Design Principles

Elements of Design

* Line - linear mark or the edge created when two shapes meet
  + Characteristic of Line are:
    - Width - thick, thin, tapering, uneven
    - Length - long, short, continuous, broken
    - Direction- horizontal, vertical, diagonal, curving, perpendicular, oblique, parallel, radial, zigzag
    - Focus- sharp, blurry, fuzzy, choppy
    - Feeling- sharp, jagged, graceful, smooth
* Shape - self contained area, is two-dimensional (has height and width, but no depth)
* Direction - all lines have direction
  + Horizontal - suggests calmness, stability, and tranquility
  + Vertical - gives a feeling of balance, alertness, and formality
  + Oblique - suggests movement and action
* Size - relationship of the area occupied by one shape to that of another
* Texture - surface quality of a shape
* Color - light reflected off objects
  + Hue - color name
  + Value - how light or dark it is
  + Intensity - how bright or dull it is
  + Categories of Color
    - A Color Wheel is basic tool for combining colors. The first circular color diagram was designed by Sir Isaac Newton in 1666.
      * Primary Colors - Red, Yellow, and Blue. These colors cannot be mixed, they must be bought in some form.
      * Secondary Colors - Orange, Violet, and Green. These colors are created by mixing two primary colors.
      * Intermediate Colors - Red Orange, Yellow Green, Blue Violet, etc.; mixing a primary with a secondary creates these colors.
      * Complementary Colors - Colors that are opposite each other on the color wheel. When placed next to each other they look bright and when mixed together they neutralize each other.
    - Color Harmonies are certain combinations of colors that create positive looks or feelings.
* Complementary colors are colors that are opposite each other on the color wheel. Example is red and green. Tricky to use in large doses, but works well when you want something to stand out. Not good for text.
* Analogous Colors are colors that are next to each other on the color wheel. Examples include red, red orange, and orange. They are harmonious and pleasing to the eye. Choose one color to dominate, a second to support, and the third color is used (along with black, white, or gray) as an accent.
* Triadic colors are three equally spaced colors on the color wheel. For example, yellow, Red, and Blue. They are quite vibrant and should be carefully balanced - let one color dominate and use the two others for accent.
* Monochromatic color is one color used with different values and intensity. For example, light brown, brown and dark brown
* Warm colors are on one section of the color wheel and give the felling of warmth. They are vivid and energetic, and tend to advance in space. For example, red, orange, and yellow are the colors of fire and look warm.
* Cool colors are on the other side of the color wheel from the warm colors. They give the feeling of coolness. They give an impression of calm and create a soothing impression. For example, blue and violet are the colors of water, and green is the color of cool grass.
* White, black, and gray are considered to be neutral.

Principles of Design

* Balance - the weight distributed in the design by the placement of elements - It provides stability and structure to a design.
  + A large shape close to the center can be balanced by a small shape close to the edge.
  + Large light shape balances with small dark shape
  + Darker shapes appear heavier.
* Rhythm - feeling of organized movement
* Proximity - creates relationship between elements. It provides a focal point. They should be visually connected in some way.
* Alignment - create order and organization. Aligning elements allows them to create a visual connection with each other.
* Repetition - strengthens a design by tying together individual elements. It helps create association and consistency. **Repeat some aspect of the design.**
* Contrast - opposing elements (opposite colors on color wheel, value light/dark, or direction). Contrast allows us to emphasize or highlight key elements in your design. Strong differences draw the eyes to a focal point.
* Space - distance or area between, around, above, below, or within elements

9 Essential Principles for Good Web Design

1. Precedence - guiding the eye using position, color, contrast, size, and design elements
2. Spacing -make thing clearer by using line spacing (When you lay text out, the space between lines directly affects how readable it appears), padding (space between elements and text), and white space (empty space on a page used to give balance, proportion and contrast to a page.
3. Navigation - where you can go and where you are now
4. Design - layout
5. Typography -the style, arrangement, and appearance of text (font choice, font size, spacing, line length, font color, paragraph)
6. Usability - ease of use
7. Alignment - visual connection
8. Clarity - sharpness
9. Consistency - use a theme to make everything fit together

**Color Assignment**:

1. Create a color wheel - (On the circle, place the 3 primary colors in a triangle shape, the 3 secondary colors in an inverted triangle, then add the intermediate colors)
2. Draw a line on the color wheel separating the warm and cool colors.
3. Looking at the color wheel, identify 3 examples of each color harmony or scheme:
   1. Complementary colors
   2. Analogous Colors
   3. Triadic colors
   4. Monochromatic color

It has been proven that color creates emotions within people and is important to achieve desired outcomes.

4. Write what you **associate** with each of the following colors:

* 1. red
  2. green
  3. white
  4. black
  5. brown
  6. yellow
  7. blue
  8. orange