

# Android Walkie Mesh Documentation - Iteration 1

*by*

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## Change Log

Version	Date	Comment
0.1	26/07/2013	Init version with outlines
0.2	26/07/2013	Added draft use case diagram and interface design
0.2.1	27/07/2013	Added more document structure and fleshed out interface design
1.0	27/07/2013	Final content added and polished.

# Use Cases

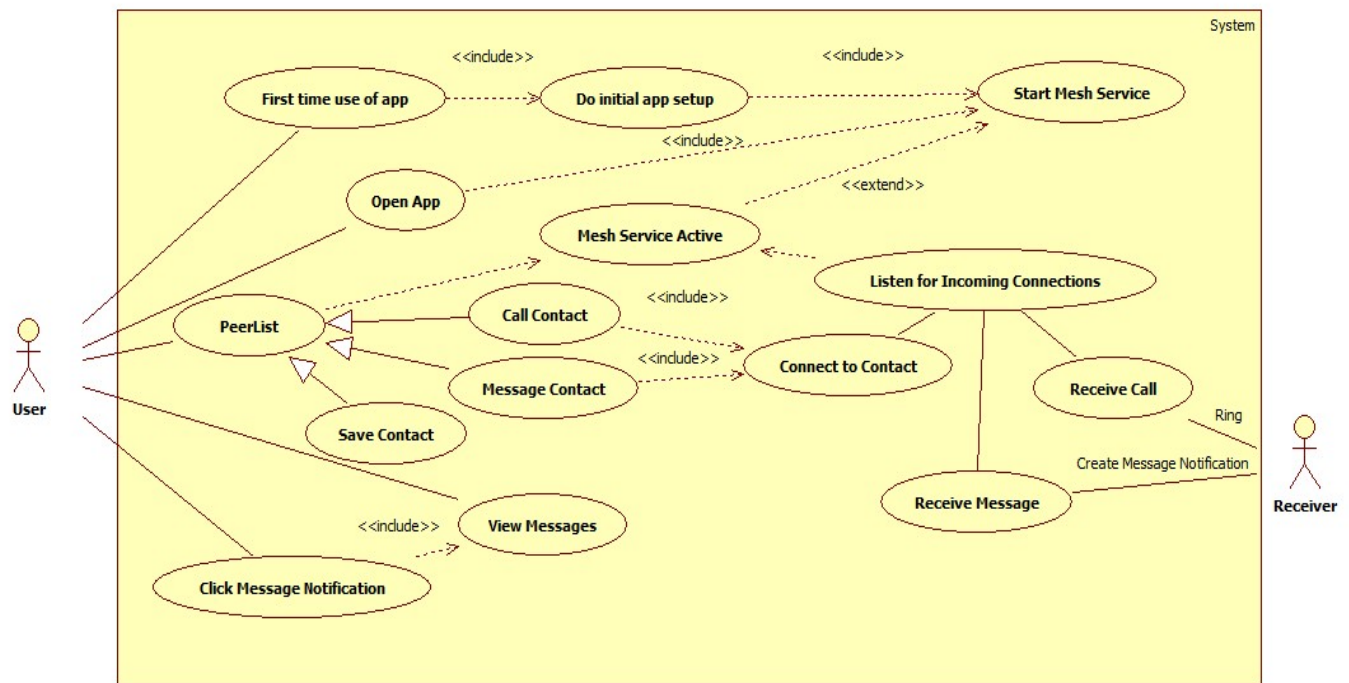


Figure 1 - Use Cases

## Functional Requirements

- To service any of the use cases FR1 (Mesh Communication), FR3 (Network Status) and FR4 (Contact Status) need to be provided.
- To provide the calling and call receiving use cases FR2 have to be provided.
- FR7 (Bidirectional VOIP) is provided as part of the calling and receiving of calls use case, requiring less user action and a more user friendly experience.
- FR5 (Groups) and FR6 (Blacklist Contacts) are not detailed here because our clients as part of our better understanding of the problem domain asked us to rather focus making the application easy to understand and use.

