

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

**-100 if any network communication or database I/O on the main thread**

- 100 if APK files not included (must be in **root folder** of submission).
- 100 if using obsolete `onBackPressed()` callback in activity
- 100 if only one device sending messages to itself

**70: Functionality (video demonstration)**

- ☐ 20: Sent messages are received at destination; demo video shows at least two devices communicating (show messages in both directions)
- ☐ 15: Each app displays a list of messages received so far, updated when a message is received
- ☐ 5: Updating list of chat rooms when message received with new chat room
- ☐ 5: Toast message when message is sent
- ☐ 5: Sender saves message that is sent in its own database – no duplicates
- ☐ 5: No duplicates in the chat peer database (show multiple messages from sender)
- ☐ 5: Adding a new chat room
- ☐ 10: List of messages for that peer (two-line layout includes chatroom for each message); must have `ViewPeersActivity` working to get to this

**15: ChatService:**

- ☐ 10: Handler thread for sending messages is correctly set up
- ☐ 5: Implementation of `send`, `handleMessage`, `run`

**10: ChatActivity:**

- ☐ 5: Binding to service (including binding callbacks)
- ☐ 5: Initialize result receiver (`onCreate`, `onPause`, `onResume`)

**5: ☐ Completed rubric**

**Total:**

**Zero marks if any network or database I/O on the main thread**