

# Survivable Social Network on a Chip

# Team SB-5 Stars

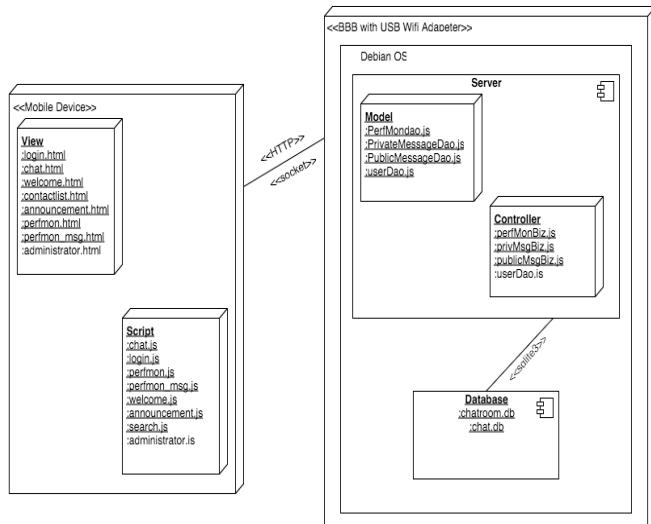
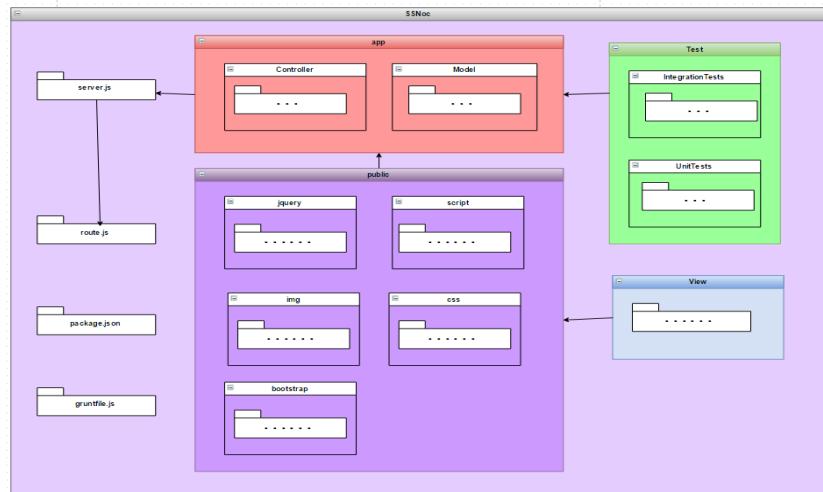
SSNoC is to provide a social network to touch base with your neighbors, exchange information or ask for help through mobiles during emergencies or disasters when no electricity or network is available.

## Technical Constraints

- Must run on Linux (Debian OS)
- Have time limits(approximate 4-6 hours)
- System must be linked by wifi
- Hardware/platform given:  
BeagleBoneBlack/Power Bank/Wifi Connector
- Node.js, Express.js, SQLite3, RESTful API,HTML,CSS,Javascript

## High-Level Functional Requirements

- Users can login with username and password and logout of the system
- Users can join community and chat with other members privately and publicly
- Users can share status to identify safe or unsafe situations and post announcements
- Users can also search information as needed
- Co-ordinator can make public announcements
- Administrator can limit user privilege



## Other Design/Architectural Decisions

**Express.js**: Lightweight web development framework.

**Bootstrap**: A framework that provides simple CSS and jQuery documents.

**Socket.io** : Bi-directional communication between client and server.

**SQLite3** : Simple self-contained and serverless database

**RESTful Web Services**: Lightweight, maintainable and scalable

## Responsibilities of Main Components

**Node Modules**: Contains the modules of all the main functionality used

**Server.js**: Captures all client request

**Database** : Used for storing the user and message information

**Public** : Contains all the images, javascripts and stylesheets

**App** : Contains all the Dao's and controllers

**Views**: Contains the front end view of the application

**Mobile** : Used to login to the application and use it

**USB WiFi Adapter** : Converts the data from WIFI protocol to USB data

**BeagleBone Board**: Contains the Debian OS



Picture of deployed system