## Activity Diagram

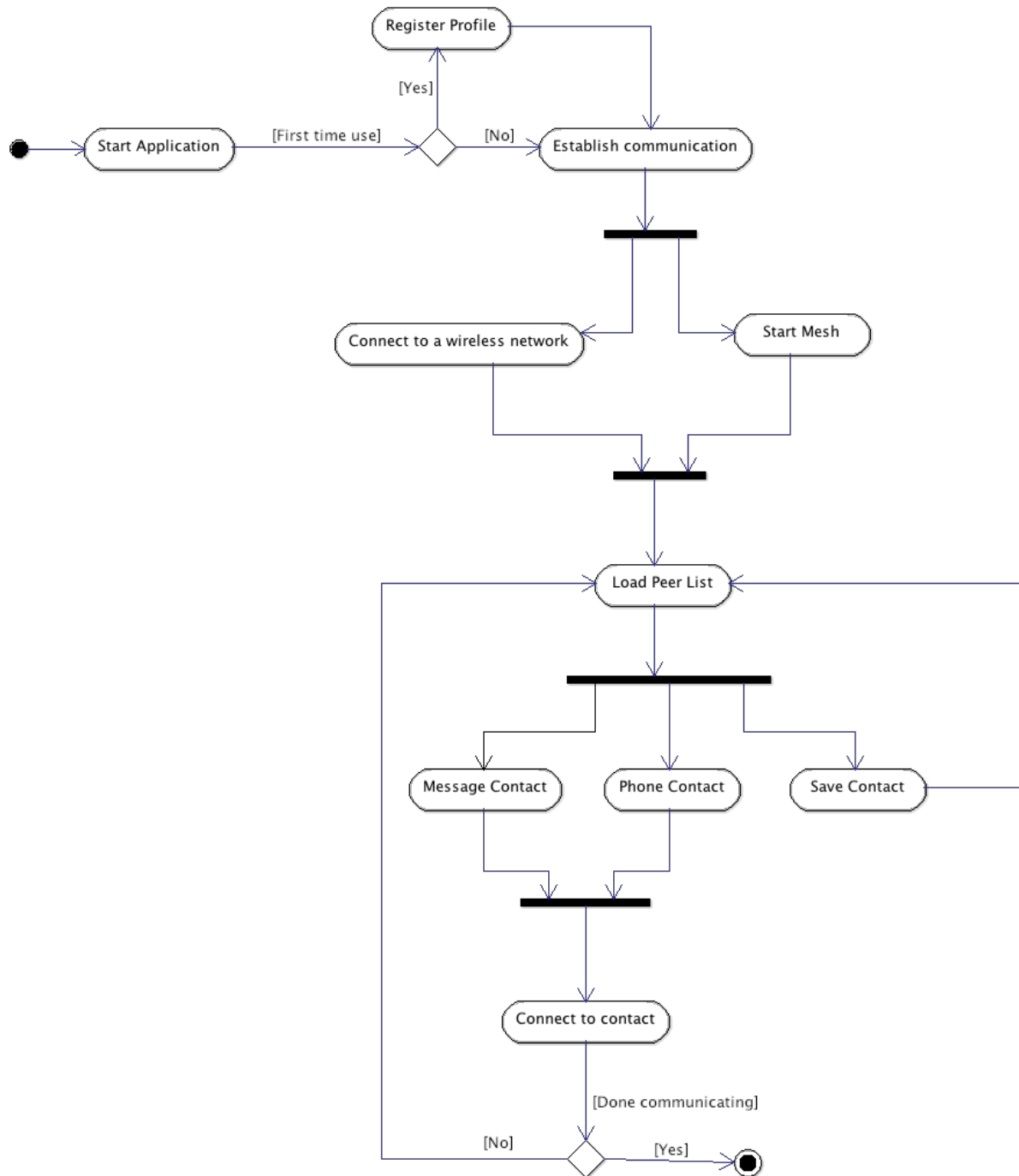


Figure 2 - Activity Diagram

## Interface Designs

The interface design for this project is very important as the users should be able to use the application with as little understanding of the underlying technology without removing too much of the power of choice. These designs should be used as a guideline and should be modified when user testing dictates.

