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Time/Slice Project Report

A. Project summary

Time/Slice is a tool for creating digital crowd-sourced bulletin boards. In particular, it is intended as a tool for libraries to collect, archive, and offer access to community information and data. Time/Slice allows institutions (e.g. libraries) to easily create online bulletin boards which users can upload multimedia content to via a simple email process; content is then sorted and archived according to media type, date, and user-chosen tags (metadata). Time/Slice is written using PHP, javascript, and MySQL, and uses the Postmark service (postmarkapp.com) for processing user emails. A project page is currently hosted at www.timeslice.io.

B. Accomplishments

In the Spring 2012 semester of Library Test Kitchen, I created a demo version of Time/Slice for a final project. Over the course of this grant, I further developed that into a working prototype, improving performance and testing it out with students in the current LTK class. I also created an API that can be used to provide flexibility in accessing community data.

Although Time/Slice began primarily as a calendar app, I explored other applications building off the core framework. I developed working instances as a "who's who" listing at events (MetaLab's openLAB), as a repository for student field observations, to indicate current activity at the LABRARY (a pop-up up library space in Harvard Square), and to demo a crowd-sourced cataloging tool at the DPLA Appfest in Chattanooga (www.catalogthewholeearth.org). Time/Slice is currently featured on both the LTK and the LABRARY websites.

In developing these applications, I talked to users (primarily LTK students) about their experience using the tool, integrating their feedback into design revisions. This led me to expand support for different media formats (animated gifs) and improve metadata parsing (Time/Slice relies on natural language processing to extract date/event info).

In addition to back-end development, I worked with Jeff Goldenson to design responsive front-end interfaces for the different uses of Time/Slice.

Although it has not yet been implemented in Harvard libraries, I am in ongoing conversations with Design and Fine Arts librarians, and having developed a functional prototype, will continue to work with them to set up Time/Slice instances in their libraries.

C. Challenges

Although I integrated much of the user-feedback into the development of Time/Slice, I was not able to respond to all of it within the project's timeframe. Better integration with other services (Vimeo, YouTube, and Instagram) emerged as features that would improve Time/Slice and facilitate wider use.

Another challenge is minimizing data-use costs for users emailing image or video files. The current design and implementation does not address data-plan limitations and the subsequent image compression that would maintain an optimal balance between size and quality.

Although developing a native mobile app was initially considered, it was ultimately seen as a barrier to use, particularly in the short time-frame scenarios that were explored. Balancing ease of use with functionality and range of features offered continues to be a challenge, and should be reconsidered as uses and user-bases change.

A last, more general challenge is defining and explicitly describing the range of uses for Time/Slice will still allowing flexibility of use. One of the strongest features of the platform has been its flexibility, and the variety of data-types and metadata that users might want to submit. Encouraging a variety of creative uses by libraries, librarians, and students should be focused on going forward.

D. Next steps

There are a number of clear next steps in the development of Time/Slice:

- Better integration with Instagram/Vimeo/YouTube
- Mobile App development (iOS/Android), including optimization of image compression
- Further API development through conversations with potential Time/Slice administrators about needed functionality (i.e. librarians)

E. Budget spent:

Apple Developer License: $99
Timeslice.io domain name (one year): $95.76
Hosting on dev server (NearlyFreeSpeech.net): $50
Payroll expenses: $8400

Total: $8644.76 ($8788 initially requested)

F. A list of any publicity you did, e.g., articles, blog posts, podcasts, etc.

- Blog posts at Library Innovation Lab: http://librarylab.law.harvard.edu/blog/2012/06/14/timeslice/
- LTK Exercise II Description: http://librarylab.law.harvard.edu/librarytestkitchen/?p=517

G. A list of any presentations you gave that involved your project

- MetaLab's openLAB exhibition: http://www.timeslice.io/demo/template1.php?kw=openlab
- Library Test Kitchen Exercise II: http://www.librarytestkitchen.org/timeslice.html
- "Catalog the Whole Earth" at DPLA Appfest: http://catalogthewholeearth.org/
- LABRARY website: http://www.librarytestkitchen.org/labrary/