

CATCH Library Lab Progress Report #3 [September 1, 2013]

This is the third progress report on the CATCH Library Lab project.

1. Background work

Front-end components:

We did some initial exploration with Ember.js (<http://emberjs.com/>), tying primitive front-end UI with fixture data from Highbrow annotation data and rendering via Ember's Handlebars templates. We've had some difficulty making the OA data work well with Ember's data models, so we are moving forward with simpler and faster rendering custom UI grids leveraging CSS/Ajax calls

Back-end: mostly focusing now on development.

2. Development

2.1 Front-end

We have an un-styled front-end UI annotation grid representation ready. The grid incorporates media-rich commentaries. Examples can be seen at: <http://marksoper.github.io/catch/>.

We are now adding styles and connecting the UI grid with the back-end CATCH server and prototyping a use case, tying front and back-end components with a video annotation tool prototype (see section *2.3 Interoperation of the CATCH modules with Annotation Tools* below).

2.1 Back-end

Back-end development is progressing rapidly. The CATCH Annotation Hub open source Grails application and the code can be found on GitHub: <https://github.com/annotationsatharvard/catcha/>

The Annotation Hub now incorporates code from the Annotation Framework a project aiming at publishing reusable components for creating Annotation Hubs. <https://github.com/organizations/annotationframework>

We are continuing the work on the the reusable modules (see report #2):

- **AfShared**: provides some shared components. Mostly Stylesheets and JavaScript libraries.
- **AfSecurity**: provides the components for authentication and management of users, groups and systems.

- **AfPersistence:**

Provides the components for validating, storing and retrieving annotation.

At the moment this component can accept:

- annotation sent by the standard annotator.js JavaScript component for creating annotation on HTML text
- annotation sent by the variant of the annotator.js JavaScript component for creating annotation on HTML text, videos and images

- annotation in Open Annotation format uploaded manually. The uploaded annotation, before being stored, gets validated according to the Open Annotation standard (<http://www.openannotation.org/spec/core/>).

This variety of input components allows us to test the Annotation Hub with different annotation format in input and output. The ultimate goal, not yet achieved, consists in normalizing all the annotation formats in input to the Open Annotation model so that all the annotations, no matter who and what generated them, can be queried in a uniform way.

In the GitHub Wiki we published documentation that explains how to build and deploy the project in a Tomcat web server:

<https://github.com/annotationsatharvard/catcha/wiki/Building-the-Annotation-Hub>

2.3 Interoperation of the Interoperation of the CATCH modules with Annotation Tools

We are now beginning to test the interoperation of the CATCH modules with annotation tools based on Annotator.js. A use-case we are working on is for the Open Video Annotation (OVA) project <http://www.openvideoannotation.org/>, where the Annotation Hub will serve a back-end server for all annotations generated by the OVA tool and the UI front-end grid will interoperate with the annotation tool component and back-end server data (see screen shot of tool).

The screenshot shows the OVA web interface. At the top, there is a navigation bar with the OVA logo and the name 'John Harvard'. Below the navigation bar are search filters for 'Search Annotations', 'Search by Users', and 'Search by Tags'. The main content area features a video player with a play button and a video thumbnail titled 'The Big Sardine Feast'. Below the video player is a table of annotations with columns for 'User', 'Annotation', 'Start', 'End', and 'Date posted'. The table lists several annotations with their respective start and end times and dates. Below the table is an 'Annotation Detail' section with a play segment button and a description of the annotation. On the right side of the interface, there is a 'My Annotated Videos' section with a list of video thumbnails and their titles.

| User | Annotation | Start | End | Date posted |
|-------------|--------------------------------|-------|------|-----------------------|
| jharvard | Comment 1 content goes here... | 0:03 | 0:08 | Sep 9, 2013, 3:45pm |
| prakata | Comment 2 content goes here... | 0:07 | 0:22 | Sep 3, 2013, 8:30am |
| jaalinger | Comment 3 content goes here... | 0:17 | 0:20 | Aug 20, 2013, 11:08pm |
| propez | Comment 5 content goes here... | 0:03 | 0:08 | Sep 2, 2013, 3:45pm |
| mbatiannini | Comment 6 content goes here... | 0:07 | 0:22 | Sep 1, 2013, 8:30am |
| hdupovic | Comment 7 content goes here... | 0:17 | 0:20 | Aug 16, 2013, 11:08pm |