Assignment No. 10

Location Mapping

Objective:-
Create chatting app with Cloud and Location Mapping

Description: -

All messages are uploaded by the client and stored in its content provider that have not yet been uploaded to the server. A sequence number is provided to the last message that it receives, along with its own UUID and client identifier to identify itself.
These messages are added to the server and adds to its own database, assigning each message a unique sequence number. The server responds with a list of all of the registered clients, and a list of the messages that it has received since it last synchronized with the client. The list of chat clients is replaced with the list received from the server. Assuming one is using server-assigned client identifiers as primary keys for clients in their content provider, you will be able to maintain the correct relationships between clients and messages in your content provider.
I have implemented google play services in order to work with Location Awareness. It uses the API to obtain the pin code of the location where the phone is located. It also displays latitude and longitude of the device along with the message sent by the user. The sender can be changed by clicking on Settings.
I have added a second app, that uses Google Maps to display the location of the clients with whom this device is communicating. In the chat app, provided a button for displaying a map of current chat peers. Pressing that button will cause the map app to be started (with an intent). The map app will now query the content provider in the chat app to obtain information about the current chat peers. I have populated the map with the location information of the other chat clients whose coordinates are provided by the chat service. Placed a marker on the map for each client, at their last known location. For each marker, set its title to be the user name of the corresponding client, and set the snippet of text underlying that to be the address that has been computed with geocoding when the location information was downloaded from the chat Web service. when a user clicks on a marker is to center the map on that point and to display its info window.

Conclusion: -

In this way I have successfully created Chat App and saved messages on to the cloud along with location awareness and displayed the current location of the user on the map.