**PROJECT SYNOPSIS**

1. **GENISIS:** In the present scenario, the widespread use of unsecured mobile devices by Army personnel has raised grave concerns. There is a high probability of sensitive issues being discussed over the mobile network. The existing security in GSM is negligible by mil standards with GSM interception devices being easily available. In order to plug this security hole there is a need to encrypt the voice before transmitting into the air to safeguard against any intelligible interception by ANEs.

The project was initiated by SODE-100 with an aim of developing Android based mobile application for secured secure voice communication. But the project in addition to being confined to voice communication had several other shortcomings listed as under:

1. Unsuccessful integration of independent encryption algorithms with the app.
2. Limited degree of security by incorporating Voice Codecs.
3. 3G Implementation not achieved.

The project now aims at accomplishing the above shortcomings and progress it to the latest trends in mobile technology.

2. **AIM:** To design and develop an Android based mobile application that provides secured communication.

3.  **SCOPE:** The scope of project involves the following:

1. Study of GSM network, VOIP, JAVA, Android OS.
2. Study of SIP Networks.
3. Study SRTP and RTP.
4. Study of existing voice encryption algorithms and codecs.
5. Integration of all components into a functional Android application.
6. Implementation of encryption and decryption algorithms with the application for GSM handsets.
7. Provision for SMS service.
8. Securing data communication

**SUGGESTED GUIDE:**

Assistant Professor Rajesh Bodade

**SYNDICATE:**

The syndicate members are as under:

1. Lt Rohit Rawat
2. Lt Chittranjan Garg
3. Lt Neelkamal Sharma
4. Lt Anubhav Choudhary
5. Lt Anil Sharma

**LRP TOPICS:**

The LRP topics of each individual are mentioned below:

1. Lt Chittranjan Garg : **Study of Android Platform for Application Writing**

2. Lt Neelkamal Sharma : **Study of different algorithms and their analysis for implementation on Android Devices**

3. Lt Rohit Rawat : **Study of** **Network Protocols and their implementation**

4. Lt Anil Sharma : **Study of** **GSM & 3G Technology**

5. Lt Anubhav Chaudhary : **Study of SIP Servers and their Configuration**