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Project Abstract

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Operation RM

Client:

General Dynamics Mission Systems

Mentor:

Tayyaba Shaheen

Team Members:

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Overview:

The purpose of this document is to briefly investigate the problem and the execution of Operation RM's solution.



In today's world, the need for secure, efficient, and tactical communication in the defense, public safety and intelligence communities can not be understated. When facilitating this, communication should remain efficient regardless of the device being used. In this project, we have developed a mobile Android application that communicates with a radio modem developed by our client, General Dynamics Mission Systems (GDMS). This application enables users to send and receive emails with optional attachments, as well as queue up various emails to send. The application enables the user to select, provision, and activate a desired waveform to use for communication on a software defined radio. An interface implemented in C is primarily used for facilitating this communication over a WiFi socket connection. This lower-level communication is conveniently integrated with an intuitive and simple user-interface in Android. GDMS will use the prototype generated by our project to analyze the efficacy and feasibility of the solution by testing it with their customers.