Wayne Gerard
(wayneg@cs)
(wayger@uw)

Real-time updates for Seattle social services

In times of need, Seattle residents often turn to the various social service organizations located throughout the city: Domestic violence shelters, rent assistance programs, and other various programs designed to ensure that community members find assistance in their most desperate times.

However, community members can often find themselves frustrated or overwhelmed by the process of seeking out these various services. Cold-calling domestic violence shelters until one responds that they have occupancy is a good way to ensure that victims become frustrated with the process and take inappropriate actions (or worse, no action). Volunteers at these shelters may be able to give some advice about facilities with availability or capacity to help, but often even the volunteers may have no idea what's available.

To alleviate this problem, we propose to establish a real-time tracking network for Seattle community social services. Participating social services will update regularly with their present capacity or availability, allowing users to make informed decisions about care. People familiar with this problem might point out that there is already a website for Seattle residents to seek out social services: 211.org. However, while Seattle residents can often find contact information for social services through this site, availability or capacity is rarely, if ever, available through 211.org.

One easy alternative (other than doing nothing) to our solution would be to provide some sort of volunteer service that users or other services could contact, and the volunteer would make it their prerogative to locate available services (for example, finding a rent assistance program with additional capacity for the upcoming month). The problem with this alternative is the necessity to have a service running this operation, and the time necessary to receive an answer could range from minutes to days. Real-time updates, presuming they are in fact real time, would be much preferable.

Technical details are limited at this point, but one imagines it may be as simple as creating separate logins for each individual social service and taking extra precautions to ensure that privacy is ensured. Information about availability and capacity could be kept in a database system, with data updated by the respective social service. Several existing web frameworks would be suitable for this challenge (e.g. Django and Rails), and the choice of which web framework to use will likely simply depend on what arises during the design process and team members' familiarity with frameworks.

The biggest challenges will likely be logistical in nature. For example, one important design question is how to incentivize social services to continue participating. Stale data due to late updates would be a big challenge. Worse than not providing real-time updates would

be delivering stale data. Users would quickly grow to distrust the service if the data was inaccurate, and rightfully so.
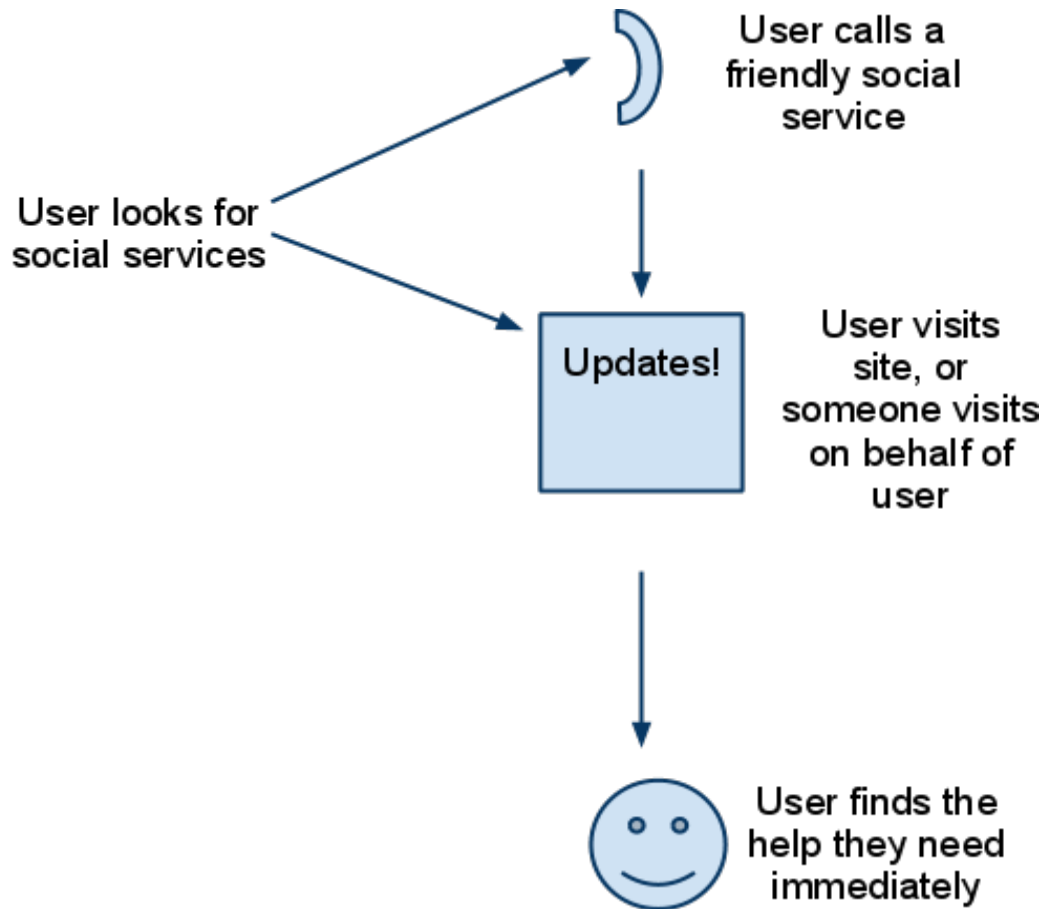

Fig. 1: A flow chart of the proposed solution

The question of server upkeep and maintenance is likely to arise. There's no money to be made off of this project, but server maintenance can be expensive if the service is heavily used. We propose to split the cost between the participating social services, and/or through donations. Ultimately, we expect the benefits of the service to outweigh the costs for participating social services.

Further, the city may be interested in funding upkeep of the servers and maintenance, since aggregate statistics about Seattle social services could be collected (carefully, of course). For example, a very rough estimate of the transient population in the Seattle area could be determined by recording shelter availability over time. This would provide a more consistent number than other programs attempting to locate the transient population in Seattle, an important fact to consider when deciding budgets for social services.