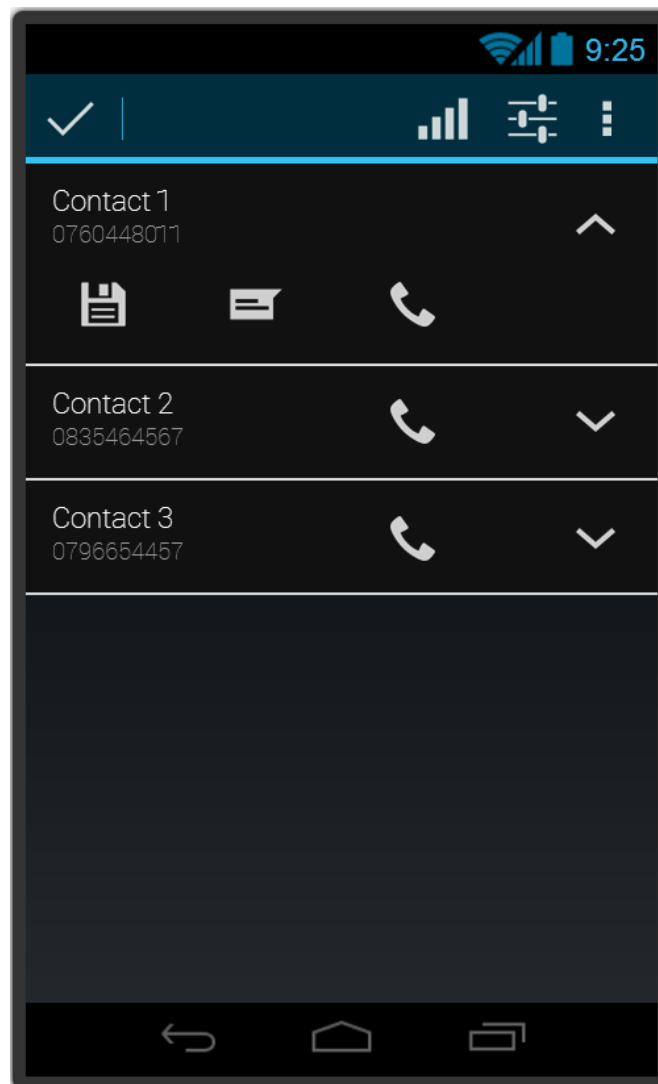


Figure 3 - Main Screen

This interface exposes most of the functionality of the application allowing the user to see all the contacts that are connected to the network. Each of these contacts can then be called, messaged or added to the android contact list via the appropriate buttons. All the other functionality like settings and network mode can be reached in the actionbar. To allow different screen size only the call action is given if the item is not selected. Once an item is selected or expanded the message and add contact actions are exposed.

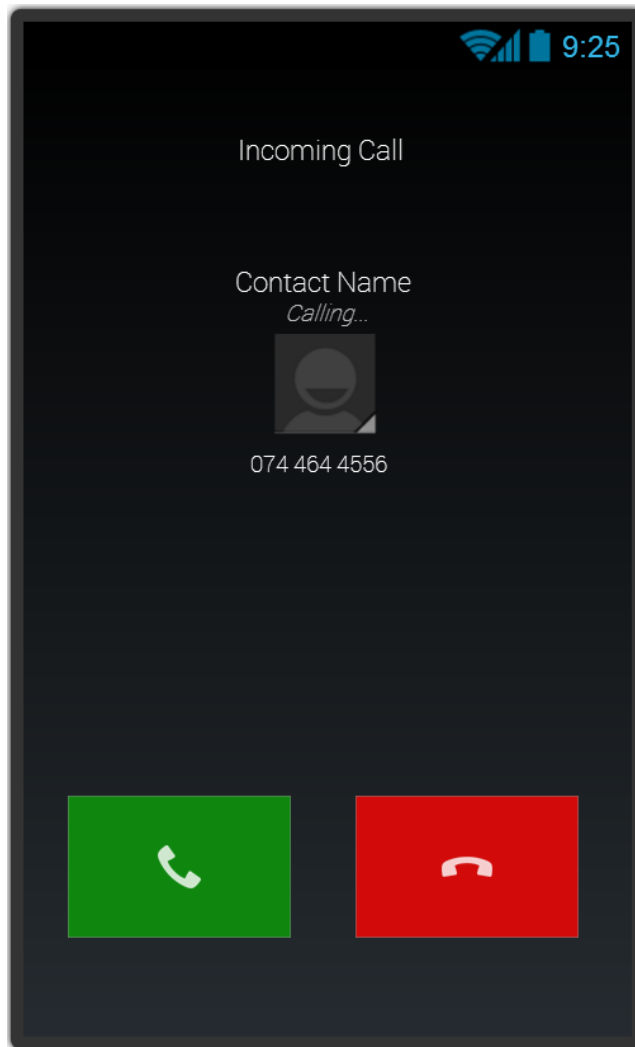


Figure 4 - Incoming Call Screen

This interface allows the user to accept or decline an incoming call.

