Maxton Scott Coulson (mjsc) and Stefan Holderer (hstefan)

Vision
LocalInfo would allow users to indicate activities or food places/kinds that they enjoy and then when they are moving around/travelling they would get a notification when they enter a certain radius of the designated place.

For example, the user could indicate that they like donuts and whenever a person enters a 3 mile radius of a donut store they would get a notification as well as potentially a Yelp rating for that place. Also, the app could be more specific and be only activated for Krispy Kreme donuts. Furthermore, when the notification occurs the user would be able to either activate the notification (thus opening a map app and showing a route to the desired location), merely dismiss the notification, or select to see more information about the place.

Some other features potentially could include:

- Recognising the destination and proposing activities/food options in that direction and/or location
- Option to allow the radius to be based on velocity/kind of travel
- Select times for when you want notifications for lunch/dinner options

LocalInfo is designed to be accessible to a large demographic of people, but mainly for people who travel or are seeking to find out more about their city.

It solves the problem of missing out on opportunities due to either insufficient research into the area, or insufficient local knowledge. This problem can occur when users rely solely on Yelp or Google Maps, our service would provide significant amounts of local information through less effort and research. In terms of ‘competitors’ through research we were unable to find a service that interacted with the users as we are proposing.
Software Architecture
LocalInfo can be implemented on either android, iOS or potentially both. It can be written in either Java, Objective-C or a framework like PhoneGap to support both platforms. LocalInfo would use GPS to track the user and a map service such as Google Maps to get information about local POI. When near a preferred location a notification will be displayed with potential connections to yelp, and trip advisor. It would also feature a link to a navigation program such as Google Maps to guide the user to the location they is interested in. The system can learn the preferences of a user by a few questions first and later by the acceptance or discarding of notifications and can even use some kind of recommender systems to also utilize the data from other users. The project is interesting because it features many different frameworks and is really expandable in terms of features provided to the user.

Challenges
A major challenge of this project is to be a battery conscious background service that seamlessly connects into the used APIs. If the user already uses GPS for navigation it should not be too problematic. GPS activation could potentially be adaptive depending on specific settings.