

CS 522—Mobile Systems and Applications
Assignment Five—Chat App with Service—Rubric

Design:

ChatSendService:

5: Bound service (client calls bindService)

10: Messaging send operation is part of binder interface (implements IBind)

ChatReceiverService:

10: Started service (client calls startService)

10: Use AsyncTask to define thread that receives messages.

10: Updates messages content provider, use broadcast to notify interested parties

Broadcast Receiver:

10: Define a broadcast receiver that reacts to notification of message received.

ChatSendService with separate process

5: Bound service (client calls bindService), use HandlerThread to ensure send requests are sent to a background thread

5: Client receives message channel when it binds to service

10: Intent sent to service includes ResultReceiver, service sends ack back to client UI

Testing:

15: Chat works with same-process chat service

10: Chat works with different-process chat service