Assignment #1: Project Proposal Gary Kuo (garykuo@u, kuo@cs) Yizhou Wang (wyizhou@u, wyizhou@cs)

Social Calendar

Our project proposal is a calendar application called Social Calendar.

Vision

Social Calendar is a fully-featured calendar with the integration of social capabilities, targeted towards people who wish to manage and collaborate events with friends. Through heavy integration with Facebook, our calendar application adds a social aspect to the traditional calendar application.

Our calendar application is unique in the way that calendar entries are created and used. For each calendar entry, users can tag it with people on their contact list, which shares the entry with those people and gives them permission to view it. Contact lists will be pulled from Facebook and possibly other sources. For scheduling of meetings, the application will check the available times on the calendars of all the contacts that are tagged for that meeting and recommend a suitable time among all people tagged. For each entry, the user can also upload photos, in which only those tagged for that particular entry are able to view them. In our application, the user can also create entries with due dates and share them with others by tagging those who are involved with the entry, which automatically sends a reminder onto their own calendar. Some of the UI as we imagine them for these functions are illustrated below.



The problem with traditional calendars is that there are very limited social capabilities, such as sharing photos for a particular event. Google Calendar, for example, only allows users to view

other people's calendars. Facebook Events is a similar application that has lots of features for creating and sharing events, but there is very little focus on the features one would find in a traditional calendar, such as controlling recurring events. Our calendar takes the best of both worlds and alleviates all of these issues by making use of social elements, which makes it unique and worth developing for, since more and more consumers are turning towards social applications for managing their daily schedule.

Software Architecture

Social Calendar will be implemented as a web-based application. Social Calendar will use the open source software PHP-Calendar (<u>http://code.google.com/p/php-calendar/</u>) as the framework for basic calendar functions. We will then heavily modify PHP-Calendar and implement the social aspects that we have described.

The application can be separated into several modules for each major feature, which include account management, creating entries, viewing/uploading photos, commenting, contact list, and scheduling. Of these, viewing/uploading photos, commenting, and the contact list will be achieved through the use of the Facebook API. To integrate with Facebook, we will be making use of Facebook's PHP SDK (https://github.com/facebook/php-sdk/).

Other major parts of the application include developing the user interface and the backend system to connect with the SQL database, which will contain application-specific data for the calendar.

Challenges and Risks

The primary technical challenge associated with our application is that it is based on PHP, a language in which we have little knowledge of. We also have minimal experience in developing an application and using the Facebook API.

One significant issue with our application is privacy and its ability to reveal sensitive information about the user. For instance, in our scheduling feature, when the system attempts to find a time slot that fits the schedule of all tagged contacts, would it consider or not consider private entries? If private entries are considered, the issue of the user having indirect knowledge of another person's private schedule occurs. If not, the scheduling feature would not be very useful because it would not accurately take into account the full schedules of other people.

Another issue is the Social Calendar's heavy dependency on Facebook, which most of our features are based off of. As with all websites, no matter how unlikely, having no downtime would not be guaranteed. However, since Facebook is known to be quite reliable, this is a trade-off we are willing to make.