

2b Tech. report – Userway issues

Website usability is an important issue. Being able to navigate through an application simply and logically is vital. Usability must ensure we provide accessibility to all users, regardless of ability.

The Userway widget (<https://userway.org>) provides a simple widget which can be added to website pages. Features include, allowing users to change colour, text size and read the page. It was added to the CEDAH in a javascript file which was automatically created by the Userway website. This was then referenced via a common file (per user type), thus ensuring integration caused minimum disruption to the CEDAH. Future updates or changes to Userway (if needed) mean that any changes needed in the CEDAH will be isolated to one area.

(As quoted on their website: Failure to comply with Section 508 of the Department of Justice's ADA (American with Disabilities Act) Standards for Accessible Design could expose your company to hefty fines, the risk of expensive criminal and civil litigation as well as a reputation for being unfriendly to the disabled.)

We have retained a switch for Back Office to turn Userway off in our demonstration systems. This allows us to easily isolate Userway as a source or non-source of any display problems encountered for instance in unsupported browsers.

Require-jquery.js

Web pages within the CEDAH application utilize client side JavaScript code. Due to the complexity and size of the application, multiple JavaScript files may be used within any page. The number of files needed per page is mainly dependent on the type of information being shown and the current user settings.

Javascript loading can be problematic, files need to be loaded in the correct order and loading the same JavaScript file multiple times can cause pages to mis-display and show errors. Some pages in the CEDAH were already using require-jquery.js, a JavaScript solution to overcome these issues.

However, the introduction of Userway highlighted issues with pages that were using require-jquery.js. Multiple loads of jquery caused pages to fail loading. In particular, the “Make a Booking” journey was affected, causing the accordions to not open when selected, making the page unusable.

Ensuring pages using require-jquery.js didn't reload the jquery.js file when userway was enabled, fixed the issue.

Some advantages of require-jquery.js:

- Lazy loading
- Reduce code complexity in large application
- Less HTTP requests
- No need to define requests in the correct order