Web Application Idea, Features, and Architecture

My application will be a social media network for events intended for use of an apartment complex of approximately 1000 residents. This application will allow a user to have his or her own personal profile and a calendar that can have events added to it. The user will be able to create or join groups and the user’s calendar will sync with and show the events that those groups are putting on.

The apartment complex the application is intended for is The Village at South Campus (the Village) located south of BYU campus in Provo, Utah – for which I am an event planner for. This apartment complex is a major center for activities and events in the Provo college social scene. Between Village events, ward events, resident events, and even company sponsored events it would appeal to a lot of residents’ interest, and also those putting on events, to know of and keep track of events happening there at the Village. My application will work to help residents in this manner.

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| Features for *Ideal* Application | Features for *Practical* Application |
| * Relational Database optimized for large-scale usage (for expansion) | * Relational Database optimized for large-scale usage (for expansion) |
| * User login with verification of residency at the Village | * User login with verification of residency at the Village |
| * Unique user profile | * Unique user profile |
| * Modular calendar GUI | * Modular calendar GUI |
| * Functionality of *Groups* - user ability to create and join groups, and syncing events with all members of that group’s calendars * RSVP * Notifications | * Functionality of *Groups* - user ability to create and join groups, and syncing events with all members of that group’s calendars * RSVP * Notifications |
| * Sync with Facebook * Friends * Events outside of the Village * Promoted events * Google Maps tab that will show locations of events on specific days * News feed * Smartphone app |  |

The architecture for my application will be written in Javascript and will be using Riak for the database. I will use node.js and Express for the backend and AngularJS for the frontend. I want something that is highly scalable and is fast. With this architecture I feel I will get what I need for my application and be able to focus on developing my features. Dr. Zappala also encouraged that we use it.