**CSS Fonts & Units: A Comprehensive Guide**

**1. CSS Units and Their Differences**

CSS provides various units for defining lengths and sizes. Below are common units and their differences:

**1.1 Pixels (px)**

* Absolute unit.
* Fixed size, does not scale with parent elements.
* Example: font-size: 16px;

**1.2 Em**

* Relative to the font-size of the parent element.
* Example: If the parent font-size is 16px, 1em = 16px.
* Example: font-size: 1.5em; (1.5 times the parent font size)

**1.3 Rem (Root Em)**

* Relative to the root element (html tag) font-size.
* Example: If the root font-size is 16px, 1rem = 16px.
* Example: font-size: 2rem; (2 times the root font size)

**1.4 Percentage (%)**

* Relative to the parent element.
* Example: width: 50%; (50% of the parent’s width)

**1.5 Viewport Units (vw, vh, vmin, vmax)**

* vw (viewport width) and vh (viewport height) are relative to the browser window.
* vmin is the smaller of vw or vh.
* vmax is the larger of vw or vh.
* Example: width: 50vw; (50% of viewport width)

**2. CSS Font Properties**

CSS provides several properties to control font appearance.

**2.1 Font Family**

The font-family property specifies the typeface of text.

p {

font-family: Arial, sans-serif;

}

* Generic families include serif, sans-serif, monospace, cursive, and fantasy.
* Multiple fonts can be specified as fallbacks.
* Some commonly used fonts:
  + **Serif Fonts:** Times New Roman, Georgia, Garamond, Baskerville
  + **Sans-serif Fonts:** Arial, Helvetica, Verdana, Tahoma, Open Sans
  + **Monospace Fonts:** Courier New, Consolas, Lucida Console, Source Code Pro
  + **Cursive Fonts:** Brush Script MT, Pacifico, Dancing Script
  + **Fantasy Fonts:** Papyrus, Impact, Jokerman

**2.2 Font Weight**

The font-weight property controls the thickness of text.

p {

font-weight: bold;

}

* Common values: normal, bold, lighter, bolder.
* Numeric values range from 100 (thin) to 900 (extra-bold).

p {

font-weight: 300;

}

**3. Conclusion**

Understanding CSS fonts and different measurement units helps in designing visually appealing and responsive websites. By using different font styles and measurement units, developers can create dynamic and engaging designs.