Project: Clique

Motivation and Direction

In today’s mobile application ecosystem, there are myriad ways for groups of people to interact and share information. Most of these applications self-identify as “productivity” apps and have business applications for groups of people working collaboratively. In many ways, these applications (ie Evernote, Slack, HipChat) represent small networks of people working closely together while LinkedIn represents a large network of coworkers and colleagues who are connected but do not necessarily work together on a daily or weekly basis.

There is not, however, a strong showing for these types of applications in the social space. There aren’t many applications for families, small groups of friends, or other small social networks to connect in a private, social space. If Facebook is LinkedIn from the above analogy, there is nothing analogous to the many “productivity” apps on the market.

For my senior project, I would like to use this gap in the mobile application ecosystem to motivate my learning of Objective-C and iOS development.

I will work on the front-end of a project, Clique, in Objective-C.

To power the backend, I will be using Parse, a backend service provider. Parse gives free service to small projects (in terms of number of users, amount of data etc.) and Parse integrates well with iOS development. It requires an understanding of backend development to implement but handles many of the complicated details, thus is well suited for beginning learners, such as myself.

Below, I provide a description of the project in its full imagination:

Project Description

Clique will focus on providing 5 primary services to users:

1. Clique Creation Tool

   Users can create their own “cliques” which will determine what information is shared and with which groups of people.
2. Photo Sharing Utility

The photo utility in Clique will allow members of a clique to post photos and videos to a stream available for viewing to all other members of the clique. These photos and videos can be organized into albums to separate events or topics, such as a family vacation or group dinner from the average day-to-day images. This will function very similarly to Apple’s Photos app.

3. Location Services

Location Services within Clique will function similarly to Apple’s “Find My Friends.” Within a given Clique, all members of the clique may see some amount of location information about the other members.

The difference between Clique’s Locations and Apple’s will be that Clique allows for finer grain control over what information is shared. With some cliques, I may only want to share the city I’m in rather than my specific location, with others, I may only want to share information about my state of transit, and still with others, I may change my mind based on the time of day (ie allow my mother to see my specific location including ETA when she is preparing dinner but not while I am out with friends).

4. Collaborative Lists and Notes

The Notes function in Clique is one of the more unique elements of Clique. The Notes function will allow for collaborative note taking and list making. This means that a family could make a shopping list or chores list or friends could write details for a party or event, among other uses.

5. Macro and Micro Event Scheduling

For any given small group, there are two kinds of events: long term or repeat events, and spur of the moment, forgettable ones.

For long-term events, such as birthdays, trips, or parties, Clique allows users to create events that will be shared directly to a user’s default Calendar app.

For short-term, “Today Events”, ie “dinner tonight at 6pm,” Clique will handle the event internally allowing members of the clique to respond “attending” or “not” and
providing other information pertinent to the event such as “in transit,” “5 minutes late,” or “Late but coming ASAP” based on user input.

**Deliverables**

1. **Project Clique:**
   Develop the first three listed features:
   i. Ability to create a Clique and add friends by phone number or email or otherwise from a users Contacts.
      • Ability to remove yourself from a Clique
   ii. Ability to add Photos to a Clique’s photo stream
      • Photos can be organized by albums or as single uploads
   iii. Ability to collaboratively write notes in a Clique (either in checkbox format or in straight note)

   The three features above have relatively well-documented online resources. Based on the ease with which I pick up the necessary skills, I will seek to meet my stretch goals:

   i. Event scheduling of both “macro” and “micro” events
      • Including ability to export macro events to a users Calendar app
      • And ability to create micro events which exist only for the 24 hours during which they are created
   
   ii. Location Services screen w/various controls
      • The various controls may not be possible based on the way Apple allows an app to access a user’s location.

   Note: All features must be intuitive to use, thus requiring some dip into UI/UX

2. 8-10 page report on:
   a. Full description of final product,
   b. Breakdown of each component including:
      i. Error handling,
      ii. Known bugs,
      iii. And input and output
   c. Difficulties encountered,
   d. Helpful resources