, the footer will encourage viewers to stay and further navigate a site.

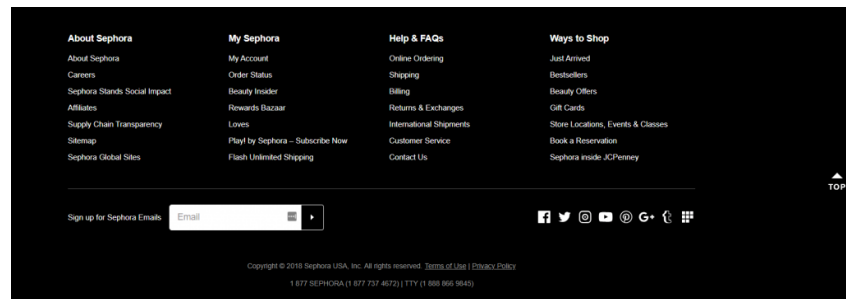


Figure 2.6 Example of Footer

Source: <https://colibriwp.com/blog/website-footers/>

5. Information Graphics

Information graphics are simply information displayed in a graphic form. They are an important aspect of information design as they display information in a brief and concise manner. Information graphics often take form as flowcharts, Diagrams or real-world objects, this method of visualization helps facilitate user needs and enhances user experience (Tidwell et al., 2020, P.433-434).

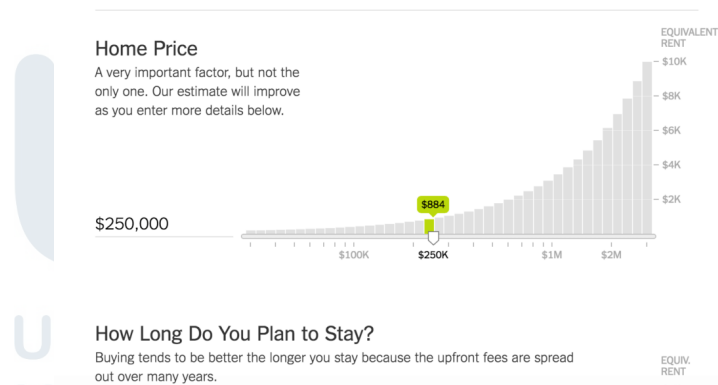


Figure 2.7 Information graphics

Source: <https://www.columnfivemedia.com>

6. Sequential Imagery

Information graphics are simply information displayed in a graphic form. Sequential imagery is a set of images that form a narrative when viewed in a certain order (Gateward & Jennings, 2015, P.56). They can convey a story through images and dialogue

in a graphic, conveying a story or a message. Sequential imagery can take various forms, like comics, storybooks, or the ancient hieroglyphs.

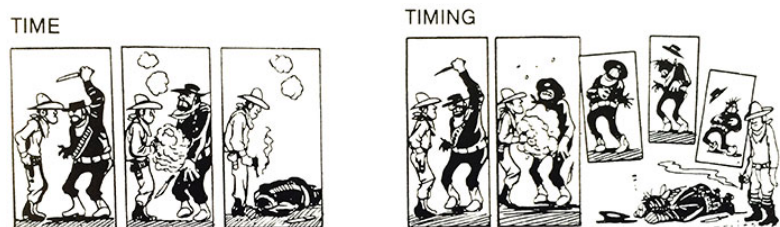


Figure 2.8 Example of Sequential Imagery

Source: <https://www.dsource.in>

Website components like navigation, icons, and footers play an important role in enhancing the usability and functionality of a design, and increases user comfort. The author will implement these principles into the current design to enhance user experience. Other elements like information graphics and sequential imagery will be used in the current design in order to engage users using visually demonstrational images regarding kitchen safety.

2.1.4 Design Elements in Websites

Design elements in websites are composed of important aspects of design that creates an enjoyable and useful interface. By using elements of typography, colors, various grids, and illustrations or graphics can one properly adhere to a user's enjoyment. Below are the further explanations of design elements required in the creation of a website.

1. Typography

Typography is one of the most important aspects of design, and can significantly influence an audience's perception of a design based on the chosen typeface (Hong, 2018). The usage of typography is to convey its contents much like its purpose on all forms of design medias, typography has been known to influence the audience's perception whether it is in a professional or inviting manner, therefore emphasizing in the importance of font selection.

a. Serif

Serif fonts are one of the popularly used fonts in various medias, and are commonly described as a typeface with strokes that extend from each letter. These typefaces have become quite popularized, namely famous fonts such as Georgia, Baskerville, and times new roman. These typefaces can be used to evoke elegance, romantic and classic moods (Hong, 2018, P.44-45).



Figure 2.9 Serif font

Source: <https://www.off-menu.com>

b. Sans Serif

The sans serif script is commonly associated with the serif script, sans the strokes that end after every letter. These typefaces are often considered as modern, clean and minimal. This typeface was popularized by a few prominent fonts, namely Gotham, Helvetica, and Arial (Hong, 2018, P.45).

