Zwamy Image Connector V1

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The Image Connector (IC) is a website which allows users to connect to image repositories on the web (e.g. flickr, facebook, smugmug, Wikimedia commons) and select images for inclusion in the Zwamy metadata database. There is a single Zwamy metabase for all images regardless of source or user which selected the image.

The basic IC workflow is:

* + User logs into IC using their Zwamy username/pw
  + User selects an image repository and if necessary the user provides the necessary login credentials for the repository
  + The IC connects to the selected repository and displays the image contents of the repository by showing a set of thumbnails
  + The user selects thumbnails of the images they wish to link
  + For each image selected the IC copies the metadata about the image to the Zwamy metadata database

Detailed Description:

1. User login (slide 1) – the user enters their Zwamy credentials. V1 will only have a few single hard coded logins for the Zwamy team. In the future it will connect to a webservice to authenticate with a Zwamy server.

2. After the user is authenticated they are given two options (slide 2) : Connect to an image source or View linked images.

3. Image repository selection (slide 3) – the user first selects a repository from a pull down list. V0 will only support Wikimedia commons and Flickr. In the future we will support a wide range of web based image repositories including Facebook, Google+, Smugmug and others. For flickr (and others in the future) the user will be asked for their credentials which will be authenticated with flickr. In the IC there should be a separate code module for each image repository so we can add new repositories easily in the future without impact on existing working repository code. The flick API is available at: <http://www.flickr.com/services/api/> The Wikimedia API is at: <http://www.mediawiki.org/wiki/API:Main_page>

For non Wikimedia repositories, the IC will then present the user with a set of sets (albums) from flickr. The list will also include the user’s photostream. The user will select one or more sets.

4. Image selection (slide 4) for Wikimedia – since the Wikimedia commons (<http://commons.wikimedia.org/wiki/Main_Page>) does not have sets or albums the user is presented with a search box where they can enter the name of an artist (e.g. Monet). Using the API a query is done on Wikimedia for artwork by the names artists and for each piece of artwork the thumbnail image is displayed to the user in a grid. If the user hovers over an image a pop up box appears with displays the metadata about the image from Wikimedia.

The Wikimedia metadata (if present for the image):

* Artist
* Title
* Date
* Medium
* Dimensions
* Current Location
* Notes
* Source/Photographer
* Permission
* URL of the highest resolution image
* URL of the image with closest resolution to 1920x1080

5. Image selection (slide 5) for Flickr – Thumbnails for the Images from the selected flickr “set” are displayed in a grid. If the user hovers over an image they get the metadata.

The flickr metadata (if present for the image):

* Title
* Description
* Tags
* Date Taken
* License
* Exif data fields
* Owner
* URL of highest resolution image
* URL of image with closest resolution to 1920x1080

At the top of the page there is a pull down list of “sets” which allow the user to switch to a different set if they found they had chosen the wrong one on the previous screen.

5a. Image selection common – The user selects the images they wish to link to Zwamy by checking the box next to each image. There is also a button “show not yet linked” clicking this removes images which have already been linked to the Zwamy database. This means that if an image had already been linked (by this or any user) it is removed from the grid of thumbnails. The “show all” button shows all images regardless of whether they were linked. For previously linked images, the thumbnail contains an uparrow symbol in the lower right hand corner of the image (and there is no checkbox next to that image). If the user hovers over the uparrow a popup appears with the user name and date of when the image was linked. This means that once an image from a particular source is linked by anyone, it cannot be linked again. However if by chance a copy of an image happens to exist in multiple web image repositories (both Wikimedia and flickr) they are different images and can both be linked. The unique image key is the “URL of the image with closest resolution to 1920x1080.”

There is an image size slider in the bottom right hand corner which allows the user to resize the thumbnails.

The “link selected images” creates an entry in the Zwamy metadata database for each selected thumbnail and populates the available metadata. During the upload two additional metadata fields are automatically added:

* User name – the Zwamy userID of the user doing the linking
* Date – the date/time of the link
* Source e.g. Wikimedia commons, flickr, facebook etc.

6. Link status (slide 6) – there is a status indicator which tells the user their progress on doing the linking. If this process is fast (and it should be since we already got the metadata when we got the thumbnails to display) there should be just a progress bar. If it is slow then we should show each thumbnail and a progress bar for each so user can judge progress.

7. View linked images (slide 7) – this page allows the user to view and edit the Zwamy image metadata database contents. Initially this page is blank until the user enters something into search. This search box supports simple wildcards like “\*”, so if the user searches for “\*” the thumbnails of all images in the database are shown. If there are more images than fit on the page it would be preferable to have an unlimited scroll bar so when the user scrolled down, it retrieved images as necessary to fill the page. If this is too difficult then there should be a next and previous page similar to google

Next to each thumbnail is a scrolling box with each of the stored metadata fields. If the user doubleclicks within the box the metadata is editable. The URL fields are not editable.

The search box does a universal search across all of the metadata fields at the same time. So if the user enters “Monet” in the search box, thumbnails would appear for all images in which the letters “Monet” appeared in any part of any metadata field.

The sort box allows the user to sort the images displayed by Title, Artist, Source, Data Added.