SOFTWARE REQUIREMENT SPECIFICATION

FOR

DDU FORUM

1. **Introduction:**

Do you want to exchange text messages and files (pictures, music, videos, etc) with your friends, family or colleagues quickly, easily and at no cost? “Wi-Fi Groups” is the best way to do it!

Wi-Fi Groups” enables all the devices connected to the same Wi-Fi network to create groups and freely communicate with one another.

You can either create your own Wi-Fi hotspot on your device and have others connected to it, or connect your device to an already existing network and let the fun begin!

Wi-Fi Groups makes use of the Samsung Chord technology.

The Samsung Chord is a brilliant and fun way to share content and Student events in real-time between devices. The Samsung Chord (Chord) SDK allows application developers to develop local information-sharing applications without a detailed knowledge of networking.

1. **Purpose:**

Chord enables simple real-time sharing without the cloud!

• Easy discovery and connection with nearby devices

• Real-time experiences between multiple devices

• Fast peer-to-peer connection, without the need of a server

• Decentralized networks where peers can come and go at any time

1. **Scope:**

The Application has to be built over the application framework. To develop an Android Application Package (APK) for instant messaging using the Wi-Fi direct.

The application features include:

• Simple text messaging

• Chat Service

• Multimedia content sharing i.e. image, audio, video and application

For example, image/jpeg, GIF, audio/mp3, video/mp4, and application/ msword

1. **Technology to be used:**

• Android SDK

• Eclipse

• SQL lite

**Versions Used**

• Android 2.2 & above

• Android APK level 8 & above

• Eclipse 4.2

1. **Overview:**

**Overall description**: In this section, there is general details are included. Mainly various groups those are available and you can chat & share with group.

**Major component of the system**: Major components of the system are signup and login phase, chatting phase, sharing phase, options, profile setup and other.

1. **Functional requirements:**

**R1: Sign up/Registration:**

**Input:** Login/Registration screen will display text view for inputting Student ID and password**.**

**Output:** If Student id and password are correct then successfully profile is created.

**Pre-condition:** DDU Forum should be installed on the system and signup screen should be available on application.

**Post-condition:** Sign up must be successfully done.

**Flow:** After entering user id & password it will check the database and return confirmation message if data valid.

**R2: Log in**

**Input:** Student id and password is required for successful completion of login phase.

**Output**: After clicking on login button, control goes to Student profile and Student can see as well as access all available functionalities.

**Pre-condition:** Student that login into the system must have registered account and login option should be available on the screen.

**Post-Condition**: Login should be successfully done to enter into main screen.

**Flow:** After completion of registration, control is redirected to login screen, if a user has logged in previously on a device; it will save the information and will not ask for login information again unless the user clears the cache of the system.

And after inserting Student id and password and clicked on log in, main screen of the Student should be displayed.

**R3: Main Screen**

**R3.1: Chatting**

**Input**: Create a Wi-Fi hotspot and join it.

**Output**: Display connected Student or Group.

**Pre-condition**: Student has to select group (multi chat) or single Student (personal chat).

**Post-condition**: Student must be able to do chat either with group or single Student.

**Flow**: Authentic Student can join group or single Student for chatting.

**R3.2: Sharing Data**

**Input**: Select file which Student want to share.

**Output**: Intended Student’s screen will get prompt message to accept the file.

**Flow**: Student who wants to share file can select it from his directory and intended Student will receive file using Wi-Fi technology.

**R4: Multi-Chat & Sharing**

**R4.1: Using Group**

**Input**: Student can be able to select for chatting & sharing.

**Output**: Student can now successfully join the selected group.

**Pre-condition**: There must be at least one group to join.

**Flow**: List of all group are displayed then any one group can be selected at a time and with that group chatting can be done.

**R4.2: With selected Students**

**Input:** Select the Student whom we want to chat or share.

**Output:** The Student is now connected with the selection he made.

**Pre-condition:** There must be at least two Student connected with hotspot.

**Post-condition**: All connected Student can be able to receive messages or files.

**Flow:** List of all hotspot connected Students are displayed and from them Student are selected for chatting or sharing.

**R5: Settings**

**R5.1: Setup Profile**

**Input:** Student can change their profile pic or nickname.

**Output:** All changes are performed.

**R5.2: Theme**

**Input:** Student can change theme of application.

**Output:** Accordingly themes are changed.

**R5.3: About DDU Forum**

**Input:** Select “About” option.

**Output:** It will show detail information for how to use this application and information regarding developers.

**7. Non - Functional requirements:**

**R1: Advertisement:**

Under this facility, Advertisement is displayed on the screen.

**R2: Help:**

Help option provides various FAQS or general query solution or counseling related general help.

**R3: Contact:**

Student can contact to toll free number of this DDU Forum if he has any queries and he wants its solution. This option is available on the home page.

**R4: Database:**

There will be a database system for all the information about the Student, which is helpful for contact with Student and advisor.

**R5: Scalability:**

When there is large number of Students try to login into DDU Forum then system should handle it in efficient manner.

1. **SOFTWARE INTERFACE:**

**Front End Client:**

Application and WIFI hotspot feature.

**Back End Server:**

Application Data and Data Base .