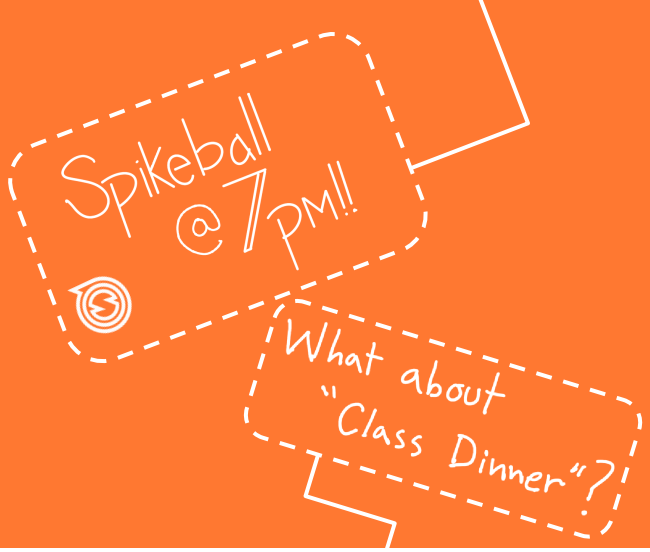
EnGauge

An Event Planning and Notification platform



Group Members

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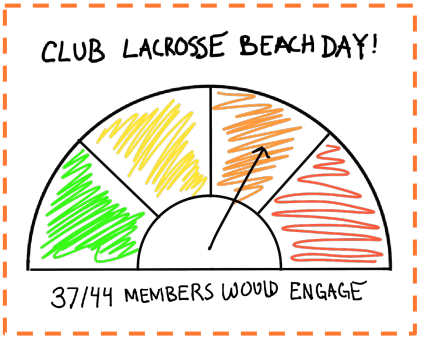
Motivation and Design

There is an undeniable need for a better event notification system, especially on campus. Oftentimes, students aren't aware of the events happening on campus despite efforts by organizers to publicize them— Listservs are largely ignored and Fizz posts are easily drowned out by the inane drivel of karma farmers and paid moderators. Additionally, there is a clear need for a means of gauging interest in events. As Class President, I *(Matthew)* have a very difficult time determining what Class events to hold or how to spend Class funds.

EnGauge is accessible via web and smartphone applications. EnGauge notifies users about upcoming events for the groups they are members of and allows them to view upcoming events. We will also allow group leaders and members to create signable "petitions" that help gauge group interest in an event. Finally, the app will allow users to browse public events and groups, ideally serving as a way to tie the campus together and give people access to fun communities they may not have heard about!



Petition Concept

This system has clear and natural concepts of a contribution pyramid and an easy and hard side of the network. The hard side of the network to recruit will be those groups and individuals responsible for running events. Our application will not function without a critical mass of events or proposals that students will be able to browse, give feedback, and rsvp to. This leads naturally into the idea of a contribution pyramid, where most users simply browse and interact occasionally, even fewer users provide consistent feedback and engagement to group leaders, and some smaller percentage of users run groups, create events, and solicit feedback.

Project Zone & Technical Plan

Zone: 1 **Active Users:** 15-25

Our project consists of a React Native application and a Web Interface connected to a Supabase backend. The mobile application will handle most of the function of the system, including group creation, event creation, messaging, and browsing. Events will be shareable through other platforms, and users will be able to interact with polls using the web interface. We will develop the application using expo and the supabase javascript api, and we will test and distribute with expo go.

Prototyping Method

Our piggyback prototype was conducted using iMessage and groupme. We both belong to a number of clubs and groups that already exist. We additionally both run or plan events for some of them. These groups range from small intramural teams to the sophomore class and Neighborhood Redwood.

