###### Department of Software Engineering

University of Sialkot, Pakistan

**Advanced Web (SE-414)**

**Assignment # 01**

**Introduction:**

We are proposing an android chatting application that will be used for sending messages in private and group chat and also for sharing files via Wi-Fi without internet (offline). This application will be a plus point for any organization that wants to improve its productivity and assisting their employees to pay more attention on their work by reducing **cyberloafing** problems as the company policies are not enough to stop workers from wasting time at work and that sanctions with policies must be consistently enforced for policies to be effective.

1. **System Name:**

**Wi Chat**

1. **Functionalities:**

* **Register**

By providing personal information and password user will register to this application. By registering user will have his/her profile according to his account information.

* **Login**

By verifying user name and password user will login.

* **Private chat**

A user will be able to send/receive messages offline to a specific user and can share files. These files will be shared in such a way that there first copy will be stored on a server computer for backup that will be connected with the network that the application user will be using and there will be chat history on user’s mobile.

* **User profile**

There will be a user profile of every employee with his/her personal info.

Every user can edit his/her profile like user can edit his info or status etc.

User can also see the profile of other users like user status, name etc.

* **Group chat**

There is a functionality of group catting in this application. User can send/receive messages and files in a group chat. In group chat there will be an admin that will monitor the whole group chat and can have some rights like add/remove a participant or can restrict any user from sending messages in the group chat. The user that is restricted by the admin can only see the messages but will not be able to send messages in group chat.

Video or audio calling in a group is optional that is our future work.

* **File sharing**

There is a functionality of sharing files in any group chat or private chat. A user can share any type of file with the range of file size.

* **Video calling**

User can make video call in a private chat and a group video call is an extra feature that is in our future work.

* **Audio calling**
* User can make audio call in a private chat and a group video call is an extra feature that is in our future work.
* **Wi-Fi network**

Using different protocols it will send/receive messages, make video/audio call and file sharing on a Wi-Fi network.

* **Database server**

It is used for storing shared files for backup and keeping the record of user profiles.