ABSTRACT

The progressive usage of Internet of Things (IoT) and smartphone ubiquity is inducing attention, importance and interest in leveraging smartphones for deploying and running sophisticated mobile applications. Modern smartphones have good connectivity, a significant amount of processing, and are always with us, making them an ideal candidate for envisioned applications. This project aims at developing a real-time audio encrypted application for transmitting audio files between two or more devices, the communication between devices is made secure by encrypting the audio sent in real-time using Advanced Encryption Standard (AES) 256-bit encryption key while channelling message through a cloud-hosted database (Firebase) that work as a real-time database. The implementation also involved the use of geocoder from the Google Map API library services to track the location of the audio sender and make reference necessary to it at that instance during which the upload of the encrypted recorded audio is done.