Going Social: Improving Navigation in the Virtual Town Square

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Introduction

The Virtual Town Square[1] is a hyper-local news aggregator developed by the Computer Science Department at Virginia Tech and is intended to assist the local population become more aware of the issues that may affect them. This system currently collects news from local newspapers, blogs, press releases from local governments (town and county), local civic organization websites, as well Twitter and Facebook posts that match a particular search parameter. The main goal is to support information discovery about local issues and to encourage citizen-to-citizen discussion and deliberation of local issues.

The system has been in operation for close to a year. We have had many positive reports of use and favorable comments from our community partners. However, we have discovered that the interface allows some media sources to overshadow other content. Sources with a lot of content, like Virginia Tech's press releases or the regional newspaper, overshadow more relevant but smaller sources. For example, finding in VTS the agenda for the next town council meeting is difficult, even when local conversation about this upcoming meeting deems it significant.

In our meetings with our partners, it was clear that they (the partners) were aware of important local issues but were struggling to find information on these issues in our site. The information was there, was collected, indexed and available, but hidden behind the large volume of other more general (and less relevant) sites. It was clear that our site needed a better way to filter and then navigate the site.

We settled on adding more social ties to the navigation. We are using social ties, as expressed in user accounts as "follows" to organize the content in a hierarchical fashion. We follow people or organizations who have similar interests to us, or live near us, and those things that they share with others are going to be something that we care about. Using this approach for a local news website would allow users to access content they care about more easily, while still making other content readily available.

[1] http://www.vts.cs.vt.edu/

Problem Definition

The problems addressed in this paper included were caused by lack of ease of use/navigation and the lack of participation from users. For example, the Virtual Town Square has a way to share articles and news with other users. Most of the users did not use this feature and it seemed as though information that was relevant to them was being ignored. Previous research has indicated that local website participation will be low due to the specificity of users' interests. Local users are interested in local issues, making it harder to find a large base of users (Ahuja, Perez, Kavanaugh, 2009).

A second problem was that news sources that produce lots of content were overwhelming many of the more local news stories. Newspapers (Roanoke Times, Collegiate Times), very active local blogs (The Burgs) and large organizations (PR releases from Virginia Tech) overwhelmed the site and did not allowed for hyper-local content to be seen.

Our solution was to create a new layout that encourages citizen participation and organizes the content around social ties of the users in the site. The next section discusses this solution and the prototype developed.

Solution

The solution explored was to create a layout that directly used social information to organize the content. We keep track of storied read online, stories recommended, etc. for each user account. We use these as a representation of a user's interest. We complement this with "follows" relationships.

The result is four groups of information content. We call these: “My Stuff”, “My Circles”, “Regional”, and “Everything”.

Each of the four different organizations play a different role in our site. “My Stuff” is there to display all of a user’s personal posts, comments, and those articles the user has clicked on. This information is accessible to those who follow the user and others through the public profile. “My Circles,” the second level, is a compilation of all of the “My Stuff” information for all of the users that a user follows. This gives a user a quick access to “relevant” information where relevant id indirectly defined by the people he/she is following. This also takes advantage of community leaders that typically are more informed in local issues and might be participating online around relevant local topics. The third level, “Regional” includes “My Circles” for all the users that have an account on the site. This becomes an aggregation of what “local users” are reading/commenting. The final group is “Everything” and includes all the articles gathered in the site, even if they have not been touched by anyone. This is an unfiltered view of the content in the site. This was, by the way, the default view in our previous site.

Based on these four circles, we built six prototypes and discussed them with our partners. We also had numerous usability inspections within members of our group and refined the prototype accordingly. By the end of summer, we had one final prototype.

Prototype

All of the prototypes were built using Twitter’s Bootstrap framework. The prototype included a single stream of information (e.g., news, tweets, Facebook posts) organized into four different tabs matching the four different circles. In addition, we added some visualizations on the left margin to help information discovery within the four circles.

Conclusion

Making a website more social is a great way to get organizations and people of a certain community aware of events and issues that directly affect them. The goal of this project was to create a social aspect to the Virtual Town Square in order to make it more relevant to the local townspeople.

The resulting prototype was informally evaluated with the partners for the VTS and with other students. In the Fall, the prototype will be incorporated into the production version of the system.