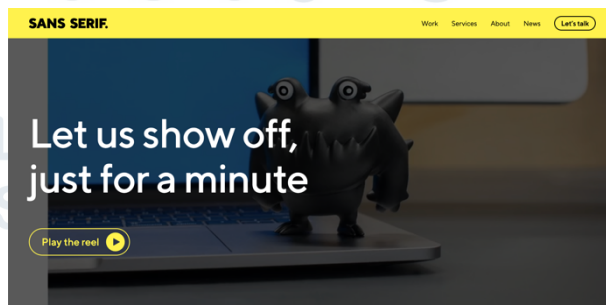


Figure 2.10 Sans serif font

Source: <https://www.sansserif.com/>

c. Script

The script font is commonly described as casual or informal due to its handwritten look, although not the best for body text this font evokes the feel of speed, familiarity and emotion (Hong, 2018, P.46).

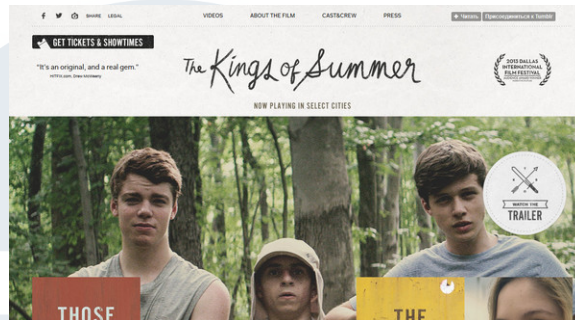


Figure 2.11 Script Font

Source: <https://designmodo.com>

2. Colors

According to Hong, color is a powerful visual component of design. Color has the power to evoke mood, attract attention, and convey a message (Hong, 2018). Emotion and mood of the audience may be affected by the choice of color and can be used in various combinations to produce interesting harmony or contrast, such as complementary, monochromatic, or contrasting color schemes.

a. Warm Tones

Warm colors are usually associated with balance, harmony and the feeling of intensity and warmth (Robin Landa, 2018, P.127). Warm colors can be found at the right section of a color wheel encompassing red and yellow hues.

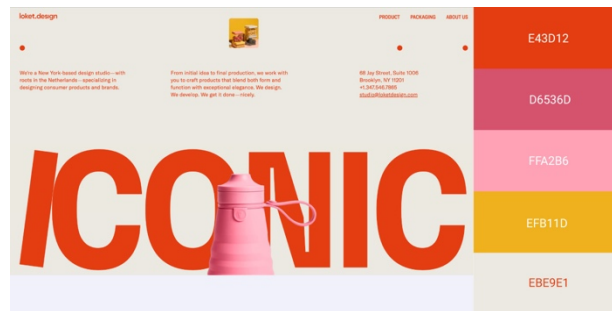


Figure 2.12 Warm toned colors

Source: <https://visme.co/blog>

b. Cool Tones

Cool colors take the opposite area of warm colors, which are the left area comprised of blue, purple and green hues (Robin Landa, 2018, P.127). Cool colors evoke a feeling of calmness and if used on a design will evoke balance and unity.

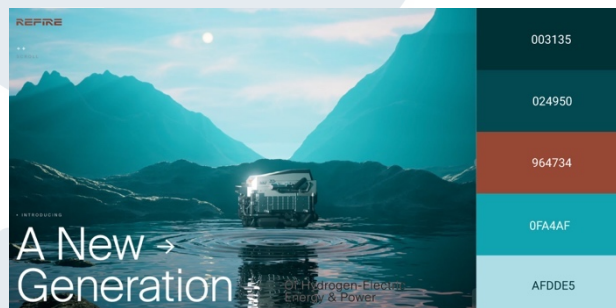


Figure 2.13 Cold toned colors

Source: <https://visme.co/blog>

c. Monocromatic

According to Robin Landa, the monochromatic color schemes can balance and unify a design as it is a color that utilizes one hue while ranging in the saturation and values (Robin Landa, 2018, P.127).

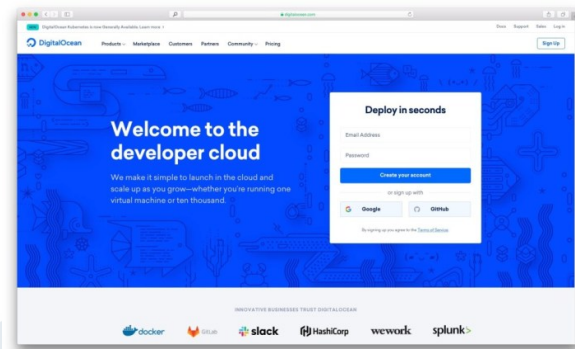


Figure 2.14 Monochromatic color scheme

Source: <https://uxportfolio.cc>

d. Analogous

Analogous colors are colors that are placed next to each other in a color wheel, they commonly transition to one another and can be used in order to create a harmonious design (Robin Landa, 2018, P.127).



Figure 2.15 Analogous Colors

Source: <https://www.entheosweb.com>

e. Complementary

Complementary colors are colors that cancel each other out, and produces a greyscale effect when placed next to one another. According to Robin Landa, complementary colors can be found across of one another in a color wheel, as they contrast one another (Robin Landa, 2018, P.127).



Figure 2.16 Complementary Colors

Source: <https://hookagency.com>

f. Split complementary

Split complementary colors are essentially a much complex version of a complementary color. In a color wheel, split complementary colors usually form a triangle, as split complementary colors are one color with two colors across of the chosen color in a color wheel. Just the complementary scheme, the split complementary colors create a high contrast with a gentler diffusion (Robin Landa, 2018, P.127).



