

Friend finder navigation android application

To meet new people around

Ravi Jayaraman¹, Navin D. Waghvani², Umesh B. Waghmare³

^{1,2,3} Student, Department of Computer Engineering, Gokhale Education Society's R. H. Sapat College Of Engineering, Nashik, Maharashtra, India

Abstract - In today's world where people want to meet new people around them to hangout, socializing has become an integral part of our new society. The reason we try meeting new people around is because we prefer to hangout only with people we share some common interest rather than just make new friends who share no common preference. This system that we have developed is for the purpose of finding new friends around a certain area who share same interests. Using various APIs such as Google APIs viz. Google Maps as our base for locating new friends nearby on the map and Parse as our backend for the data storage. Event management is also another feature included in the app to organize and socialize with likeminded people

Key Words: Parse, Google map API, Find nearby friends, event management

1. INTRODUCTION

Now a days smartphones have captured the market and everything is available within few minutes be it the best restaurants nearby or a coffee shop within a mile and so on [2]. This app add a feature to your repository of apps in smartphone to find new friends around who share same interest in what you do. This is the app that is need of the hour right now because while going to new locality, finding new friends is difficult because we are not used to the environment. But this app would remove those barriers and cut short the waste of getting to know right people whom you need for different purposes. Consider this example, I have shifted to New Delhi and want to search for new friends who like to play football. So when I search for people around me I can find people who also love football, alternatively I can

also look for some events wherein I can join with people who already play football.

Location based services are the core part of the application, it is used to get the user's location and based on that we find nearby people who are in certain range that is set by the user himself. Creating events and organizing get together can be very easy and helpful.

The application is broadly divided into two parts viz. Finding new friends nearby and Event management. We will discuss these two parts in detail in the later section.

2. PROPOSED SYSTEM

Now a days, location based services are used in mobile devices. With the Android location API provided by Google play services, adding location based services to application becomes easy [3]. It includes tracking location of device, recognizing activity and geofencing. It provides services based on user's current location, such as suggesting the nearby cafe or mall.

Main components of system are,

1) Parse cloud

Parse cloud is used as backend for application. It stores data in key-value pair of JSON. Every application on parse has its own application key and client key. These IDs are used to map the application i.e. connecting the front-end and the back-end.

2) Google Maps API

Google Maps API provides the GUI for the user. This API acts as an essential part because user's can see the location of the other user on map and it is easy to locate the other person [3].

3) Login and Registration

Prior to login process the user has to first register himself within the application.

The process of one time login is used in this application. When the application is installed for the first time the user has to register himself. Registration part consist of accepting various fields from the user like username, password, e-mail, name and interests. After successful registration the user can use the credentials entered in the registration process and login into his account. Application needs only one time login, that means only at the time of first login user has to enter his credentials afterwards there is no need for doing this procedure again unless and until user logged out of the application.

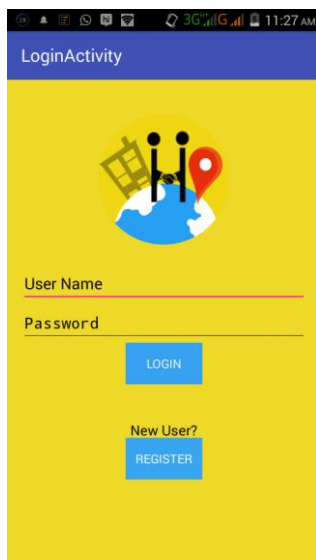


Fig-1: Login

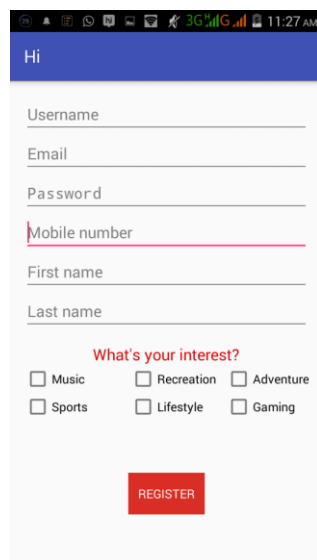


Fig-2: Register

4) Dashboard

Dashboard consists of four button leading to four different function provided by the application. These four functions are as follows,

