Web Development Assignment - Part 1: Research Task

# 1. CSS Units: px, em, rem

• px: A constant unit used to measure the size or dimensions of elements in CSS. It is not affected by the default font size or user settings.  
 Example: If you set font-size: 20px, it will remain the same across all devices.  
  
• em: A relative unit that depends on the font size of the parent element. For example, if the parent’s font size is 16px, then 1em equals 16px.  
 Example: font-size: 2em; will be 32px if the parent is 16px.  
  
• rem: Similar to em, but it depends on the root element’s font size (usually the <html> tag). If <html> has font-size: 16px, then 1rem will always be 16px.  
 Example: font-size: 2rem; equals 32px when root font size is 16px.

Example CSS Code:

p {  
 font-size: 16px;   
}  
  
h1 {  
 font-size: 2em;  
}  
  
h2 {  
 font-size: 2rem;  
}

# 2. HTML Audio and Video Tags

• <audio>: Used to embed audio files in a webpage. The 'controls' attribute allows users to play/pause the audio.  
 Example:  
 <audio controls>  
 <source src="audiofile.mp3" type="audio/mp3">  
 </audio>  
  
• <video>: Used to embed video files in a webpage. It also supports controls.  
 Example:  
 <video controls>  
 <source src="videofile.mp4" type="video/mp4">  
 </video>

# 3. What is Web Accessibility and how can we improve it?

• Web accessibility means designing websites so that they can be used by everyone, including people with disabilities.  
  
Ways to improve accessibility:  
a. Use alternative text for images:  
 <img src="image.jpg" alt="Description of the image">  
  
b. Ensure keyboard navigation:  
 Allow users to navigate using the keyboard (e.g., Tab key).  
  
c. Improve contrast:  
 Choose color combinations that are friendly for visually impaired users.  
  
d. Use semantic HTML tags:  
 Tags like <header>, <footer>, <main>, <article> help structure the content for screen readers.