Figure 2.17 Split Complementary colors

Source: <https://arounda.agency/blog>

g. Triadic

The triadic color scheme can be described as colors that are of equal distance from each other and forming an equal angled triangle inside a color wheel, they can take form of a primary triadic scheme or secondary triadic scheme (Robin Landa, 2018, P.127).

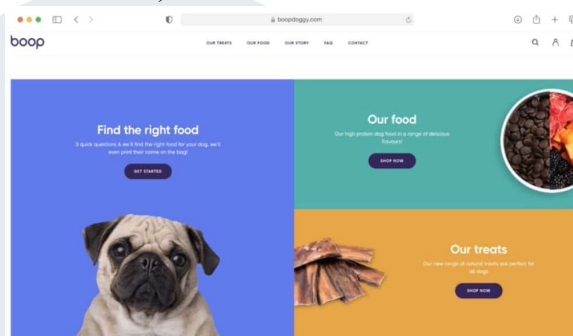


Figure 2.18 Triadic Colors
Source: <https://www.skillshare.com>

h. Tetradic

Tetradic color schemes are a combination of four colors in a color wheel, commonly composing of two pairs of complementary colors. Tetradic colors are often used due to its range in colors and favorable contrasts (Robin Landa, 2018, P.127).

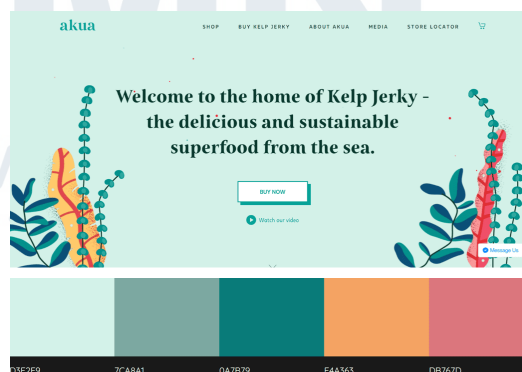


Figure 2.19 Tetradic colors
Source: <https://colibriwp.com>

3. Color Psychology

Color Psychology can be described as a fascinating field that delves into how colors influence human emotion and perception. Colors can influence human reaction and moods, and act as a visual stimulus that can affect an individual's self-image and well-being. Association of colors can be influenced by natural reactions such as how yellows are commonly associated with warmth of the sun, and blue being the constant reminder of the sky. Colors can mean significantly differently between cultures and historical context, creating a complex field that influences how individuals experience the world through design (Eiseman, 2017, P. 47-47).

a. Red

Emotions such as passion, courage, and love are commonly associated with the color red. In nature, the color red has been seen as a source of life providing, warmth yet also danger, evoking psychological responses that increase appetite and the increase of heart rate. The color red's connection to blood and fire strengthens its powerful essence in the human psychology, embodying life and threat in a human's psychology (Eiseman, 2017, P.48).

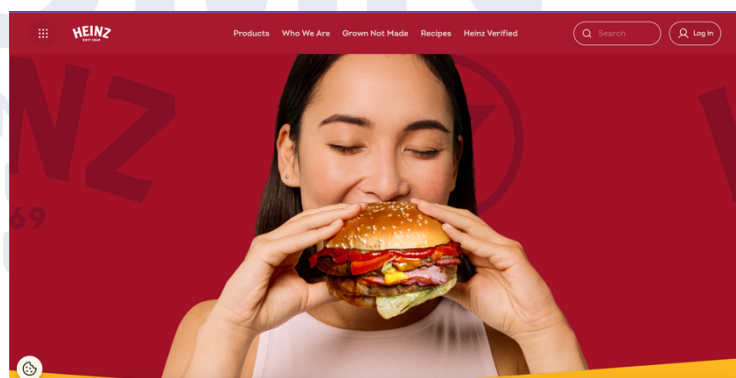


Figure 2.20 Heinz Ketchup Website

Sources: <https://www.heinz.com/>

b. Blue

The color blue is often reminiscent of the hues of water and sky, offering feelings associated with stability, calmness, and serenity. In terms of spiritual perspective, the color blue is associated with sincerity, truth, and devotion often used by garbs donned by religious figures such as the virgin Mary, and other goddesses of various religious and cultural backgrounds. Various shades of blue can be interpreted differently, for example darker shades of blue evoke an air of mystery as it suggests the depths of far-off galaxies as it leans to the power of the color black's darker depth (Eiseman, 2017, P.45-53).

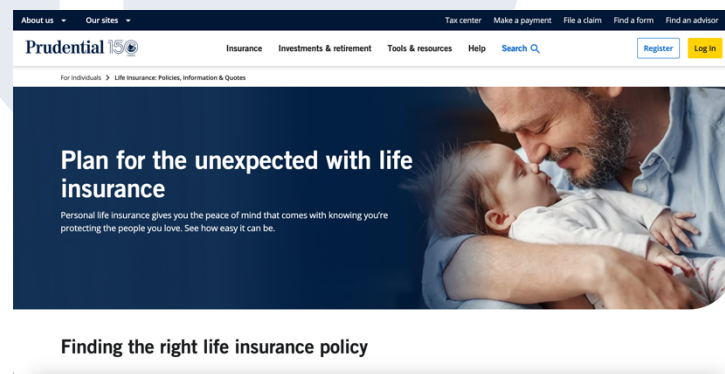


Figure 2.21 Prudential Website
Sources: <https://www.prudential.com>

c. Green

The color green is undoubtedly connected to nature and growth, and is often seen as a color that promotes harmony. The English language of green originated from the Germanic root "grun" much similar to the word grass and grow, which can be seen as a common phenomenon to other languages such as Slavic, and Greek. Green embodies well-being and health, and are commonly used in designs involving wellness and environmental themes. This sentiment has been remaining through the ages, as in ancient Egypt green

symbolizes rebirth and regeneration, followed by romans who favor green as it is associated with the goddess of gardens and vineyards Venus (Eiseman,2017, P.57-59).

