

Accessibility Testing: In a realistic manner



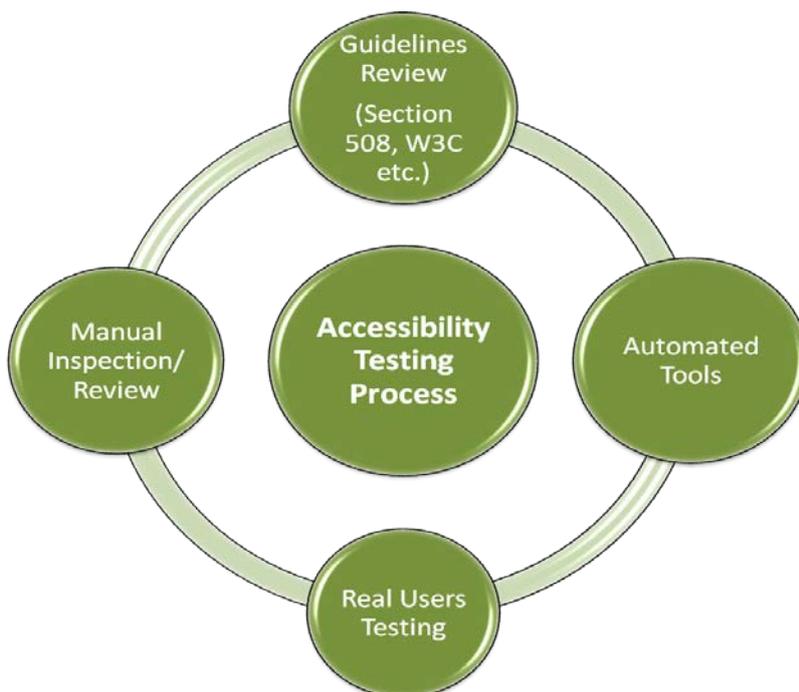
Client: World's premiere e-learning product company spanning across US & Europe. Its growth has primarily been triggered by its award winning technology products, which have redefined the concepts of content digitization and enabling its use for the disabled. When it came to outsourcing their accessibility QA work, their goal was straightforward i.e to ensure hassle-free application usage by all disabled users. The organization hired a QA Vendor who did not have any specialized accessibility process setup – their functional QA staff was assigned to take on this specific QA activity. Their pain points started when they realized that functional testers could perform accessibility verifications but that they do not possess the skills to uncover all possible accessibility issues. This document highlights the case in point.



Business Challenge: Client's tremendous growth and its goal to serve all users including the challenged, (specifically visually challenged), became a major hurdle that became imminent. Managing accessibility testing without compromising or risking the usability of features for the disabled, was a huge challenge. The testing experts they hired were good functional testers and they were able to use screen reader tools like JAWS conveniently but they lacked the intricate understanding that only a non-sighted user bring in.



Innovative Solution: QA InfoTech brought in a change to the testing approach to address the challenge. We hired visually challenged engineers, trained them on the software testing requirements and had them closely work with our accessibility test experts. These testers were experts in using screen reader tools, possessed great understanding of Section 508 and WCAG 2.0 guidelines. Adapting to the accessibility QA process and bringing in a paired testing concept (sighted with non- sighted QA Engineers) did wonders for the client and they started believing in the fact that there is zero compromise when it comes to the quality of the product, whatever be the area of testing.



Target Accessibility Areas

- Sensible reading order for screen readers
- Complete access to Application via Keyboards
- Ability for screen readers to capture dynamic content
- Timed Activities – disabled user should be allotted additional time to execute
- Hidden content should not be readable by screen readers
- Alternate Text for images & videos
- Appropriate Link Text
- Color contrast should be relevant
- User adjustable Text
- In-page navigation
- Every form element should have a label
- Page titles should reflect purpose
- Flashing content should be avoided

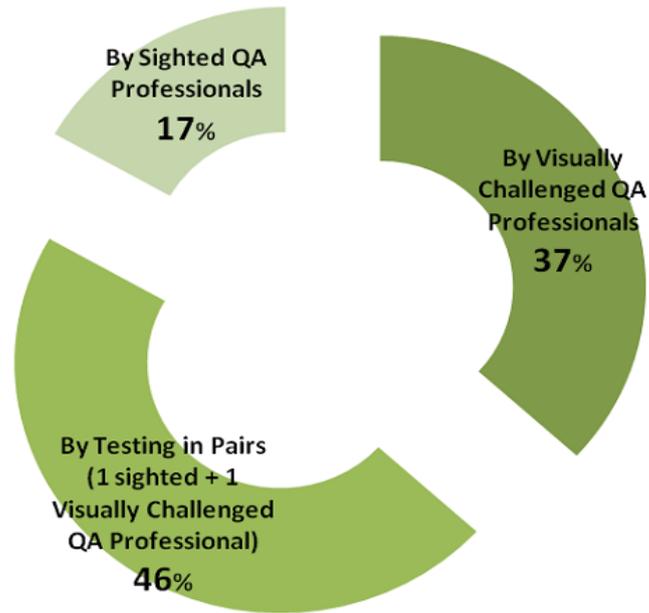


Accessibility Testing Tools

- JAWS
- NVDA
- Windows – EYE
- WAVE
- WIN XP Magnifier
- Web Accessibility Toolbar
- Color Contrast Analyzer
- W3C Link Checker
- W3C Mark Up Validation Service
- W3C CSS Validation Service



On successfully executing the Accessibility QA for the client - Statistics in terms of % of total bugs as logged by Sighted & Non-sighted QA Professionals is as follows:



Valued Conclusion: Defining a rigorous accessibility testing approach is always beneficial. Some of the real life observations forced us to change the plan on the go; an out of the box solution allowed us to bring benefits back to the client by not only reducing the testing cycle and the cost involved, but also by helping them develop effective products which were accessibility oriented . The quality of product met user expectations.

- ❖ Sighted testers can sometimes make assumptions – they just pretend. Whereas, non sighted testers provide realistic results
- ❖ From a usability testing perspective, non-sighted testers act as real end users and provide realistic feedback
- ❖ Testing in pairs (1 sighted + 1 non-sighted Engineer) concept results in uncovering all possible accessibility issues in the product