References

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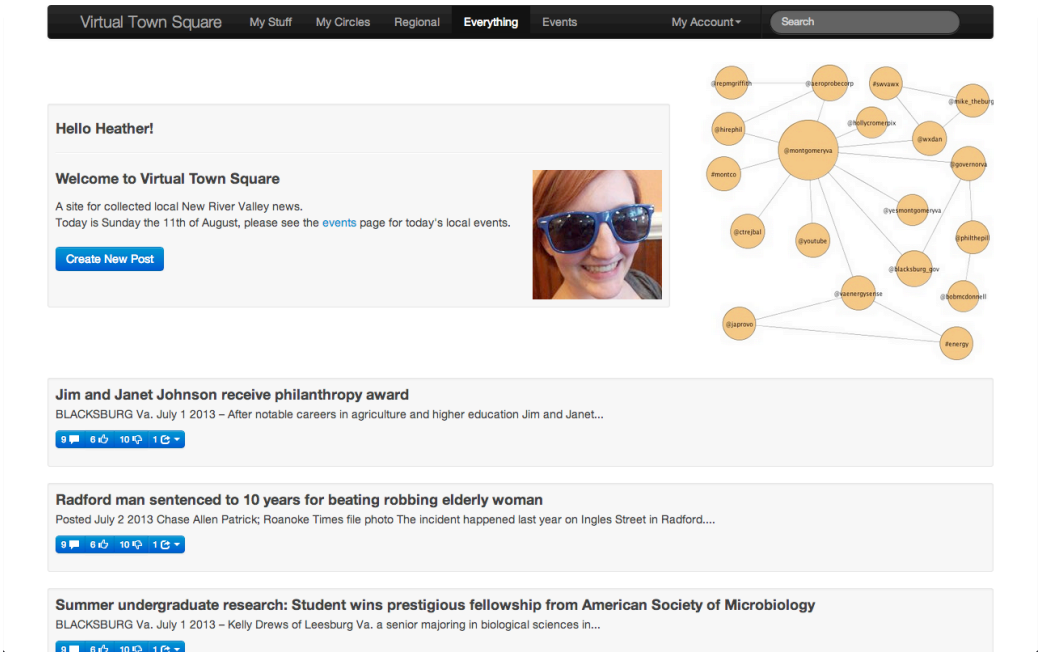
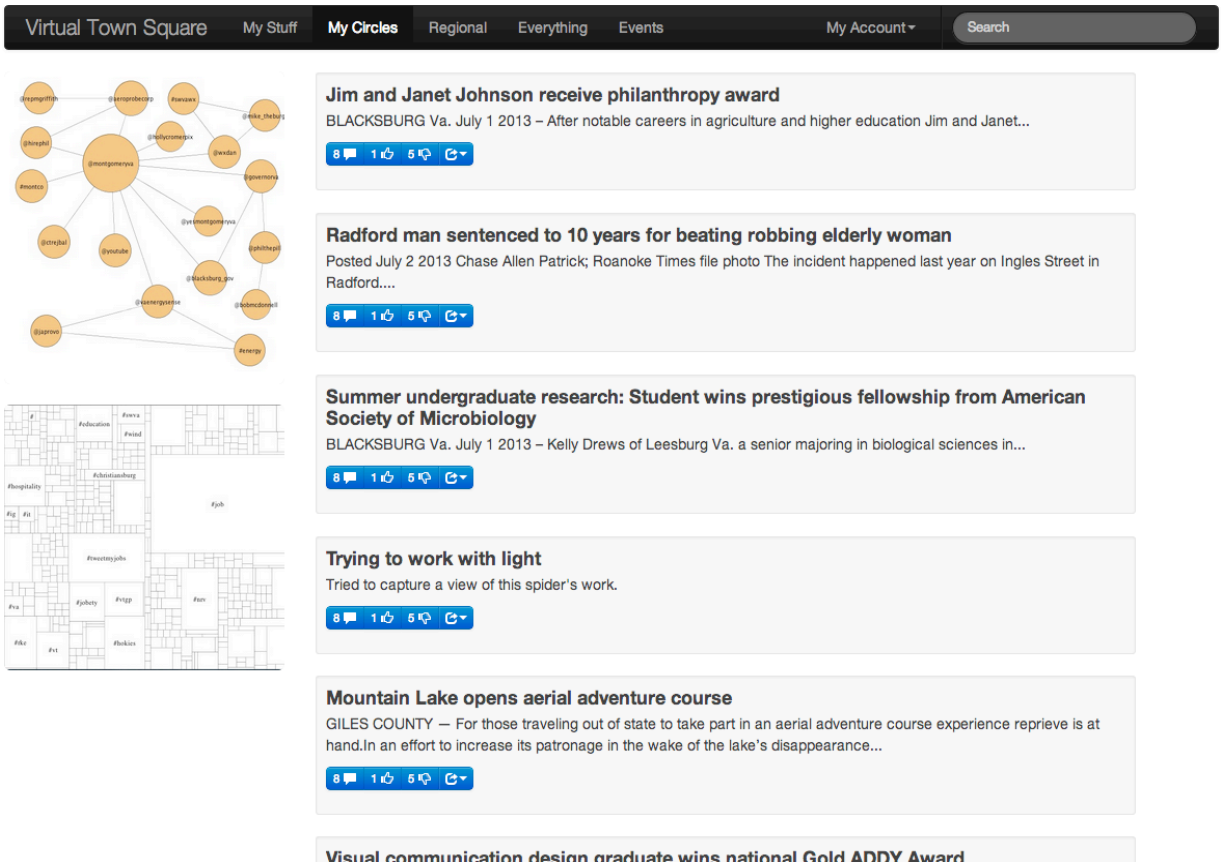


VTS home page after the user has logged in.



VTS layout showing one of the four different levels, including two visualizations in the left hand margin.