## **EPUBCheck development project**

The EPUBCheck project has been actively developed and maintained by the DAISY Consortium for nearly a year, thanks to the fundraising organized by the W3C Digital Publishing Business Group.

## Fall 2018 - Summer 2019

Some important milestones have been achieved in the past year, most notably with the **release of EPUBCheck 4.2**, which introduced the possibility to check the conformance to the newly published EPUB 3.2 family of specifications. Throughout the first phases of the project, the development team aimed to rapidly attend to the issues reported to the GitHub tracker. A couple maintenance releases have already been published to fix bugs or implement recommendations made by the EPUB3 Community Group. Several volunteer contributors also helped keeping the various localizations of EPUBCheck up-to-date.

At the same time, the development team started **some foundational work in order to improve the long term maintainability and reliability of the project**. A new system of labels is now used on the GitHub tracker, which already proved useful in tidying the various existing issues, and documenting their status. Even more importantly, **the primary test suite** –used at development time to verify that EPUBCheck's behavior conforms to the EPUB specifications– **is being entirely refactored**. This work, invisible to the end users, is particularly important since it ensures that new developments do not unintentionally break previous functionality.

While the previous test suite was poorly organized (as a result of being organically developed over the years), and required tedious work anytime EPUBCheck's source code needed to be updated, the **new test suite is consistently organized, easier to update**, and will also be usable as source of documentation for EPUBCheck's functionalities.

## Fall 2019 - Spring 2020

The next phase of the project, starting in September 2019, consists of both user-facing and internal developments. The public API (application programming interface) will be revamped. This API is used by third-party developers to integrate EPUBCheck in their workflows or application. The task includes the refactoring of the messaging system and reporting mechanism (i.e. how EPUBCheck messages are defined, and how they're written to different formats). Along the way, the development team will also take the opportunity to refactor and streamline the internal source code, when relevant. The intended benefit of these tasks is twofold: first to simplify the integration of EPUBCheck in third-party products, and second to reduce the technical debt induced by years of intermittent development.

After the code base is consolidated, work will resume with the implementation of **new checks for Media Overlays**, which have been –to some extent– historically overlooked by EPUBCheck. The improvements will focus on the validation of timing and duration attributes (SMIL clock values), as well as validation of reading order consistency.

Finally, **a website will be developed for EPUBCheck**. This website's home page is expected to be the primary landing page for the EPUBCheck project, and will include direct download links for the latest version of the tool. The website will also feature **user documentation** (in particular with a detailed list of the various errors and warnings reported by EPUBCheck), and **developer documentation** for integrators and contributors alike.