iScout

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An iPhone application for Boy Scouts

Target User Group

The Boy Scouts of America is a 100 year old program that teaches young men between the ages of 11 and 18 the importance of character, citizenship, personal fitness, and leadership through a structured program of outdoor activities. Boy Scouts are active, social, fond of the outdoors, and are usually tasked with managing their own badge achievements and conducting fundraising activities with their troop.

Problem

Boy Scouts record large amounts of information on paper which can be inconvenient for such a mobile user group. Our application seeks to address these problems which include managing the scout's merit badge advancement, collaborating on badge work with fellow scouts, and organizing fundraising events.

Currently, Boy Scout troop leaders may use a single handwritten poster or an Excel spreadsheet to track badge advancement for each member in the troop, but neither of these methods are readily accessible by all scouts.

Scouting encourages teamwork, but currently scouts must coordinate merit badge work at weekly meetings. This means the only time that scouts can discuss their progress is at these meetings, thus making it difficult to coordinate working on badges together.

Finally, scouting heavily relies on annual fundraisers. Currently members must organize neighborhood groups and routes on paper and make photocopies of their plans. These plans are easily lost and do not provide enough detail, causing many fundraising groups to cover the same ground twice.

In our sketch of fundraising groups, we did not know how the map would work on the iPhone, so we originally had the user put in two cross streets. We also did not have the option to add members to a group or pick a group color.

Our final badge tracking system was very similar to the original prototype. We simplified the tab at the bottom because during testing, our users found it somewhat confusing.

Solution

iScout improves the scout's awareness of badge requirements by providing a means to view his badges directly from his iPhone and record his progress on each of them. Scouts can also view their friend's progress by adding them as a friend within the program. Our application also provides a way for scouts to coordinate fundraising activities by recording fundraising group rosters, driver contact information, and regions of fundraising.

Design Evolution

Badge Tracker: Once we tested our application with users, we realized they had a difficult time finding their friend's badges because they thought the bar at the bottom was to view different ways to organize the badges. We altered this by removing all the sorting options at the bottom, and adding a sorting section.

Fundraising: We decided to give the users more freedom by allowing them to draw polygons, as opposed to limiting them to resizable rectangles. We allowed the user to delete areas by selecting pins representing each distinct area.

After user testing, we noted that some users had trouble with typical conventions such as "Edit" mode and saving progress before exiting a menu. We put additional effort toward eliminating these ambiguities.

Our map in the fundraising section evolved a lot throughout the project. From left to right: a sketch of our original map idea, a paper-prototype of our map, and our final map implementation on the iPhone.

Final Prototype

Badge Tracker: Our final prototype closely followed our original concept for the badge tracker. Our users responded very well to the user interface, and we only had to make minor modifications to make it work the way our users wanted as outlined in the design evolution.

Fundraising: We updated the way users can edit groups. In addition to doing away with the edit mode in the individual group views, when adding members to the group, the user also has the option of adding new members to the entire troop. The edit map screen was also updated, allowing users to delete shapes.

In the troop wide map, we were finally able to implement map troop-wide areas on one map for all groups. Selecting on a pin for a group's area takes the user to a detail view of the group. The map views in edit group and troop wide map both have search bars and are able to zoom in on the user's current location.

Extra Features: We also added a help section with screenshots of how to use the application. Since our last prototype, we were also able to get a database online, allowing troop and user information to be shared amongst devices.

Here are some samples of our final prototype. From left to right: The "Archaeology" badge tracker, a fundraising group's information page, the home screen of the application.