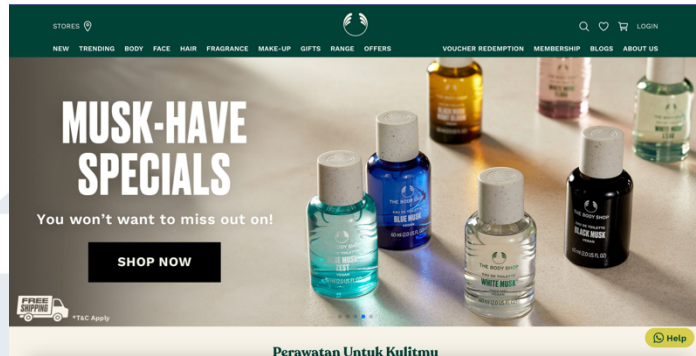


Figure 2.22 The Body Shop Website

Source: <https://www.thebodyshop.co.id>

d. Yellow

Yellow is often associated with the warm rays of the sun, as it radiates and reflects the sun's enveloping warmth symbolizing a new day or brightness from changing seasons and weather. Symbolically, happiness and cheerfulness can be used to describe vibrant yellows as yellow are believed to stimulate the left brain to think with much heightened clarity, preventing poor decision making, helping individuals to feel increasing amount of optimism (Eiseman,2017, P.63).

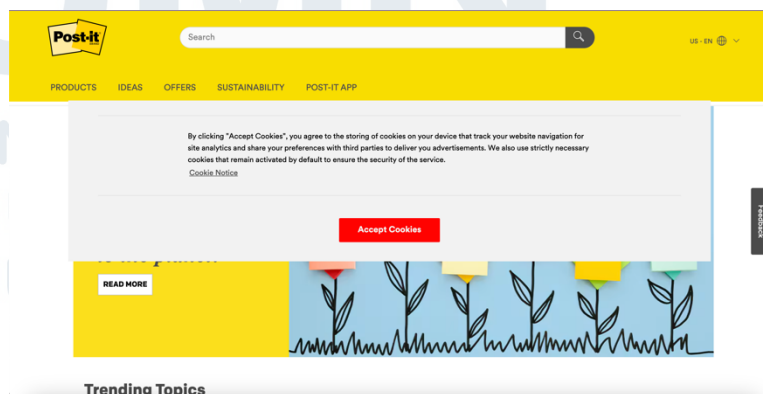


Figure 2.23 Post-It Website

Source: https://www.post-it.com/3M/en_US/post-it/

e. Orange

Orange is the result of combining yellow and red, yielding in a color associated with encouragement, creativity and enthusiasm due to yellow's cheerfulness and the warmth of red. Orange is typically used in socially evoking designs as it stimulates appetite and conversation by simulating impulsivity and spontaneity (Eiseman,2017, P.66-68).

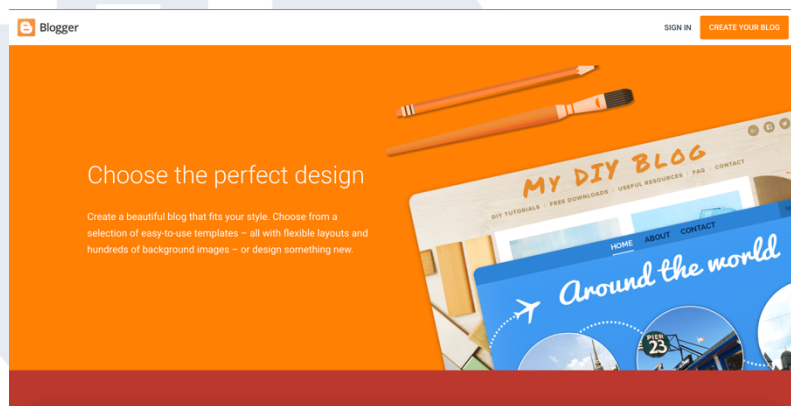


Figure 2.24 Blogger Website

Source: <https://www.blogger.com/about/>

f. Purple

Purple is a color commonly associated with luxury, royalty and sophistication, as historically purple is a hue that can be gained from labor intensive processes, making it an expensive color to afford. therefore, Greek governors and roman magistrates often favor this shade as somewhat of a status symbol. This phenomenon can be seen similarly in countries such as Japan, China, and the Aztecs (Eiseman,2017, P.69-72).

