

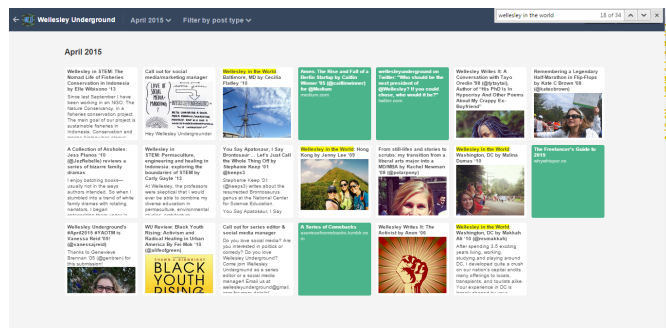
CS 249 Mashup IP - Detailed Description by Meridian Witt

App Title: Wellesley Underground

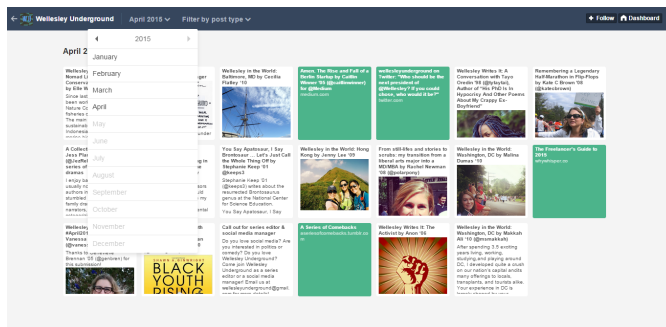
Short Summary:

The Wellesley Underground Tumblr allows Wellesley alums to express their stories and opinions in an interesting and evocative way. I would love to expand their audience beyond that of Tumblr. Powered with the Google Feeds API, I will create a web app to display the feed in a dynamic and inviting way that is accessible to Tumblrs and non-Tumblrs alike. Powered by Meteor, users can feel free to explore and interact with the articles, but logged in users can save favorited articles and preferences using MongoDB. The layout will imitate but also expand the UI of the Wellesley Underground Tumblr's archive UI.

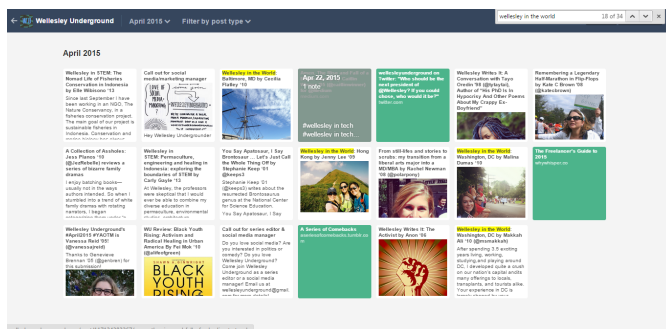
Inspired by:



All the articles are previewed as tiles. You can search for articles with the Ctrl + F function (it seems it can also search the entire article in the preview). Articles with no text or images are green blocks. I will implement search functionality.



You can also filter by publication date and O hope to be able to filter by predetermined tags called “series” (like Wellesley in Tech, Wellesley in Comedy). Perhaps, I will also add visualizations that illustrate trends in articles, tags, and authors.



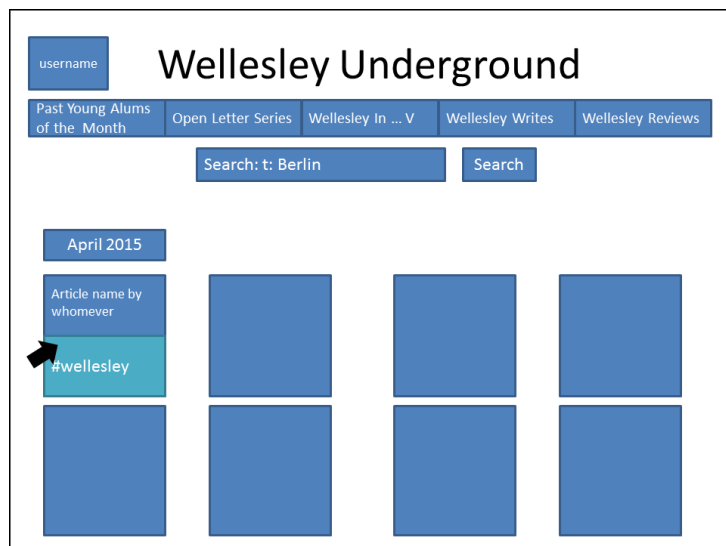
On hover, you can see the date and tags. I would like to keep this functionality.

Possible Problems:

We went over Google Feeds API quickly a while back, so I will need to reach back into my notes and memory. A huge key to my web application is organizing according to tags <category>, author <title>(parse after “by”) and <dc:create>, and time <pubDate>. I need to be able to organize by these tags specifically and search for other terms as well.

