ANDROID SPEECH RECOGNITION BASED VOICE COMMAND NOTICE BOARD

ABSTRACT:

Notice Board is primary thing in any institution/organization or public utility places like bus stations, railway stations and parks. But sticking various notices day-to-day is quite a difficult process. A separate person is required to take care of this notices display. This project deals about an advanced hi-tech wireless notice board.

The main objective of the project is to develop a wireless notice board that displays notices when a message is sent from the users mobile. While the user sends the message from the mobile, the remote operation is achieved by any smart-phone/Tablet etc., with Android OS, upon a GUI (Graphical User Interface) based voice operation. Transmitting end uses an Android application device remote through which commands are transmitted. At the receiver end, these commands are converted to texts used which are displayed on a 20X4 LCD - interfaced to the microcontroller. Serial communication data sent from the Android application is received by a Bluetooth receiver interfaced to the microcontroller.

The program on the microcontroller refers to the serial data to display the received data on an 20X4 LCD.
The power supply consists of a step-down transformer 230/12V, which steps down the voltage to 12V AC. This is converted to DC using a Bridge rectifier. The ripples are removed using a capacitive filter and it is then regulated to +5V using a voltage regulator 7805, which is required for the operation of the microcontroller and other components.