# **SIT120 Pass Task 2**

## **1.2P**

1.

1. **Understand**:

Responsive web design (RWD) is an innovative approach to building web pages so that they display optimally across a diverse range of devices, from desktop monitors to mobile phones. The essence of RWD is to ensure web content is easily accessible and provides an optimal user experience regardless of the device's screen size or orientation. This design strategy revolves around several key techniques, including fluid proportion-based grids, flexible images, and media queries. For instance:

* **Fluid grids** adjust content layouts in relative units (like percentages) rather than fixed ones (like pixels).
* **Flexible images** are sized in relative units to prevent them from exceeding their container's boundaries.
* **Media queries** utilize the capabilities of CSS to apply styles based on device characteristics, like its screen width.

RWD has become more and more prominent with the exponential growth of mobile device usage. With most web users accessing content via mobile, creating mobile-friendly websites is a necessity. In fact, in 2015, Google's Mobilegeddon update began prioritizing mobile-optimized sites in search rankings when accessed from a mobile device. Thus, embracing RWD is not just about aesthetics or usability; it directly impacts a site's visibility in search engines.

1. **Implement**:

When implementing RWD, these foundational steps should be followed:

1. **Use a Fluid Grid:** Instead of designing with fixed pixel values, utilize percentages. For example, if a design layout is 1000px wide on a desktop, and a content area takes up 600px of that, its width would be 60% in a fluid grid system.
2. **Flexible Images:** Ensure images scale within their containing elements. Using CSS, this can be achieved with: **img { max-width: 100%; }**.
3. **Media Queries:** These are pivotal for RWD. With media queries, you can write CSS rules that apply only when certain conditions are met, such as browser window width:

When implementing Responsive Web Design (RWD), it's crucial to account for all potential devices accessing the webpage i.e., desktops, laptops, tablets and mobile phones. Overlooking this aspect can lead to critical issues with cross-platform compatibility, impairing user experience and potentially turn away visitors. Ensuring a seamless transition across various devices not only enhances user engagement but also fosters trust and credibility in the website's professionalism and reliability.

1. **Reflection**:

During this task, I gained deeper insights into responsive web design, recognizing its importance in ensuring websites are accessible across all devices, especially given the varied screen sizes prevalent today. I also re-familiarized myself with JavaScript, appreciating its wide-ranging capabilities, from simple string functions to complex date operations. The project was a balanced blend of theory and practical application, enhancing my expertise in both responsive design and JavaScript, positioning me for more advanced challenges ahead.

**Video Link:**

**GitHub Repository:**