- Profile
- Find friends
- Settings
- Events

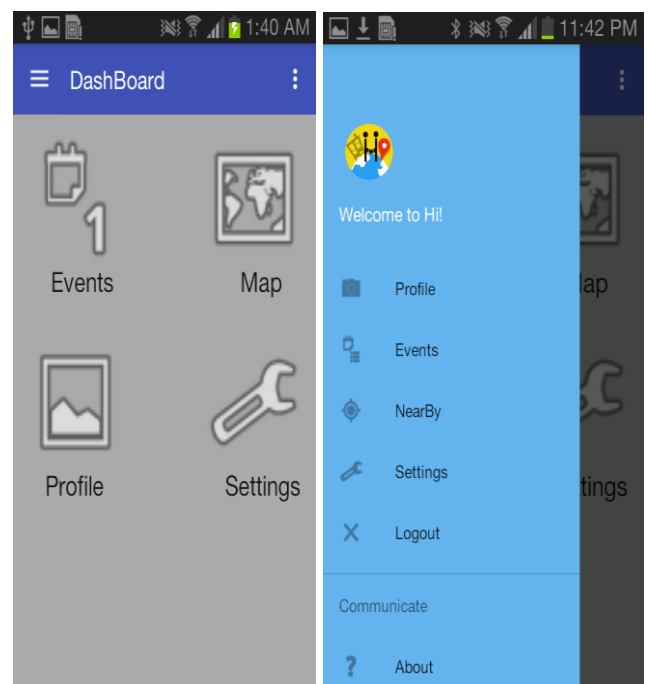


Fig-3: Dash Board

Fig-4: Navigation Drawer

5) Profile

Profile consist of the features to edit basic information like user's first name, last name, e-mail and phone number.



Fig-5: Profile

6) Find friends

When user wants to find new friends around to hangout, he can set the range for the searching friends on maps. The map is Google's Maps API used as base for setting up map in the application to find friends. In this module of the application the user's current location is fetched and the distance is calculated using the range set in settings by the user and is mathematically similar to the distance formula used just adding the curvature of the earth to add the distance.

When the users are located within the specified range the location or geo-point of the other users in range is stored in a list which is used to locate the new people around the user who is searching.

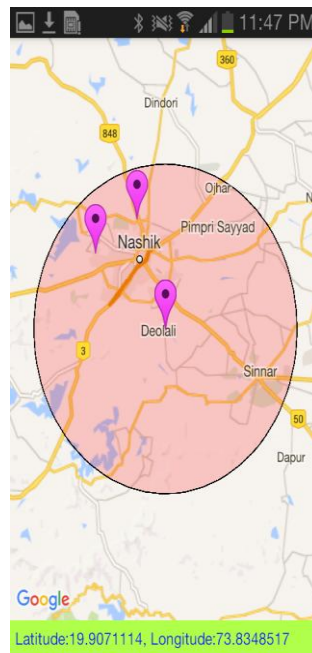


Fig-6: Nearby Friends

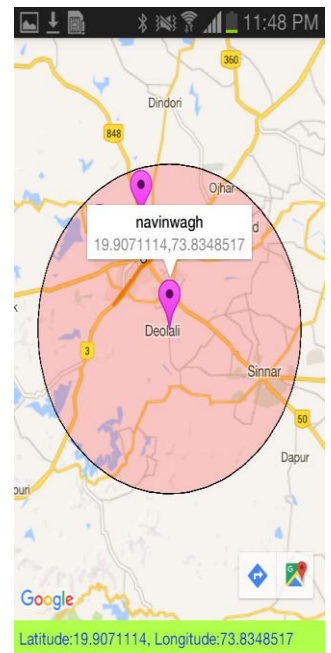


Fig-7: Details of friends

7) Events

This is the crucial part of the application where users are given choice to browse for new events around and go for the events they are interested in. In this way users can make new friends by socializing With the new people they meet at the event instead of just chatting on social network.

Events consists of three different modules, they are as follows,

- Create an event
- Browse events
- My events

7.1 Create an event

Users can create their own event for various purposes according to their choice. For example, for get together, convection, nearby adventures, trekking, business meets etc.

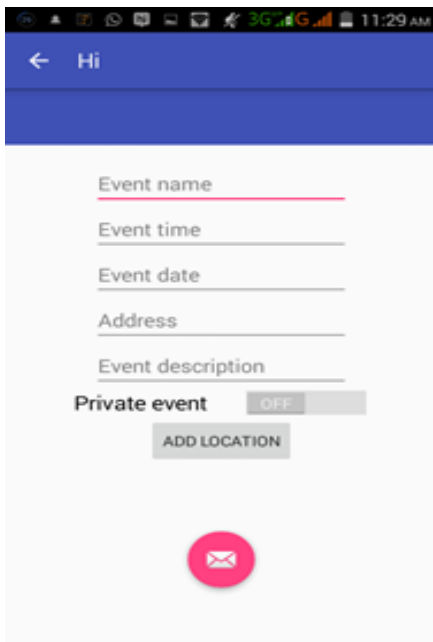


Fig-8: Create Event

7.2 Browse events

Users are given a choice to go to those events in which they are interested. When the user feels that he want to attend a particular event he can just click on the event name which will navigate the user to new windows which displays the details of those events like the time, date, organizer name and event description.

When user clicks on the join event he is added to the event’s members in a list and stored in back-end.



