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SENG 564

Application Proposal
September 10, 2018

TagSwarm

TagSwarm is a concept for a mobile app that helps organizations crowd-source tasks that involve locating and gathering information on things in time and space. For example, a city may set out on a project to improve crumbling infrastructure. Such a project requires many hours of surveying to even begin to identify problematic infrastructure and prioritize it for repair. However, by crowd-sourcing residents who have a particular interest in the success of the project, the city can take advantage of empowered citizens and save significant time and money. This collective user activity is the "swarm". Other use cases may include crime-solving, usage-tracking, search-and-rescue, and disaster response.

TagSwarm allows users to create a point based on a smart phone's GPS reading, to associate a picture with that point, and to associate a title and notes with that point. A time and unique device ID are automatically associated with the point as well. These values are synched with a cloud database. The app owner can then access the results of the swarm through a web-based interface.

I plan to develop TagSwarm for the Android operating system. My overall objective for the semester is to complete the mobile client in several Agile iterations. The first iteration will create the app shell and allow the user to create a point with a unique device ID, time, and text. The second iteration will include GPS coordinates. The third iteration will include a picture. If I have time remaining, I will do a fourth iteration to synch data to the cloud, and a fifth iteration to create a web user management interface.