**Electrical Engineering Technology Program**

**Department of Electronic Engineering Technology**

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**Research Assignment 2**

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**Good Practices in Choosing Website Colors and Using Color Wheel Concepts**

**Why Color Matters in Web Design**

Color isn't just about making a website look good—it directly impacts how users feel and interact with your site. The right color choices can grab attention, build trust, and even influence decisions. A well-chosen palette enhances readability, improves navigation, and strengthens brand identity.

**How Colors Affect User Perception and Behavior**

* Colors create emotional responses—blue feels calming, while red creates urgency.
* They guide user actions, like clicking a button or staying on a page longer.
* High contrast makes content easier to read, improving accessibility.
* Colors reinforce branding, making a website instantly recognizable.
* A consistent color scheme ensures a smooth and professional experience.

**Best Practices for Choosing Website Colors**

1. **Stick to Your Brand Colors** – Keep your color scheme in line with your brand identity to build recognition.
2. **Use Contrast for Readability** – Make sure text stands out against the background to improve accessibility.
3. **Keep It Simple** – Limit your palette to a few main colors to maintain a clean and organized look.
4. **Think About Color Psychology** – Choose colors that evoke the right emotions for your audience.
5. **Test on Different Screens** – Colors can look different on various devices, so always check for consistency.

**Understanding the Color Wheel**

The color wheel helps designers create visually balanced color schemes. It includes:

* **Primary Colors** – Red, blue, and yellow (cannot be made by mixing other colors).
* **Secondary Colors** – Green, orange, and purple (made by mixing primary colors).
* **Tertiary Colors** – Combinations of primary and secondary colors.

**Popular Color Schemes and How to Use Them**

1. **Monochromatic** – Uses different shades of one color for a sleek, modern look (e.g., shades of blue for a corporate site).
2. **Analogous** – Uses colors next to each other on the color wheel for a harmonious feel (e.g., green, blue-green, and blue for a nature site).
3. **Complementary** – Uses opposite colors for strong contrast and energy (e.g., orange and blue for a sports website).
4. **Triadic** – Uses three evenly spaced colors for a balanced, vibrant effect (e.g., red, yellow, and blue for a playful design).
5. **Tetradic (Double Complementary)** – Uses two complementary pairs for a bold and dynamic look (e.g., purple and yellow with blue and orange).