**The Instant Messenger**

***Abstract and Objectives:-***

It is a simple client-server based model. From our android device, we will be able to send a message to a server. Other clients connected to that server will be able to read our message. Again they can send message to server, which will be displayed in our android device. Technically, it is a type of online chat that offers real-time text transmission over the Internet. Short messages are typically transmitted bi-directionally between two parties, when each user chooses to complete a thought and select "send". It uses push technology to provide real-time text, which transmits messages character by character, as they are composed. Instant messaging is a set of communication technologies used for text-based communication between two or more participants over the Internet or other types of networks.

It allows effective and efficient communication, allowing immediate receipt of acknowledgment or reply. However it is basically not necessarily supported by transaction control.

It is usually possible to save a text conversation for later reference. It is logged in a local message history, making it similar to the persistent nature of emails.

***Functional Design :-***

**Function of Users Login –** Through the fill in the user name and password, choose the right to enter chat room on the interface.

**Function of User Registration –** Fill in and submit to a server in the personal information, server registered information will become successful after members. Submit personal information, the client to personal information of validation.

***Modules:-***

**Sign Up :-** To create the account of the user where user has to enter his name, e-mail, User name, date of birth, gender, phone no., password, etc.

**Sign In :-** To log in into the system where the fields to be entered are User name and Password.

**Settings :-** To change the credentials of the User by changing any of the fields provided earlier.

**Chat Window :-** Align the text messages sent and received in the an ascending order of date and time.

***Detailed Design :-***

**Login Module Design –** This module will need a graphical user interface, for the user to enter your user name and password, and select login role.

**Registered Module Design –** This module will need a graphical user interface, for user input personal information, need special mark required fields, and to the input information for verification.

**Chat Module Design –** This module will need two graphical user interface, the world face and a private chat room chat interfaces, user chat of the main places. The user can accord to the personal like, selection of the group chat or secret private chat.

**The Server Management Module Design** **–** This module will need a graphical user interface, running on the server management of start-up and closed Socket, forward user chat messages, and the management of the chat rooms.

***Application Programming Interface (API) :-***

API 14 Android 4.0 IceCreamSandwich

***Use Case :-***

