



## Using Blended HTML-CSS-JS Semantic to Implement Web Accessibility Principles

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### Abstract

Aotearoa New Zealand’s health response during the first wave of the Covid-19 pandemic significantly impacted the tertiary Web accessibility is the inclusive practice to overcome all barriers that prevent interaction with websites or web apps on the World Wide Web (WWW) by people with physical disabilities (cognitive/auditory/visual limitation), situational disabilities (small screen, bright sunlight), and socioeconomic restrictions on bandwidth and speed. Tim Berners-Lee, W3 Director and inventor of the WWW, stated that “the power of the Web is in its universality, access by everyone regardless of disability is an essential aspect” (World Wide Web Consortium, n.d.). Web accessibility is a crucial aspect of modern technology and is playing an increasingly critical role in shaping a more equitable and accessible future for all users. Teaching web accessibility as a topic to undergraduate students in the Bachelor of Computing Systems (BCS) at EIT is not only a technical necessity (meeting legal requirements and enhancing user experiences) but also promotes inclusivity and fosters social responsibility. As a result, students are prepared for successful and rewarding careers in the technology industry. However, this also comes with challenges. These challenges may stem from various factors, such as technical complexities, time constraints, resource constraints, and lack of awareness and understanding. This article discusses in more detail some challenges to teaching this topic to undergraduate students. It then suggests how to use HTML/CSS/Javascript semantics to implement four web accessibility principles – perceivable, operable, understandable and robust (POUR).

Keywords: Web accessibility, web accessibility principles, HTML semantic, CSS semantic, Javascript semantic

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