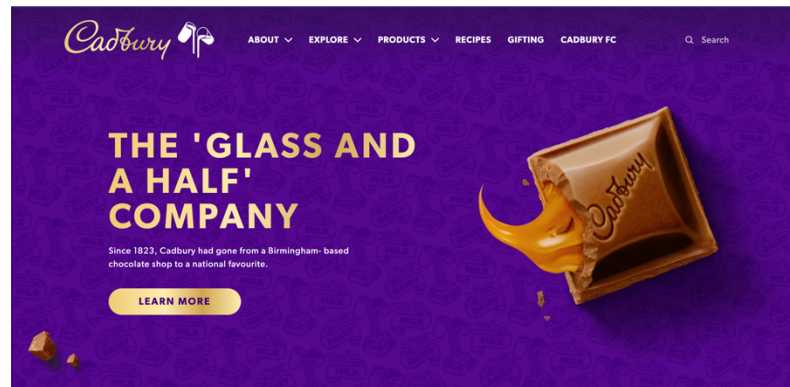


Figure 2.25 Cadbury Chocolate Website

Source: <https://www.cadbury.co.uk/>

g. White

White is often associated with purity, simplicity and innocence, as it is akin to freshly fallen snow, and clear clouds in a sunny sky. white is a popular choice used in minimalistic design as it evokes cleanliness, peace and tranquility, which may be originated from the cleanliness associated with hospitals and various cleaning products therefore offering an impression of sterility (Eiseman,2017, P.73-75).

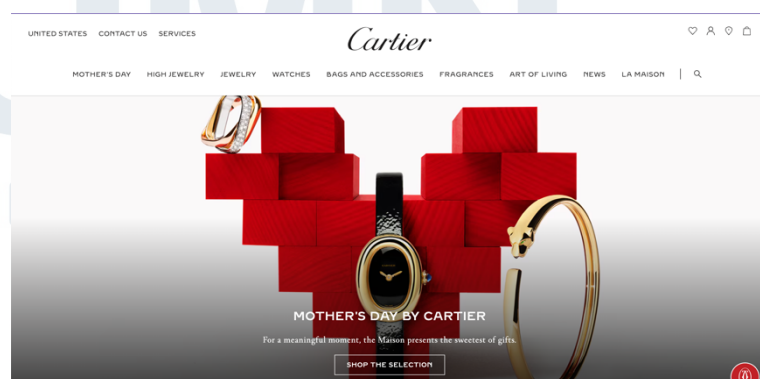


Figure 2.26 Cartier Website

Source: <https://www.cartier.com/en-us/home>

h. Black

Black is often associated with elegance, power, and sophistication. The black color is often favored by various

fashion and design, as it remains a timeless choice that never goes out of style. However black may have negative connotations as its associated with night time, giving an air of mystery. Black is also commonly used to describe negative moods, like mourning or unhappiness (Eiseman,2017, P.60-62).

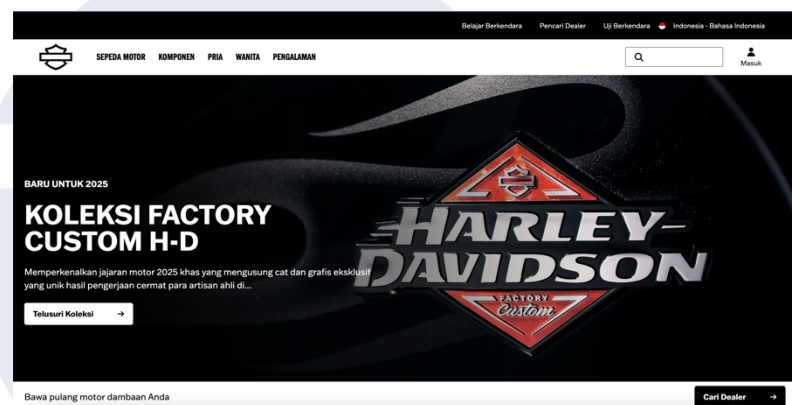


Figure 2.27 Harley Davidson website

Source: <https://www.harley-davidson.com/id/id/index.html>

4. Grids

According to the book of Practical Web Design by (Hong, 2018) grids are one of the main foundations of a website, and are helpful guidelines in order to design an interactive website page. Grids are one of the fundamentals of design forms creating a harmony between text, pictures, and data in order to communicate in a unified design. Using a grid creates a structured and systematic method of inserting large amounts of data while distinguishing different types of information all the while ensuring cohesion between visual elements and improving the viewer's navigation (Timothy Samara, 2005).

a. Hierarchic Grid

The Hierarchic grid is one of the essential forms of grids in website design, as it provides flexibility in width and depth to various layouts for varying content and screen sizes (Timothy Samara, 2005, P. 30). The hierarchic grids are

commonly used for websites that conform to the information's need, guiding the viewer's eyes to the important aspects of the displayed information by using visual hierarchy.

Source: <https://www.uxdesigninstitute.com>

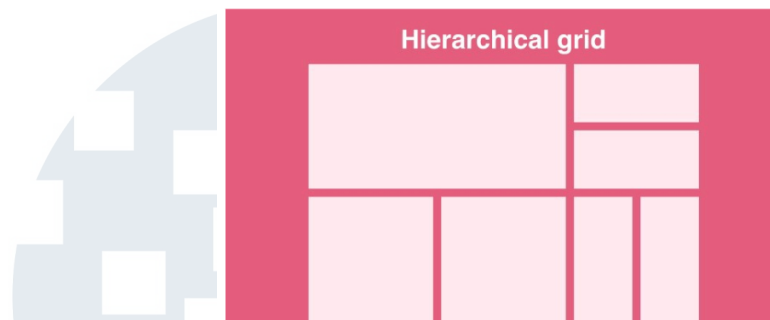


Figure 2.28 Hierarchal grid

b. Column Grid

Column grids are a common layout used by graphic designers on various medias, one of them being the website. The column grid is typically composed of various vertical columns which appear modular with vertical rhythm. This allows designers to arrange text and images in a balanced manner while maintaining rhythm and variety of layout (Timothy Samara, 2005, P. 114). A well-arranged column grid allows designers to create dynamic designs while maintaining a well distinguished visual hierarchy allowing them to differentiate various information through design.