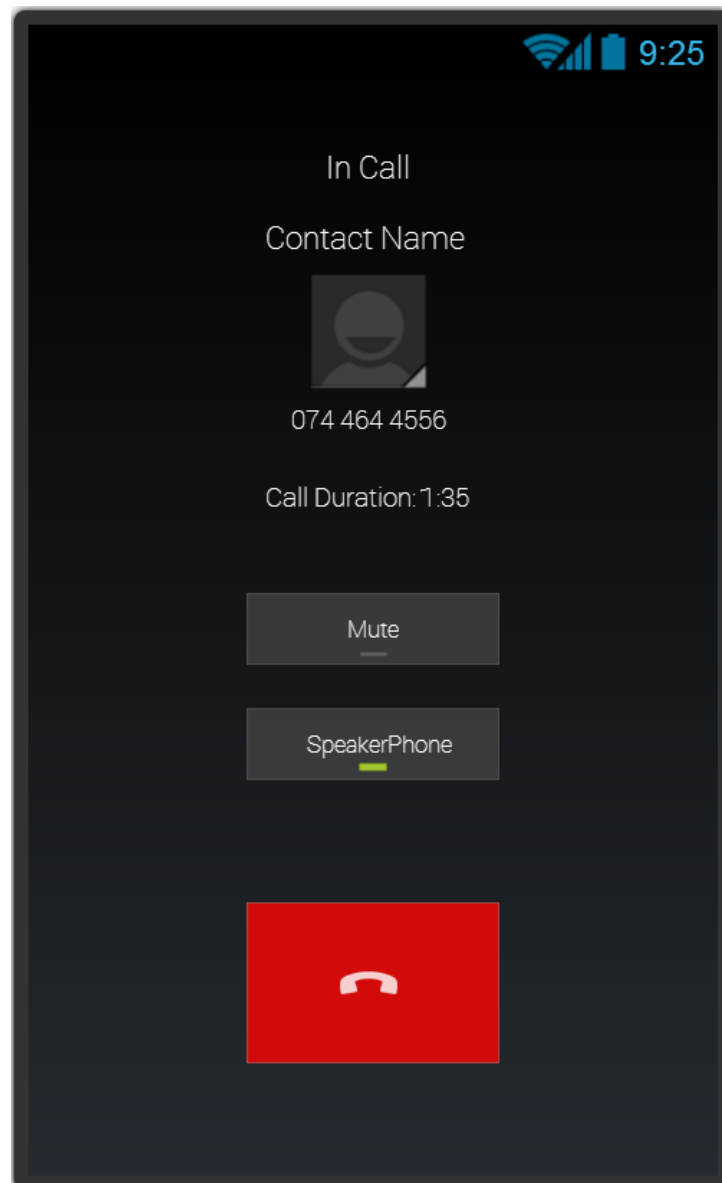


Figure 5 - In Call Screen

This interface displays the status of the current in progress call and allows the user to terminate the call. The user can also choose to use the speakerphone or to mute the audio. The speakerphone setting should persist across calls.

