DIAGRAM Project Annual Report

Tobi’s Image Description Workflow

(May 2012 - April 2013)

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# Executive Summary

The year 2012-13 was dedicated to promotion, training, and gathering feedback for the image description workflow of Tobi. More than 13 promotion and training events were conducted throughout the year, which not only helped in gathering feedback for Tobi’s image description workflow but also about the Content Model, thanks to the representation of the complete DIAGRAM Content Model in Tobi that exemplifies all the details.

The feedback is constructive, and it has provided the base for future developments detailed in the report.

# Training & Promotion Events

Face-to-face training and promotion events conducted for audiences from different parts of the world are as follows:

* June 2012 – a week-long training at NAB Kolkata for (DAISY production center)
* July 2012 – a week-long training for Rehabilitation Council of India (publisher)
* August 2012 – a week-long training at rehabilitation center at LB Prasad hospital in Hyderabad, India (DAISY production center)
* August 2012 – a week-long "Train the Trainer" program at Dehradun, India
* Sept 2012 – a week-long training for NIOS (National Institute for Open Schooling, India)(publisher)
* Sept 2012 - introduction of Tobi to RNIB staff, London, UK.
* Sept 2012 - 2 days introductory workshop for Swiss DAISY Consortium held at Zurich, Switzerland
* Oct 2012- training for a DAISY production person from Afghanistan, held in New Delhi, India
* Nov 2012 - Tobi presented in Future of e-Publishing seminar in Bangkok, Thailand (associated with World Blind Union (WBU) and International Council on Education of the Visually Impaired (ICEVI) meetings)
* Jan 2013 - training for 2 persons from DAISY production centers located in Dhaka, Bangladesh, held in New Delhi, India
* March 2013 – a week-long "Train the Trainer" program held at National Association for Blind, New Delhi, India

Online trainings are as follows:

* July 2012 - online training for TTI Pune - India (DAISY production center)
* Feb 2013 - online training for DAISY producers from Sri Lanka

# Users’ Feedback & Feature Requests

Tobi’s image description workflow has generated quite a lot of interest in the DAISY community. The excitement shown by the DAISY production centers and the users of DAISY books exceeded our expectations. The following attributes of the workflow were appreciated in the trainings and promotion events:

* Image description workflow provides several alternative methods of representing images, making it useful for different kinds of disabilities; for example, there is tactile image for blind, simplified image for people with cognitive disabilities, etc. Availability of elements like tour was noticed and admired.
* The concept of human voice synchronization with text descriptions was appreciated for its usefulness for not only visually impaired but also for people with cognitive disabilities.
* Usability of simplified user interface received good comments on the basis that it provides very straightforward path for adding information to the comprehensive Content Model.

Feature requests received:

1. Embed DIAGRAM Content Model in EPUB 3 media overlays.
2. Option to filter images so that only the images that require image description are shown in the navigation pane. For example, option for hiding images with alt=””.
3. Audio-text synchronization at finer granularity should be provided inside elements like longdesc. Currently Tobi synchronizes audio with the complete text contained in d:longdesc, d:summary & d:simplifiedLanguage. It is requested that audio should be synchronized with finer mark-up that lies inside these DIAGRAM elements like <p> or <sent>.
4. Capability to edit the original images and captions.
5. Enhancements requested in Content Model and Tobi to enable production of manuals for playing chess.
6. One of the biggest bottlenecks highlighted by users was lack of availability of reading systems that can render image descriptions in an appropriate way. In spite of the fact that the production centers were impressed with the Tobi’s image description workflow, they were reluctant to deploy it until the reading systems, which provide options for selecting suitable image description elements, become available.

# Development Plan

The development team focused on the following 2 objectives in year 2012-13:

* Maintenance of image description workflow which include bug fixes and minor enhancements.
* Implementation of EPUB 3 production workflow in Tobi, which will provide base for further development of image description implementation on the EPUB specifications.

The development plan for 2013-14 is as follows:

1. Add the capability to filter images in navigation pane: September 2013.
2. Capability of embedding image descriptions in EPUB 3 media overlays: No date set yet due to dependency on decision for the use of appropriate image description element (describedAt or something else) in EPUB specification.
3. Update to output based on approved EPUB 3.0.1.

There are some more candidate features that require heavy investment of resources, which are not yet in the plan but may be included in the future if more resources are available. These are as follows:

* Synchronization of audio and text at finer level of granularity. For example, synchronizing audio clips with elements like <p>, <sent> etc. that lie inside the longdesc element.
* Capability to add and edit the image and its caption in the main document.

Remark: The items 5. & 6. in users’ feedback are relevant to the Content Model development and adoption, and therefore not included in the development plan of Tobi at this stage.

# Conclusion

Tobi’s image description workflow has stimulated interest in the users of DAISY technology and the DAISY production centers. The comprehensive descriptions authored by the workflow are being considered as a breakthrough that can help in overcoming the challenge faced by print-disabled students in accessing images. The representation of the complete Content Model in Tobi has also provided a testing ground for the specification, enabling the users to provide feedback for potential improvements in it.

The feedback received is encouraging and has provided the base for future planning.

The feedback also emphasized that the adoption of the DIAGRAM Content Model is highly dependent on the availability of reading systems that support image descriptions, and incorporation of the Content Model in the accessible book publishing specifications like EPUB 3 and/or DAISY 3.