Figure 2.29 Column Grid

Source : <https://www.uxdesigninstitute.com>

c. Modular Grid

A modular grid is a much complex variety of the column grid, with intersecting horizontal flowlines which create modules (Timothy Samara, 2005, P, 28). The Modular grid is suitably used for designs that involve varying information, as it creates an organized presentation. flexibility can be achieved by implementing the use of smaller modules, creating further room for adjustment and integration of various types of information.

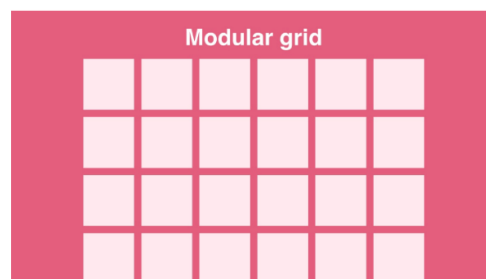


Figure 2.30 Modular grid

Source: <https://www.uxdesigninstitute.com>

5. Illustrations and Graphics

Illustrations and graphics convey the creator's ideas and information through the use of image, designs and symbols. They play a crucial role in educating and building the public's perspective on events and various topics and have become the heart of the graphic image, bringing various iconic images, events and history to life. Illustrations and graphics serve as a way to serve information through visual art if executed well (Lawrence Zeegen, 2009).

Design elements such as color, typography, color, visual layout and illustration are important aspects of a website which affects a user's perception. By implementing these principles, the author will develop a visual design that is suitable to the target audience's interests and preferences on design.

2.1.5 UI/UX Principles

UI/UX or user interface and user experience are essential aspects in designing an effective educational website. User interface, or elements that users interact with comprise of icons, menu, and various buttons in a digital interface. Meanwhile user experience gravitates towards the experience of interacting the designed product (Krug, 2014, P.183-189). A well designed UI and UX design will increase user engagement and overall experience. By utilizing various theories creating a well thought website will be achievable.

1. Usability

Usability refers to the ease of use of a certain product or item. Usability is one of the key components to UI/UX design and prioritizes user's experience when interacting with a product. According to Krug, the definition of usability in design begins with usefulness, learnability, memorability, effectiveness, efficiency, delightfulness and desirability (Krug, 2014, P.3-9).

2. User Experience

User experience is an approach to designing products that emphasizes in user satisfaction, by understanding a user's needs, incorporating various theories, and continuously enhancing said product to increase enjoyability and delight of the users utilizing said design (Krug, 2014, P.183-189).

3. UX Theories

In the process of designing an interactive product, considering the user interaction, and how capable said medias are at accommodating users' needs and feelings are what UX or user experience is. This process details a few principles that are utilized to enhance a designer's UX design in a correct fashion, such as Hick's laws and Fitt's law.

a. Fitts's law

Fitts's law was discovered at 1954 by Paul Fitts, an American psychologist. Fitts's law is one of the fundamental principles in UX design as it establishes an understanding of human movements in the physical world, which are now commonly applied in digital interfaces. According to Fitts designers should consider size, distance and placement when designing digital interfaces such as positioning buttons, and other elements in an interactive media. To improve user experience, interactive elements should be big enough, with plenty of space yielding in easier selection or decision making, with big enough space to prevent mistakes(Yablonski, 2020, P.26-36).

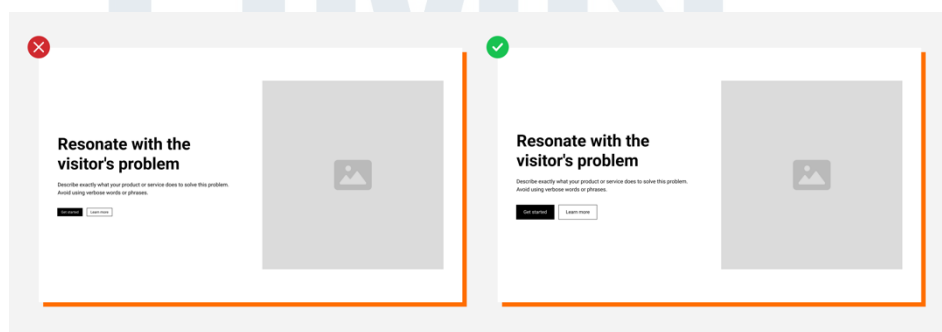


Figure 2.31 Fitts's Law

Sources: <https://www.perpetualny.com>

b. Hick's Law

Hick's law was founded by psychologist William Edmund hick and Ray Hyman at 1952 which discovered the

relationship between an individual's reaction time to the numbers of stimuli present. It is founded that the more choices a user has, the longer it will take for them to make a decision. This concept is applied quite straightforwardly in design, it is ideal to avoid busy interfaces as busy interfaces muddle actions and create difficulty identifying critical information. By minimizing choices, highlighting recommended options and breaking down complex tasks into digestible information will reduce cognitive load, or the mental effort used in order to operate an interface (Yablonski, 2020, P.38-39).