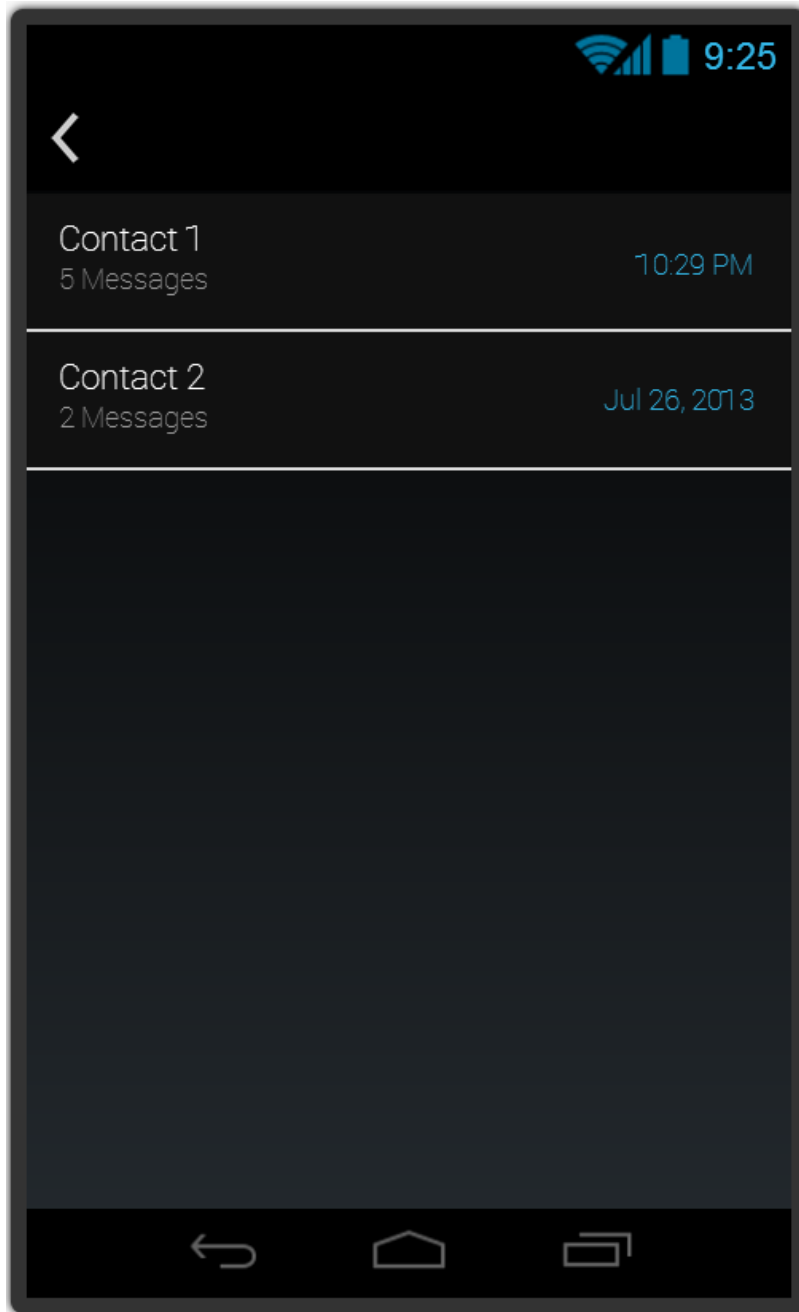


Figure 6 - All Messages Screen

This interface show all the contacts that has sent the user messages. The user can then open each contact to continue the conversation.



