**Survivable Social Network on a Chip Team S-16 A2**

A social network that easily can be setup in a local area to allow for people to talk to each other without larger internet access

**Hardware**: Beaglebone Black with wireless dongle and portable rechargeable battery. Clinet connection devices

**Software**: The main server is written in NodeJS with a sqlite database. The front end uses a combination of framework7. The communication between the backend frontend is implemented with http restful get/put requests and the socketIO framework.

**Software Abstraction:**  To simplify the system a model view controller abstraction is used. Each functional page has its own controller on both the front and back end. The functional pages are:  
 *Login* handles new user creation and returning user login

* *Search* handles the look up of information that is on the system such as past posts or user active users
* *Test* handles load testing and performance monitoring of the system
* *Public Message* handles user send public messages to everyone
* *Private Message* Handles users send a private message to a specific user
* *Announcement* handles sending announcements that immediately show up on all users screens

The SNOC is designed to be very responsive and handle a moderate scale, however it has not been designed to support a massive user base. This allows for us to optimize performance for a smaller number of people so direct socket connections are used for server client message passing of dynamic data such as new message.