Intelligent services to the users task using geo-location and recommendations

Project Journal

by

Prasanna Raajkumar Senreddy Ramanujam
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October, 2012

ABSTRACT

Intelligent services to the users task using geo-location and recommendations

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Geo location is playing an important role in day to day life especially after the tremendous growth in the mobile market. Revolutionary applications such as foursquare, Google maps have changed the perspective with which geo location data has been perceived. Examples of such location based services are customized offers from businesses nearby user's location, close proximity carpooling and geo-location based reminders. The principal objective of our project is to exploit geo location data to provide intelligent services to the user. The user would be able to add tasks and the system to identify and recommend services based on specific tasks by the user. A location aware client installed in smart phone would notify the user of services based on user tasks. The back end system uses data mining techniques to extract information from the local market and match it to the user's requirement. The client will also generate recommendations of other users with similar interests for closed proximity collaboration. This application would act as a "smart" assistant to the user providing him recommendations. As a result of this project, a location aware intelligent service is deployed as a mobile application across all mobile platforms on the cloud which will blend with the growing tech ecosystem.

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Intelligent services to the users task using geo-location and recommendations

Supervisor: Magdalini Eirinaki Joined (or not): Yes

Date/Time: August 25, 2012 Approach:Group meeting personally

Location: ENGR 283

Project Meeting Minutes: 40

Attendees: Prasanna RaajKumar, Rukmani Nellaiappan, Sudershan Malpani, Magdalini Eirinaki

Topics discussed:

- Item #1 Project Idea

We drafted initial idea of our project and discussed about it to the professor.

- Item #2 Design of our System

We discussed about the technologies we are going to use for this project.

Action/Work items:

- Action item #1: To refine the idea and make it more specific.
- Action item #2: To find out open source API which we can use for this project.

Intelligent services to the users task using geo-location and recommendations

Next meeting plan: September 6, 2012

Supervisor: Magdalini Eirinaki Joined (or not): No

Date/Time: September 6, 2012 Approach:Group meeting personally

Location: MLK Library

Project Meeting Minutes: 120

Attendees: Prasanna RaajKumar, Rukmani Nellaiappan, Sudershan Malpani

Topics discussed:

- Item #1 Machine learning algorithms

The agenda of this meeting was to discuss more on the different machine learning approaches present and find the one that best represents the problem that we hope to solve.

- Item #2 Analysis

We penned down the deliverables of the system and discussed regarding the architecture of the system. We outlined the major blocks in the system to obtain a much clearer view of our problem.

Action/Work items:

- Action item #1 Research further on machine learning approaches.

Next meeting plan: September 12, 2012

Supervisor: Magdalini Eirinaki Joined (or not): No

Date/Time: September 12, 2012 Approach:Group meeting personally

Location: MLK Library

Project Meeting Minutes: 100

Attendees: Prasanna RaajKumar, Rukmani Nellaiappan, Sudershan Malpani

Topics discussed:

- Item #1 Datasets to use

We discussed about the suitable data sets that we should be considering while training our machine learning approach.

- Item #2 Design

The initial thoughts about the design of the system were discussed. We also explored the machine learning packages in different programming languages in order to find the best machine learning library for our problem statement. We explored on Python, Ruby and Node.js for our server side development.

Action/Work items:

- Action item #1 Gather more info on Node.js
- Action item #2 Explore more suitable datasets.

Next meeting plan: September 18, 2012

Intelligent services to the users task using geo-location and recommendations

Supervisor: Magdalini Eirinaki Joined (or not): No

Date/Time: September 18, 2012 Approach:Group meeting personally

Location: MLK Library

Project Meeting Minutes: 120

Attendees: Prasanna RaajKumar, Rukmani Nellaiappan, Sudershan Malpani

Topics discussed:

- Item #1 Retailigence API

We discussed about several API's and other tools which we can use for developing the project and cheked feasability of using those API's or tools in our project.

- Item #2 Design of our System

We tried to figure out what design to implement in our system. Basically, just trying to check the workflow that how could the modules be divided and in what fashion the project could be proceeded.

Action/Work items:

- Action item #1 Brainstorming on different API's to use

- Action item #2 Project Abstract preparation

Next meeting plan: September 27, 2012

Supervisor: Magdalini Eirinaki Joined (or not): No

Date/Time: September 27, 2012 Approach: Telephonic Conference

Location: MLK Library

Project Meeting Minutes: 180

Attendees: Prasanna RaajKumar, Rukmani Nellaiappan, Sudershan Malpani

Topics discussed:

- Item #1 Discussion on the Project Presentation

We discussed about the what to present in the class. Gathered the data to make slides and coupled all the data together to make the final slides.

Action/Work items:

- Action item #1 Presentation for the project was completed.
- Action Item #2 To gather more information about some more API's and read some research papers relevant to the project topic.

Next meeting plan: October 4, 2012

Intelligent services to the users task using geo-location and recommendations

Supervisor: Magdalini Eirinaki Joined (or not): Yes

Date/Time: October 4, 2012 Approach:Group meeting personally

Location: ENGR 283

Project Meeting Minutes: 20

Attendees: Prasanna RaajKumar, Rukmani Nellaiappan, Sudershan Malpani, Magdalini Eirinaki

Topics discussed:

- Item #1 GimBal

We discussed about Gimbal, which is a product of Qualcomm, as it might be used in our project. It has relevant API's and features which we can use in our project and exploit those features to make a meaningful and intelligent system for the user.

Action/Work items:

- Action item #1 Getting more info about Gimbal and try to use it on your own such that you know what are the features and how can you exploit them for your application

Next meeting plan: October 10, 2012
