

**Project Title** : WiFi Chat

**Abstract** :

An app for text chat based on WiFi direct and could add support for images if time permits.

**Implementation** :

The basic operation of our app will be to send a file from one device to another through WiFi Direct/through APIs such as:

[WiFi p2p](#): For creating WiFi connection between two devices.

For transferring files:

[Server Socket](#): On server, for receiving files from client.

[Socket](#): On client, for sending files to the server.

Sending messages to all the members of a group can be implemented by sending messages to all devices in range and stopping when it reaches a device on which message has already been received (like depth first search).

**Timeline** :

**Week 1** : Learning android programming/ Java/XML

**Week 2** : Making a basic WiFi file transfer app

**Week 3&4** : Coding for the main app & deciding upon network optimization (Reducing data duplicacy)

**Week 5** : Testing & debugging

**Week 6** : Solving any left difficulties

**Funding** :

No funding required

**Learning Aspects** :

1. Android Programming (Java, XML, APIs)
2. Network architecture
3. Software development