SMS Secure App (Android Based EncryptedSMS App)

Abstract:-

This is an SMS Secure Application Which Uses AES(Advance Encryption Standard) or Encryption and Decryption. It basically targeting SMS for the android users. Where the user can communicate with the other user with this application in secured way. The User can send an Encrypted message while Receiver can decrypt the encrypted message using the private key shared by sender. The application makes use of SMS that you see it in personal inbox in the mobile. The message is Encrypted using this application and the application generates the Encrypted key(cypher-text) and sends the Encrypted key(cyphertext) to the Mobile Number you given in the application. Shared Private key should be mentioned in the application before encrypting the message, So that message and the private key together encrypted and sends to the receiver SMS application. This App uses Android Studio as its front end.

USER:-

- **TEXT TO ENCRYPT:-**The user has to mention the message he need to send to the receiver.

- **PHONE NUMBER:-** The user has to mention the receiver phone number to whom he need to send the message.

- **PRIVATE KEY:-** The user has to mention the private key along with the message in the related attributes where the private key and message will be together encrypted. The private key should be personally shared with the receiver so that receiver can decrypt the message he received in the SMS app.

- **ENCRYPTED TEXT:-** The receiver receives the encrypted text in the SMS app and he need to copy the encrypted text and paste it in the encrypted attribute in the application to Decrypt.

- **ENCRYPTION KEY:-** The receiver will be shared with the private key by the sender through a call or through personal message. This private key is important to Decrypt the message that is sent by the sender.

Software Requirements:

- Windows XP,Windows7,8,10(Professional,Ultimate)
- Android Studio
- Genymotion

Hardware Components:

- Processor-i3
- Hard Disk- 50 GB
- Memory- 4 GB Ram
- Android Phone with Marshmello or Higher.

Advantages:

- No internet is needed
- User Interface is fast and Easy to use.

- It is highly reliable and secure.
- Encryption and Decryption can be done in same application.
- User only need cypher text received in SMS and private key to decrypt the message.
- Application Establish Secure way of communication
- Intruders can not decrypt the cypher text and also they can not get the cypher text sent by the sender**.**

Disadvantages:-

- **User should have Active plan in the sim to send the SMS**
- **The text can't be automatically decrypted. The user need to copy the cypher text which is received in the SMS and paste in the application to decrypt.**

Applications:

- **This application can be used by companies or owners are partners Or even a common man if they want few messages to keep it secret.**
- **Most useful application for secure texting**