

Pursuit of Mappyness (POM)

Team information

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Elevator speech

The current set of Princeton Tigerapps provide a variety of useful services, the most successful of which are arguably ICE, SCG and PTX for academic planning. While apps for providing information on campus social life like the Events Calendar and PAM do exist, the former sees decreasing usage and the latter by nature only concerns a section of campus. Notably, the Tigerapps lack an integrated, visually sensible interface that provides access to general campus information that changes on a day-to-day basis, and largely this is the reason that past attempts at this subject have been less successful. We propose the POM, an interactive campus map on which customizable and searchable layers of information important to students including campus events from the Events Calendar and facilities hours and statuses from Princeton's data feeds can be added.

Overview

The POM's fundamental interface will be similar to that of PAM, and will be a web app with buildings highlighted and clickable. POM will then include a panel of layers that will provide various types of services for users - currently, the key types of layers planned are a calendar-type functionality that displays the multitude of events occurring during a user-specified time period across campus, and a information-type functionality that displays such information as facilities hours, dining hall menus, and printer and laundry machine statuses. Layers can

be customized through user-set settings, items on layers can be filtered through searches, additional items that users will inevitably find lacking can be added and shared through a simple interface, and layers can be displayed at the same time, in different colors. Essentially, the goal is to provide an all-in-one, visually appealing, and extendable interface that each user can customize to his or her needs.

A variety of new technologies allows us to expand POM to integrate with widely-used Web services such as Google and Facebook, time permitting. The POM web app will be primarily coded in Django and Javascript, but could include API calls to Facebook events and Google calendar that will allow users to add POM items to their personal accounts. Furthermore, should time allow, POM could be modularized to be independent of data specific to the Princeton campus - in other words, POM could serve as an open-source code-base that allows other developers to customize for their own mapping needs.

Risk Factors

- *Must find an image of a map of all campus buildings, and must carve it out to make it clickable.* Largely mitigated, since we already have this image and we can learn the technology from the developer of PAM.
- *Must integrate with the existing Events Calendar, which may contain messy code.* Probably minor, since we already have access to this code.
- *Must get access to, or find a way to scrape and parse, Princeton's data feeds on menus/hours/statuses.* Largest out of our risk factors, since we're unsure of where to get the data specifically. However, the worst case is simply that we develop some scripts to parse the data out of the multitude of sources online. Best mitigated by contacting relevant sources early.
- *Misc.* We don't anticipate many of the traditional problems with databases, hosting, and development infrastructure because we have access to USG TigerApp resources. Our timeline primarily adds functionality to our core project, hence if we run into major problems we can always cut off early. Also, we intend to uphold the USG tradition of I.E. incompatibility.

Target users

- Princeton undergraduates as users of the information on POM

- Clubs and other campus groups as providers of events information on POM
- Princeton graduates, faculty, and other community members, and potentially prefrish interested in what campus life at Princeton is like

Projected Timeline/Milestones

March 7, 2012

Josh, the USG contact on the team, ran the project idea with Bruce and Benny in the USG. They found the idea of a campus-wide social map excellent - to them it was incredibly useful, as well as a great way to increase usage of the old Events Calendar and build on PAM (the Prospect Avenue Map).

March 14, 2012

The team members met up with Professor Kernighan, where we discussed potential additional features.

March 25, 2012

Plan is to get Github and server accounts for all team members set up by then.

March 26-30, 2012

Meet with TA.

April 6, 2012

Should have map; buildings with events should be highlighted; buildings should bring up info column when clicked; should display gym hours as facility-info proof-of-concept.

April 13, 2012

Prototype (few if any changes to intended functionality after this).
Should have basic event adding functionality at this point.

April 20, 2012

Should have clean event adding interface by now. Should have info for most facilities.

April 27, 2012

Alpha Test (~working version of core project)

Core project should be clean. If time GCal integration, FB events integration.

Experiment with mobile CSS.

May 4, 2012

Beta test (website should be relatively secure and user tested).

May 8-11, 2012

Demo day.

May 15, 2012

Final submission for Dean's Date.