

Progress Report

Our design for this project did not change dramatically from our original expectations. At a high-level, we created an Android application that allows users to interact with data stored on the server, a server application that provides information to the Android application as well as collects incoming data submissions, and a simulation program that acts as a data submission agent (in lieu of actual measuring devices in the field). The changes we made included altering the submission data format to include the region list (to avoid needing to pre-define them on the server), having the server use MongoDB's automatically generated primary keys (instead creating our own arbitrary "id" integers), and simplifying the implementation of the user interface because it was taking too long to implement.

The table below outlines the contributions made by each of the team members:

Panagiotis Stanitsas	Nabil Cheikh	Jacob Quant
Exploration / development of algorithms for generation of the "heat map"	Development of Android application / user interface	Designed and setup server infrastructure
Initial code to create video from images	Android application architecture	Development of server's data collection & storage modules
Writing of proposal & design document	Creation of mock-up images for documentation	Creation of simulator
	Assistance designing the MongoDB documents / collections	Writing of progress report (also helped with proposal and design)

There were a few major obstacles for us during this project, one of which was the death of Jacob's mother-in-law, which delayed work by about 10 days. In the future, we'd like to enhance the UI, improve performance, prevent multiple concurrent users from potentially interfering with each other, and fix the delivery of the generated video content.