Fig-9: Event list

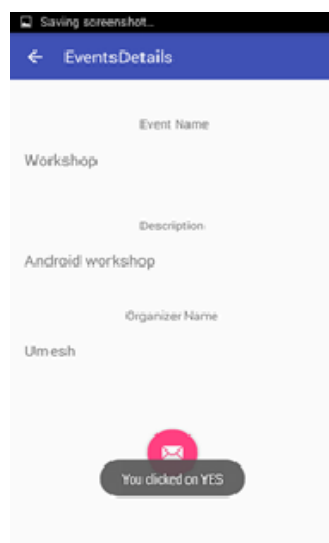


Fig-10: Event Details

7.3 My events

A list of all those events the users is planning to attend are listed in this module of the application. User can modify their choice of attending the event at any time by browsing the events window.

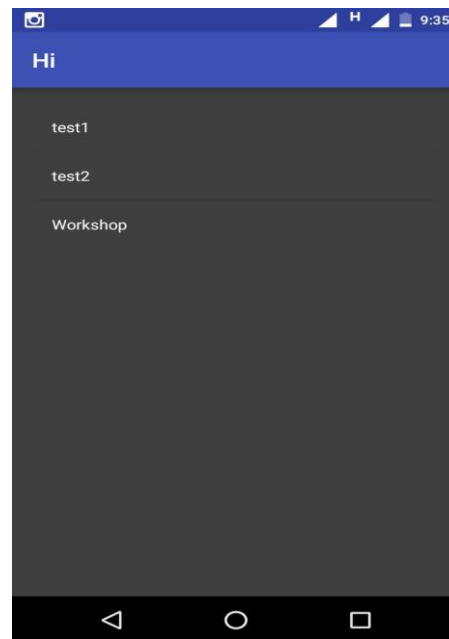


Fig-11: My Events

8) Settings

In settings function user is given the option to choose the range in which he wants to search new friends within the specified range only [2].

Secondly, user is also given the freedom to show or hide his location on the map so that other users cannot search for this user. A Boolean value is set for this module based on which the user will be displayed on the map or will not be available. This feature comes in handy when the user is not currently in the mood to search for new people around and has work to do.

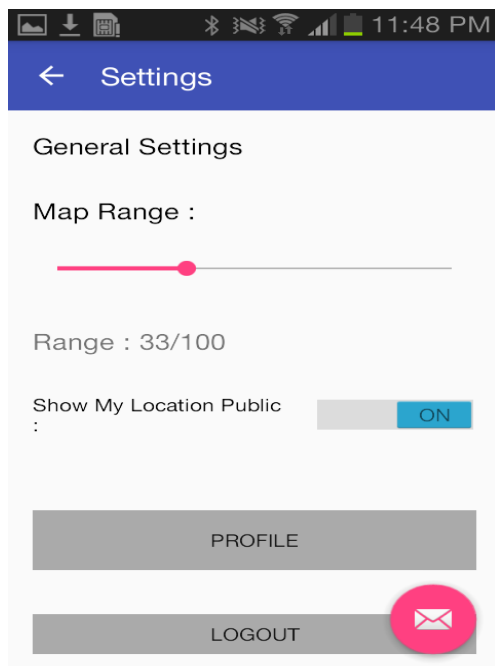


Fig-12: Settings

3. CONCLUSION

The proposed system finds new people around within the range specified (in Km) by the user. The system can also create new events which user can subscribe on their interest basis. Events can be managed on the Google Map.

ACKNOWLEDGEMENT

We are very thankful for the guidance and support of **Dr. S. V. Gumaste**. We also appreciate constant support from **Mr. Rajesh Seth** for sponsoring our project and also special thanks to **Prof. S. V. Ghorpade** and **Prof. G. K. Bhamare** for keen advice on numerous occasions, without whom this project would not have been possible.

REFERENCES

1. Xiuquan Qiao, Wei Yu, Jinsong Zhang, Wei Tan, Senior Member, IEEE, Jianchong Su, Wangli Xu, and Junliang Chen, "Recommending Nearby Strangers Instantly Based on Similar Check-In Behaviors", IEEE TRANSACTIONS ON AUTOMATION SCIENCE AND ENGINEERING, 2014.
2. QIAO Xiuquan^{1*}, SU Jianchong², ZHANG Jinsong², XU Wangli¹, WU Budan¹, XUE Sidal, CHEN Junliang¹, "Recommending Friends Instantly in Location-based Mobile Social Networks", IEEE, February 2014.
3. Reinaldo Bezerra Braga¹, Ali Tahir², Michela Bertolotto², and Herve Martin¹, "Clustering User

Trajectories to Find Patterns for Social Interaction Applications", SpringerVerlag Berlin, Heidelberg, 2012.

BIOGRAPHIES



Ravi Jayaraman is pursuing his graduation in Computer Engineering from Gokhale Education Society's R.H. Sapat College of Engineering, Nashik. His core interest include: a) Android application development, b) Networking



Navin D. Waghvani is pursuing his graduation in Computer Engineering from Gokhale Education Society's R.H. Sapat College of Engineering, Nashik. His core interest include: a) Android application development, b) Java



Umesh B. Waghmare is pursuing his graduation in Computer Engineering from Gokhale Education Society's R.H. Sapat College of Engineering, Nashik. His core interest include: a) Database, b) Software Testing