**Community Map**

1. **Introduction**

A community map is a platform to collect local knowledge of the community and perform local mining tasks. We see below three components in this map.

1. Mash up of information for local places by aggregating data from external sources like Yelp, public datasets and external web etc.
2. Social profiles to encourage users/organization to share information within the community. This can be in the form of notes, reviews and other application specific tags. Users can also agree to share activities from other social profiles like Twitter, Foursquare and Facebook.
3. Mining this knowledge to discover interesting facts in the community and visualize them on the map.
4. **Data Sources**

These are the major data source categories that can be used for the Map

1. **External Sources on web**

These are trusted data sets available on the web and accessible via APIs or shared data sets in the form of downloadable files. E.g Google Maps API, Yelp API etc

1. **User Generated Content – External Social feeds**

These are user generated content from external social feeds like Twitter API, Foursquare API, Facebook API etc

1. **User Generated Content – Internal**

These are generated by our application through user notes, user memories, user reviews, hash tags, online surveys, online questionnaire, online chat, images etc

1. **Local News Feeds**

These are feeds for news from external sources accessible on web using APIs

1. **Search/Mining Tasks**
2. **User Information needs**
3. Proper Topics: These are well defined topics and directly satisfy the user needs. E.g. Restaurants, Groceries, Schools etc
4. Derived Topics: These topics are abstract and usually associated with emotions/moods. E.g Fun, Safety, Spiritual, Happy etc
5. Ad Hoc queries – Natural language
6. **How relevant the place is for the given user needs**

This involves assigning a score to the places based on user topics. We can also employ ranking to measure the relevancy of a place to the given topic. For derived Topics, we use scores from Proper topics and other external parameters. e.g. Fun Score, Safety Score, Peace Score etc.

1. **Topic based heat maps for Visualization**

This includes heat maps for both proper topics as well as derived topics.

1. **Place Discovery - Discover sub entities or related entities**

The idea is that any place will have sub entities within it. These entities describe something about the place. We can ask questions like what is inside the place, what attributes are relevant to describe the place, How is this place related to other places etc.

e.g Users generated data may involve discussion of Siebel Atrium at Thomas Siebel Center.

We should automatically discover “Siebel Atrium is a place within Thomas Siebel Center and create a list of discovered entities within Thomas Siebel Center”

1. **Topic discovery – Trending topics – Local News**

These are specific topics happening right now.

1. Authorities and Subscribers

Profiles may register themselves as authorities. Other users may subscribe for these authorities. An alert is broadcasted to all interested users.

1. Discovery of fine grained trending topics

* Location based discovery - Discover from large user densities
* Text based discovery – Discover from text from user content, news feeds etc

1. External News Feed for local news - Directly from external feeds.
2. **Interface Design**

Place holder for interface design discussion. Questions like how user inputs query, how we display results, how we provide filters for browsing on the map, how we encourage users to share information using our interface.

1. **Code Design**

Place holder for code design discussion. Questions like what does a profile for a place should contain properties/attributes for the places, what interfaces to input data.