Participants

There were two groups of participants who used this prototype. For the first group, we used students who were involved in multiple of our groups. For instance, one participant plays on my soccer team, lives in my dorm, and lives in Neighborhood Redwood. Normally, they see announcements and communications about events from multiple different channels. The soccer team uses iMessage, the dorm uses groupme, and Redwood uses email. Each of these groups requests potential availability, RSVP information, and feedback. To test our system, we texted participants in this group multiple messages containing the event info at once, so it would all be aggregated in the same place. The other participants all received event information in the conventional manner.

Metrics

Our goal was to determine whether the aggregation and simplification of event information would increase engagement and overall provide a better experience for our participants. To that end, we collected both quantitative data and qualitative data. Our quantitative data included a) whether or not the participant responded to a given event message (a poll, request for RSVP, etc.) and b) the time it took them to respond. The qualitative data consisted of a number of questions that we asked to determine a participants reaction to this new system.

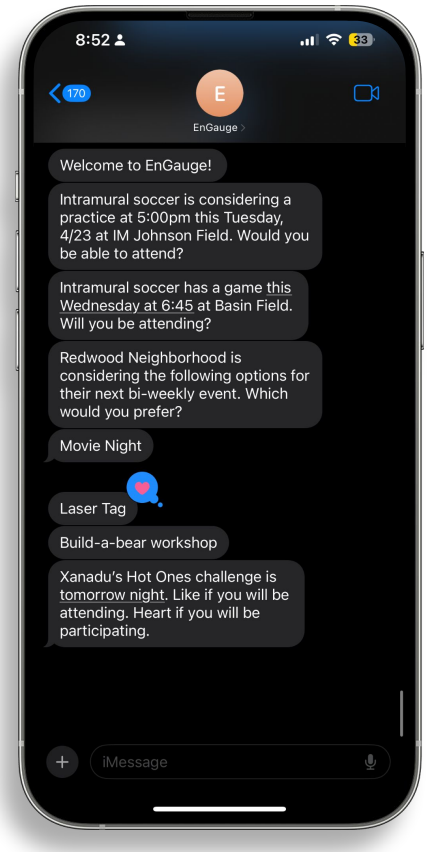
Prototyping Results

Average response time (Test Group)
1 hour 6 minutes

Response ratio (Test Group)
10/12

Average response time (Control Group)
4 hours 51 minutes

Response ratio (Control Group)
9/12



Discussion

We expected the more personalized and aggregated new method would increase participation (our main goal) and decrease response times (a secondary goal). Unfortunately, the response ratio did not improve as much as we were hoping. However, due to the short nature of the study, we utilized a small sample size (only 4 participants per group, who each received 3 event messages). Response time was significantly improved, which we attribute to the direct nature of a message compared to email or group chats. The true success of the prototype came from our qualitative data. The participants in the test group each said that they wished they could receive event information and other communication from each of their clubs in this centralized manner instead of scattered across various platforms.

Ethics & Privacy

As a sociotechnical system, our project would share many of the concerns of other applications of its type. Users and groups will be regularly interacting with each other, expressing opinions, and sharing personal information with each other and the system. There is of course potential for hostility and negativity within such a system. Injunctive norm creation and moderation will be especially important to prevent these harmful outcomes as the platform grows. Verification will also be important for individuals and groups, as an application that allows users to assume identities could be misused, especially within a community such as a college campus. Additionally, as an application that necessarily divides people into groups, it will be necessary to take specific care with moderation and governance to prevent cultural rifts and context collapse. Finally, user privacy is of the utmost importance, as our application will need to maintain collections of identities, messages, locations, and more. Here are some more specifics for our current thinking about these issues:

Privacy & Authentication

Using established external services for authentication and user data will be important for our application. Neither of us are software security experts, so we hope to use Google's OAuth system to verify user identities and make sure they are really members of the Stanford community. Additionally, Supabase provides standard data encryption within their account management system. We will endeavor to build out our application on top of these existing foundations.

Moderation & Governance

We will work from the beginning to provide clear injunctive norms for our application. Group owners will be responsible for maintaining these norms within their groups (akin to reddit mods) or risk their groups being shut down. The structure of these groups will also serve as their own governing system, as they are already existing structures within the Stanford community.