Bluetooth Chat Application in Android

**Abstract:**

Messenger applications are very much in vogue these days. Whatsapp, WeChat, Hangouts, etc are a rage in the app world. But all these messenger applications exploit either mobile data which is a paid service or Wi-Fi which is not always available and when available the connection strength fluctuates from place to place. Even when one wants to send a message to another person on the same floor or a few feet away they have to rely on the availability of these two. Our motive was to create a messenger that facilitates communications in a small firm (say college or hospitals or clinics) free of cost. To accomplish this, one technologies came into our minds, the Bluetooth. The project discussed here is an Android messenger application which connects using Bluetooth. The main concepts discussed here are : i) Bluetooth connection between two or more android smart phones, whereby users can chat with each other. This app doesn’t require an internet connection rather uses the in-built Bluetooth facility in a phone. Hence it comes in handy for charge-free short distance communication between individuals within a certain range (30 or 150 ft, depending on the hardware). This app significantly uses Bluetooth hence on start the application firsts checks if the phone’s Bluetooth is on and if it’s not the app asks user to give permission to turn it on. After the phone’s Bluetooth is checked, if it is the first time the application is being run it will ask the user to enter its name. This name entered by the user will be sent during the introduction section of messaging where the users are introduced to one another by the name they take up. The data-transfer rate of the Bluetooth technology is quite acceptable, i.e. 721Kbps. It is readily available since it’s in-built in every Android phones and moreover the cost of setting up a Bluetooth network is much less in comparison to that of Wi-Fi Hence for all the aforesaid reasons we chose Bluetooth over Wi-Fi as our medium of communication. Apart from general messaging between to users, the application also has an additional feature which allows users to save their chat history.