# Part 1: Research Task

## Understanding px, em, and rem units in CSS

When writing CSS, we often need to set sizes like font size, padding, margins, etc. There are different units for that. The most common ones are px, em, and rem.  
  
- px (pixels):   
 This is a fixed unit. If I set something to 20px, it will always be 20 pixels no matter what screen or setting is used. It's simple but not flexible when designing for different devices.  
  
- em:   
 This unit depends on the font size of the parent element. For example, if the parent is 16px and I set a child to 2em, it becomes 32px. It’s useful, but sometimes confusing if the parent size keeps changing.  
  
- rem (root em):   
 This one is based on the font size of the root (html) element. So if html is 16px, then 2rem = 32px. It's more consistent and easier to control than em.  
  
Example:  
html {  
 font-size: 16px;  
}  
  
p {  
 font-size: 1.5rem; /\* = 24px \*/  
}

## HTML Audio and Video Tags

In HTML, we can add sound and video using the <audio> and <video> tags. These tags are useful to make websites more interactive.  
  
- <audio>: This tag is used to play sound. It can have controls so users can play/pause.  
  
Example:  
<audio controls>  
 <source src="music.mp3" type="audio/mpeg">  
 Your browser does not support the audio element.  
</audio>  
  
- <video>: This tag is used to show video on the page. You can also add width, height, and controls.  
  
Example:  
<video width="320" height="240" controls>  
 <source src="movie.mp4" type="video/mp4">  
 Your browser does not support the video tag.  
</video>

## What is Web Accessibility and How to Improve It?

Web accessibility means making websites usable for all people, including those with disabilities like vision, hearing, or motor issues.  
  
Improving accessibility is important because everyone should have equal access to information and services online.  
  
Ways to improve web accessibility:  
- Use semantic HTML like <header>, <main>, <footer>, etc.  
- Always add alt text to images to help screen readers:  
 <img src="cat.jpg" alt="A sleeping cat">  
- Make sure all forms have labels:  
 <label for="email">Email:</label>  
 <input type="email" id="email">  
- Use good color contrast between text and background.  
- Allow navigation using keyboard only (for people who can’t use a mouse).