Figure 2.32 Hick's Law
Source: <https://blog.yarsalabs.com>

UI/UX principles are one of the foundations that are required to create a website interface that is usable and efficient for users. With theories like Hick's and Fitts's law, the writer will create a website with guidance regarding various placements and interactions that are needed in the current design.

2.1.6 Design Principles in Websites

According to Robin Landa (Robin Landa, 2018) design principles are one of the standards set in order to create satisfactory designs in terms of functionality, aesthetics, and to communicate the desired message.

These following design principles are used in order to create the optimal results:

1. Space

According to Robin Landa blank areas in designs are also considered an important aspect of design. Space is one of the design elements considered crucial in creating depth, and guiding the viewer's eyes from one graphic to the next creating a flow of visuals(Robin Landa, 2018, P.28). Making efficient use of free space and placing design elements effectively within the boundaries of the available area is an example. Clarity, division, and a balanced visual sense are the benefits of leaving space between design elements.

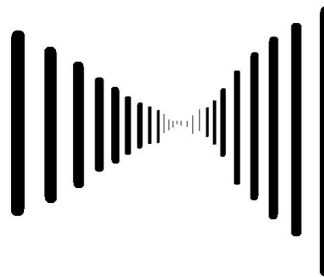


Figure 2.33 Example of Space
Source: <https://illustrarch.com>

2. Hierarchy

According to Robin Landa hierarchy refers to the way in which a designer arranges a graphic element based on the graphics or information which will be seen first (Robin Landa, 2018, P.25). The visual hierarchy principal details how every element in an artwork is configured, and to emphasize differences in every element. This helps viewers decipher information with the usage of contrast, colors, and pattern to encourage the mind through information that has been arranged with visual hierarchy.



Figure 2.34 Example of Hierarchy

Source: <https://www.venturerepublic.net>

3. Alignment

According to Robin Landa the arrangement of design elements that are consistent and systematic are called Alignment (Robin Landa, 2018, P.25). Alignment is a principle which arranges components to be balanced, and coordinated in an aesthetic manner. Alignment helps designs to be cohesive and comfortable for information to be absorbed by viewers creating a comfortable visual for further understanding.

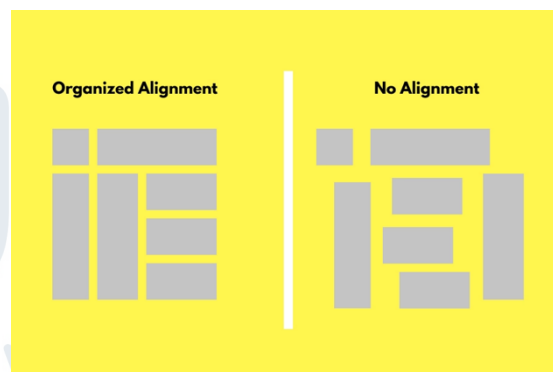


Figure 2.35 Example of Alignment

Source: <https://www.venturerepublic.net>

4. Balance

According to Robin Landa balance is one of the elements of a composition, it acts as a stabilizer and distributes visual weight in a way that balances a composition (Robin Landa, 2018, P.23). Balance can be used to create harmony in various arrangements, and create a design that attracts the viewer's eyes.

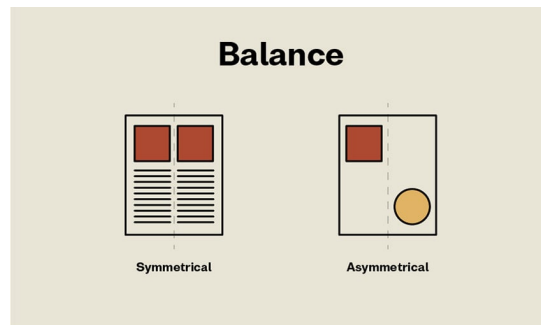


Figure 2.36 Example of Balance

Source: design.tutsplus.com

5. Unity

The harmony and balance between various design elements of a work are aspects of the understanding of Unity according to Robin Landa (Robin Landa, 2018, P.26-27). This requires the use of consistent design elements to establish meaningful relationships and differentiate the overall design, such as font types, colors, shapes, and visual styles.

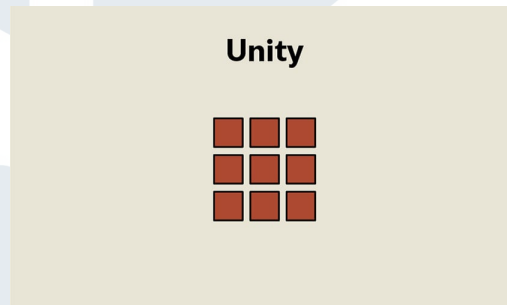


Figure 2.37 Example of Unity

Source: design.tutsplus.com

As according to principles of design, it can be concluded that principles such as space, visual hierarchy, balance, alignment, and unity play an important role in creating various visual designs. In this project, the writer will be utilizing these principles to create a functional and aesthetic interface.

