

ASSIGNMENT 6

CS 522

Submitted By-

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In this assignment, you will implement a simple cloud-based chat app, where clients exchange chat messages through a Web service. You are given a simple chat server that apps will communicate with via HTTP. You should use the `HttpURLConnection` class to implement your Web service client, following the software architecture described in class. All your projects for this submission should target Marchmallow (Android 6.0).

1. The main user interface for your app presents a screen with a text box for entering a message to be sent, and a “send” button. The rest of the screen is a list view that for now will just show the messages posted by this app. Provide a settings screen where the server URI and this chat instance’s client name can be specified, to be saved in shared preferences.
2. The interface to the cloud service, for the frontend activities, should be a *service helper* class. This is a POJO (plain old Java object) that is created by an activity upon its own creation, and encapsulates the logic for performing Web service calls. For now, this helper class supports two operations:
 - (1) Register with the cloud chat service. This operation will only succeed if the requested client name has not already been registered by a different client.
 - (11) Send a message to the cloud chat service.
3. In this assignment, the registration activity runs if the user is not already registered for example, running the application for the first time.
4. After the registration is done, the Chat Activity continues and displays a layout which allows user to enter a message and the name of the chat room the message is intended to.
5. The output, like confirmation of registration and message been received is displayed on the server terminal which is running.
6. The messages sent are displayed on the chat window in the list view which also displays the username the message is from.
7. There is also a server uri field in the registration which allows us to forward our rest requests to that uri. The settings field also shows the user name and client id of the user.

Note-

The zip archive “Yugaank_Sharma” contains 1 zip archive of the android project and 3 files which are APK file, chat application video and README.pdf