User Interface:

I am inspired by the screenshots above. Below are quick drafts made in PPT.



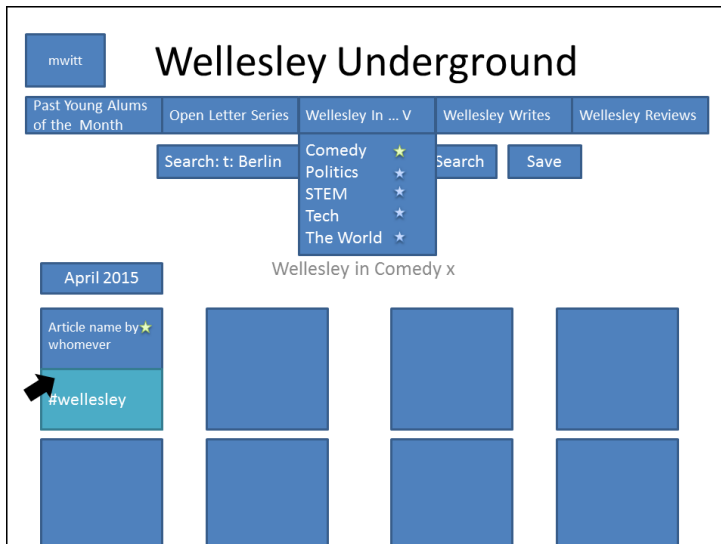
Before log-in

Before log-in, the user can leverage all search and filter functionalities but cannot save these preferences or favorites. The row of buttons on the top, on click, act as filters and display the appropriately tagged articles. The user can also search with the search bar (requires prefixes - t for title, a for author, etc.). When the user hovers on an article preview, a transparency appears displaying the tags. On click, it takes the user to the article.



After log-in

After log-in, all the previous functionality is available. Now, the user can save searches and articles as filters that appear under the search bar.



A logged in user can also save on of the “Wellesley in” series as a filter.

Main Functionalities

- Preview tiles: From the articles, I want tiles that preview the author, title, and image (if not image, display text). On hover, the tiles will display the tags.
- Filter and search: I want to filter and redisplay tiles by user-given terms (ranging from title, article, author name, publication date, tags, and series).
- Save and favorite articles: Logged-in users should be able to save and favorite articles.
- Create preferences / create own filter: Logged-in users should be able to create filters for a particular author or a particular series (so they can see those articles more quickly).

The invisible parts (server-side, database, data processing, etc.)

Talking with the API:

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml version="1.1" encoding="UTF-8" standalone="no"?>
<rss xmlns:dc="http://purl.org/dc/elements/1.1/" version="2.0">
  <channel>
    <description>
      An Alternative Alumnae Magazine for Graduates of Wellesley College
    </description>
    <title>Wellesley Underground</title>
    <generator>Tumblr (3.0; @wellesleyunderground)</generator>
    <link>http://wellesleyunderground.com/</link>
  </channel>
  <item>
    <title>
      Wellesley in STEM: The Nomad Life of Fisheries Conservation in Indonesia by Elle Wibisono '13
    </title>
    <description>...</description>
    <link>http://wellesleyunderground.com/post/117533155142/</link>
    <guid>http://wellesleyunderground.com/post/117533155142/</guid>
    <pubDate>Mon, 27 Apr 2015 14:24:58 -0400</pubDate>
    <category>wellesley underground</category>
    <category>wellesley in STEM series</category>
    <category>Elle Wibisono</category>
    <category>sustainable fisheries</category>
    <category>indonesia</category>
    <category>conservation</category>
    <category>fisheries conservation</category>
    <category>marine biology</category>
    <category>environmental conservation</category>
    <category>oceans</category>
    <category>nomad life</category>
    <category>class of 2013</category>
    <dc:creator>rabbitandcatadventures</dc:creator>
  </item>
</rss>
```

As explained in the [class notes](#), we can use the Google Feeds API to handle the [feed from Wellesley Underground's Tumblr](#). I will also try to use jQuery's \$.parseXML to deal with the data.

MongoDB: Collections

My plan is for each user to only have access to her own 2 collections: one that contains her preferences and one that contains the articles she has saved. I have to think about how to create this. In the end, I just want the first collection of preferences to be strings to insert into `articles.find({author:"Meridian Witt"})` - for example. I will try to use regexes or regular expressions for more complex searches/filters in fields (i.e. `{ $regex : ".*son.*" }`). In the second collection, I want to save the articles. Each article will have its information (title, content, image, category tags all as fields with values).

Another collection (user accounts) will automatically be created by the Meteor package `accounts-ui`.

Inserting and Updating Collections

To be thought through...

Data Processing

To be thought through...