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CSE 403
Project Proposal Writeup

Pocket Pickup — set up and be notified of pickup sports in your area

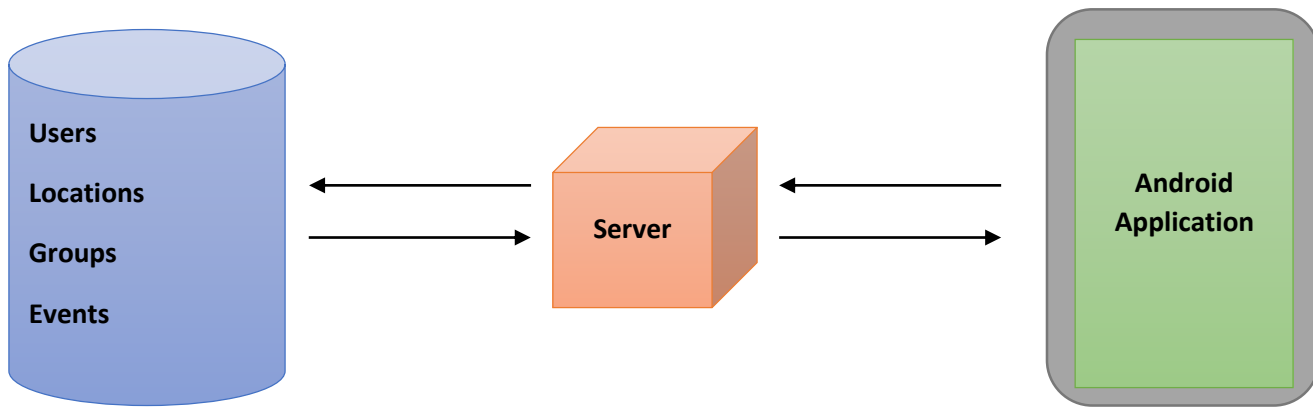
Vision

Our proposed project is an Android app that allows users to set up and join pickup sports games based on location or group of users. Users subscribe to locations (i.e., UW IMA fields) and/or join groups (i.e., UW CSE basketball), and then are notified when another user publishes a game to that location or group. Users are given the option to RSVP as a “yes” or “maybe” to these games, which will be published to the creator and invitees. When a user creates a game, they set the time, location, and whether or not the game needs a certain number of players to happen. If a creator wants at least 10 people, the game will be displayed yellow until 10 people have confirmed attendance. Games with enough people or no set minimum will be displayed green. We want it to be easy to set up repeat games (i.e. soccer every Saturday), but we don’t want the app to get cluttered with forgotten or poorly attended regular games, so repeat games will require confirmation from the creator, and will be pushed to subscribers every week.

This app will be designed for anybody to use, but just due to the nature of pickup sports, we’ll primarily target young males. However, there will exist a market for older men (think more racquetball and tennis, less basketball and football), young women (it’s harder for women to get random pick-up basketball games, because there are less of them), and older women (perhaps for yoga or group walks). Keeping in mind the diverse demographics, we’ll have to allow for users to choose their preferred activities, and for user groups to advertise who they are for, not just what sports they’re about.

A handful of similar apps do exist today, but none provide the functionality that we are interested in providing. The only related app in the Google Play store, *Pickup Sports* advertised many of the same features, but has seemingly merged with *Spotvite*, which appears to be a thinly veiled dating/sex app. This makes it unusable, and leaves the Android market empty. Another competitor, *NextGame*, advertises itself as a way to find pickup games in your area, with both an iPhone app and web interface. However, there didn’t seem to be any active users or upcoming games. The most successful alternative, *InfiniteHoops*, is a valid solution to the problem, but differs from our idea in a couple key aspects. *InfiniteHoops*, as the name suggests, caters only to basketball players. The developers have other, less-used apps, such as *InfiniteSoccer* and *InfiniteUltimate*, but we’d like to accommodate all sports in one app since it benefits users who are interested in multiple sports and doesn’t detract from the experience of single-sport users. This would allow the app to have a larger pool of users and, in the long run, to gain more traction. Additionally, *InfiniteHoops* is completely location based and is cluttered with defunct games that don’t apply to all users. Our idea is to only show games that are relevant to the user and allow games to be set up by location or by group.

Architecture



Our front end will be an android application that allows users to create a profile, to subscribe to locations and groups, to create events, and to see events that are relevant to them. The backend will be a MySQL database that stores users, locations, groups and events, mapping users to the locations and groups that they follow, and events to the location or group that they were created for. Technical interfaces that we will need to work with include the Android API and the Google Maps API. The Android API will allow us to create simple and user-friendly forms for registration, creation of new events, and handling push notifications, while the Google Maps API will allow users to visualize events nearby, and easily view event details. The project can be implemented mainly in Java, with the need for some MySQL queries in order to communicate with the database. The server and database can be hosted in the cloud separately, or can be a single dedicated machine.

The image shows two parts of a mobile application interface. On the left is a map view with a 'New Game' button at the bottom. On the right is a form for creating a game with the following fields:

- Sport:** Basketball
- Location:** UW IMA Courts
- Date:** 01 01 2014
- Time:** 1:00 pm
- Minimum Players:** 6
- Details:**

A 'Submit' button is located at the bottom of the form.

Challenges

Looking ahead, we believe that the most difficult challenge will be including all the desired features into a UI that is both easy and pleasant to use. This seems to be the single biggest determinant for the success of an app, and all the functionality in the world can't overcome a poor UI. As evidenced by some of the alternative apps on the market, this is a difficult problem to solve cleanly, but a cluttered UI can result in a serious lack of users, or even a merger with a sex app.

From a more technical standpoint, we can see difficulties integrating with Google Maps to provide the location functionality. As an additional challenging feature, we could consider using Facebook to create the users' profiles and to advertise newly created events to friends, although that may be out of this project's scope.