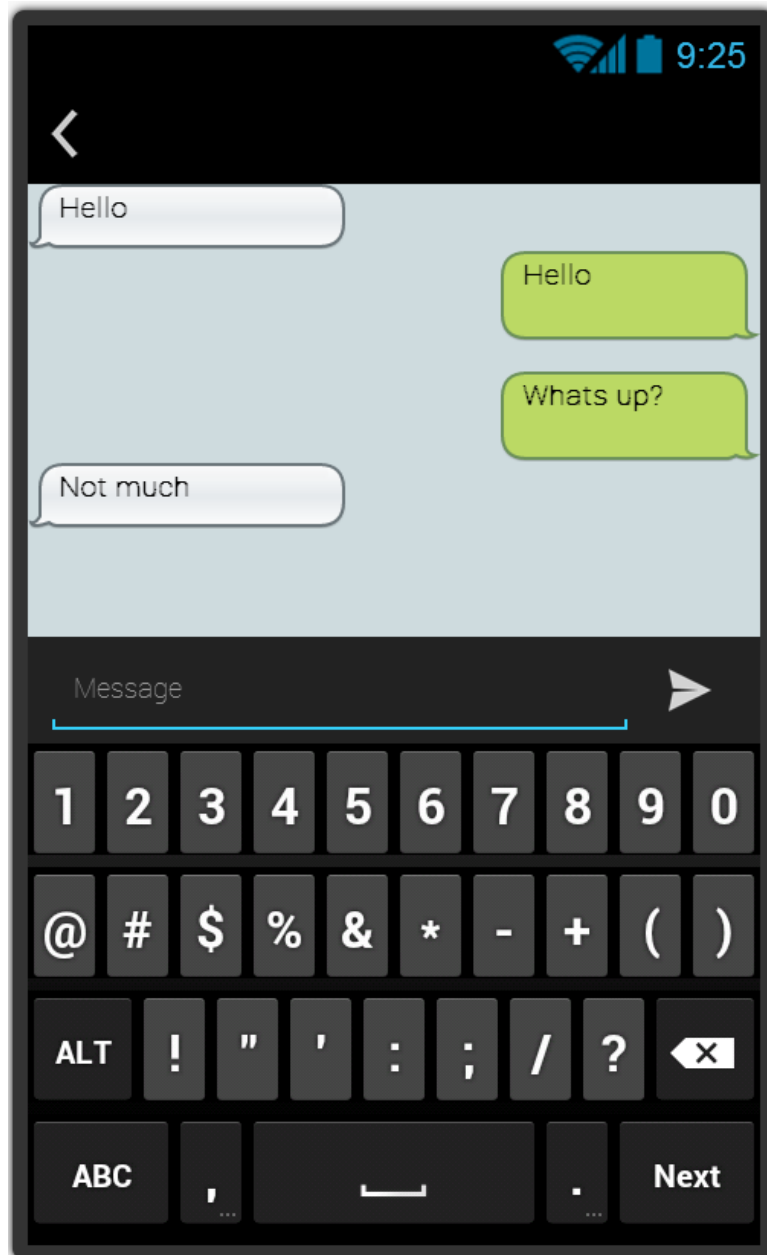


Figure 6 - Conversation Screen

This interface show all the messages in a conversation that has been exchanged with a specific contact.

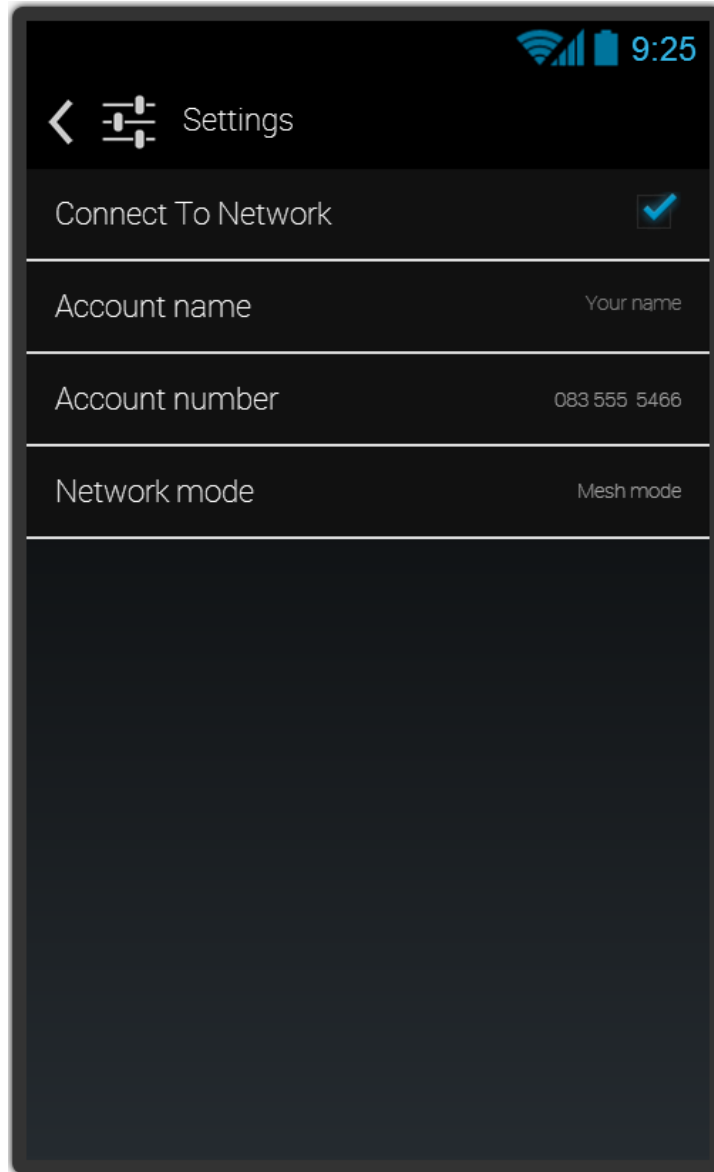


Figure 7 - Settings Screen

This interface allows the user to configure some the less often used settings.

