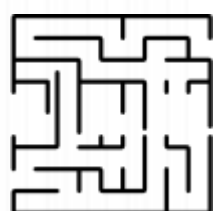# Engineering an Intuitive, Accessible, Secure, and Personalized DXP for University of East London

SERVICES DELIVERED:

Drupal Migration, Accessibility Audit, Development and Testing

In response to enforced website accessibility regulations, the University of East London (UEL) faced a critical challenge in ensuring compliance with Web Content Accessibility Guidelines (WCAG) 2.1 AA standards.

Axelerant, as their Digital Transformation partner, led the initiative to address accessibility challenges identified by the Government Digital Service's review of public sector websites, including UEL's, on June 8, 2022.

Background / Business Challenge

Axelerant recognized the urgency for UEL to address accessibility challenges promptly and comprehensively to mitigate potential legal implications and heavy penalties from regulatory bodies like the Equality and Human Rights Commission (EHRC) or the Equality Commission for Northern Ireland (ECNI). Key Accessibility issues faced were:

- **Inconsistent Focus Order:** Inconsistent focus order poses challenges for keyboard-only users and screen reader users, hindering their ability to navigate the website efficiently.

- **Semantic Markup Inconsistencies:** Inconsistent semantic markup across the website hindered accessibility for users relying on assistive technologies, impacting their ability to navigate and understand the content.

- **Link Naming and Contrast**: Poorly named links and inadequate color contrast can impede the navigation and comprehension of users with visual impairments.

- **Vestibular Disorder:** Users with vestibular disorders may experience discomfort or dizziness due to animations or motion effects on the website.

In the pursuit of digital inclusivity, Axelerant collaborated with the University of East London (UEL) to bolster website accessibility.

Below, we detail key strategies tailored to optimize UEL's digital platforms for improved usability and inclusivity.

Solution

- **Strategic Prioritization and Technical Expertise:** Prioritizing key content areas, such as the homepage and course page, was crucial given their significance in user engagement and UEL's operational success. Leveraging tools like WAVE, Lighthouse, we meticulously addressed critical issues like focusability, font size, contrast, and responsiveness, with a keen focus on enhancing keyboard accessibility.

- **Collaborative Compliance and User-Centric Design:** In tandem with UEL's accessibility expert, we ensured strict adherence to WCAG guidelines for all new components. Enhancing the screen reader experience emerged as a pivotal aspect of our strategy, underlining our commitment to inclusivity and user-centric design. We shifted our approach from tool reliance to a holistic evaluation of accessibility, fostering iterative refinement aligned with the envisioned user experience.

- **Strategic Persona Development and Semantic Correctness::** To streamline our efforts, we developed personas representing diverse user profiles, enabling targeted interventions to address accessibility challenges effectively. Assigning personas like to relevant tasks facilitated a deeper understanding of user needs and minimized project complexities. Additionally, we focused on ensuring semantic correctness throughout the site, optimizing markup elements to align with best practices and enhance usability.

These efforts significantly improved the website's accessibility ranking, evident from audits by governmental and private organizations.

Furthermore, critical page performance, notably the course page, saw significant improvements.

Results

58% ⟶ **90%**

WCAG 2.1 AA Compliant in 2023

120+ ⟶ **Top 20**

Overall Silktide Rating Improved
(site quality and accessibility rating)

Thanks to Axelerant, the client has enhanced their SEO ratings on Google and resolved numerous site accessibility issues. They've also achieved a CTR increase of over 20% and an improved conversion rate. Axelerant's agile practices, friendliness, responsiveness, and knowledge are second to none.

Fiona Harrison

Product Owner, University of East London