2.2 Kitchen Safety

Kitchen safety are practices that are implemented to prevent accidents to happen while participating in culinary activities at home or at a professional setting. According to the Professional chef book authored by the Culinary Institute of America, alongside the safety of food handling, kitchen safety is one of the most essential aspects of a work environment in a kitchen as it prevents injuries on the cooks and individuals present and should be practiced in a kitchen setting(The Culinary Institute of America (CIA), 2011).

2.2.1 Kitchen safety protocols

Kitchen safety protocols are the essential guidelines that maintain the safety of a workplace or home environment. These set of rules prevent major and minor injuries due to equipment, and human error. Kitchen safety protocols ensure people to design ergonomic workspaces, maintain kitchen equipment, use Kitchen tools as according to training or knowledge and various other rules. The following are the major safety protocols that are essential in a professional environment as according the Occupational Health and Safety In The Food and Beverage Industry (Ebrahim Noroozi & Ali R. Taherian, 2023).

1. Fire Safety

Fire is one of the most damaging accidents that could happen in a kitchen, they're often started by heat, fuel and oxygen and can be catalyzed by open flame, electrical energy, and compressed gasses (Ebrahim Noroozi & Ali R. Taherian, 2023, P.84). Fires can result in deaths due to the mishandling or messes made by organic substances. Fire safety are the necessary extra precautions that are taken to prevent dangerous fires and plan an effective method to remedy each dangerous situation.

c. Fire Prevention Management

According to Ebrahim Noorozi and Al R. Taherian, fire prevention management are effective methods to combat fires before it occurs and can be applied in relatively simple steps. Performing a few things like minimalizing placement

of combustible and flammable items, placing fire extinguishers around the kitchen, implementing an exit strategy, and keeping the area clean are one of the approachable and crucial rules that can be implemented in regular households to prevent fire damages and injuries(Ebrahim Noroozi & Ali R. Taherian, 2023, P. 89).

d. Emergency Fire Procedures

Emergency fire procedures are the procedures implemented at the moment a fire occurs to safely navigate a dangerous scenario. Steps such as alerting nearby individuals, calling authorities, using fire extinguishers and evacuating the premises are encompassed in the emergency procedure(Ebrahim Noroozi & Ali R. Taherian, 2023, P.87).

2. Electrical Safety

Electrical hazards can be caused by malfunctions, poor usage of a device, or electrical system failures among other occurrences, and have been proven to be dangerous as humans are more conductive than the earth(Ebrahim Noroozi & Ali R. Taherian, 2023). By following safety regulations regarding electrical equipment lowering the chances of injuries and accidents can be achieved.

a. Protection Against Electrical Hazards

Electrical hazards often happen when individuals neglect safe work practices, by implementing rules like replacing or repairing damaged electronics, avoiding unsafe equipment and unsafe installation (Ebrahim Noroozi & Ali R. Taherian, 2023, P.139-140). Electrical hazards can often be avoided by having an awareness regarding the hazards surrounding an individual in a kitchen which are relatively simple things like de-energizing an appliance before maintenance, keeping all electronic tools maintained, and

maintaining general caution when handling electrical tools or sources.

3. Physical Hazards

Physical hazards happen in all forms of injuries, starting from slips and falls, open wounds from mishandling tools and electrocution (Ebrahim Noroozi & Ali R. Taherian, 2023). These physical hazards often happen due to individuals neglecting the usage of self-awareness in the kitchen, resulting in injuries from negligence. Things such as workplace hygiene or keeping the area clean can easily prevent these hazards by reducing clutter and slippery floors, by doing this the kitchen becomes safer from the risk of falling objects, and hazards mentioned prior.

Kitchen safety protocols are an important element in a home's safety. They make sure household activities are free from various accidents such as wounds from sharp objects, fires, and other physical injuries. By compiling this information in a form of a visual website, the author will provide information regarding kitchen safety.

2.3 Relevant Studies

The author has done a study to understand the relevant studies and knowledge about the design subject. This compilation of research will function as the standard of this design:

Table 2.1 Relevant Studies

No.	Research Title	Writer	Research Results	Novelty
1	Visual-Based Minimal-Text Food Safety Training Tools for Chinese-Speaking Food Service workers	Rajagopal et al., 2019	The usage of the trial training material with enhanced visuals are kept as the regular training material, showing how effective it is as	Designing a visual based educational material about food safety.

No.	Research Title	Writer	Research Results	Novelty
			a training material.	
2	<i>Kitchen Safety Behaviour Sebagai Upaya Preventif Kebakaran Di Lingkungan Rumah Rangka</i>	Listianti et al., 2018	Analyzes the importance to maintain kitchen safety as an effort to prevent fire from household culinary activities.	Draws attention on how kitchen safety and kitchen safety protocols are important to implement in a home kitchen.
3	Cooking Practices and Fires	Salem et al., 2023	Emphasizes the importance of education regarding kitchen fires due to unattended stovetops.	Emphasizes in the effectiveness of educational media such as campaigns, visual aids, and a combination of medias are effective in fire safety education

As according to the relevant studies collected in the table above, the research result and novelty provided by these findings provide valuable input to the author in the process of designing their final project. By analyzing each strength

and weaknesses of these relevant research the writer has extinguished methods to refine and conduct their website creation process.