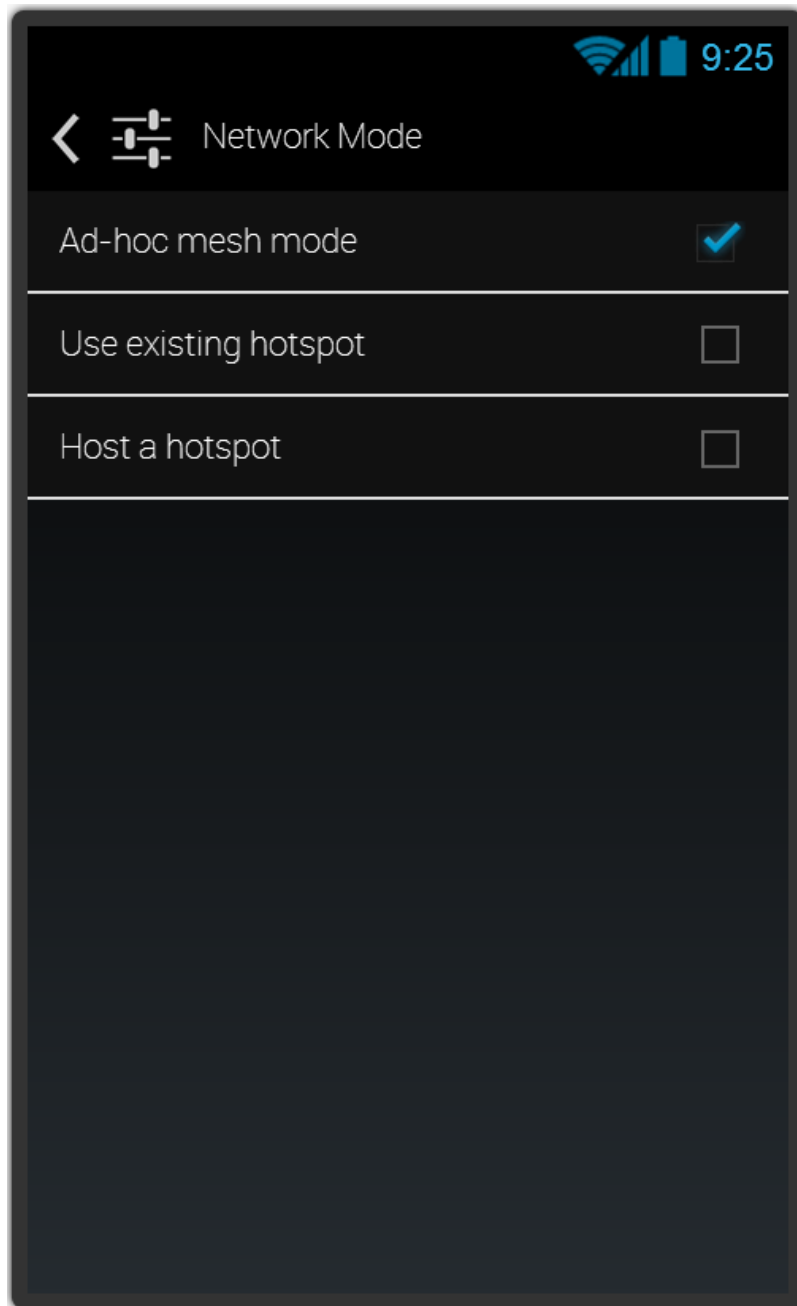


Figure 8 - Network Mode Screen

This interface allow the user to select the network mode that the application should use. This screen should also be accessible from the main screen via the action bar's overflow menu.

## References

Walkie Mesh Vision and Scope document.