Flight Hospitality System For The Passengers By Using Android Application

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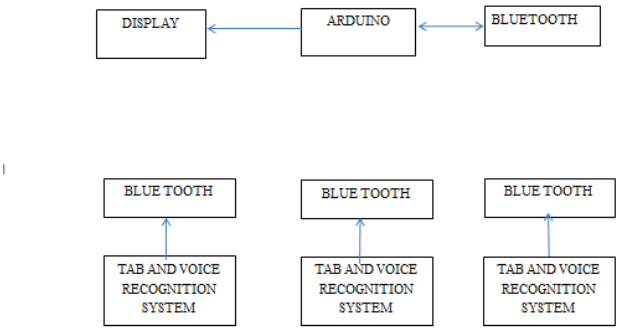
Abstract- *Historically, Embodied Conversational Agents (ECAs) have been used as virtual assistants that make easier the access to information or help in performing complex tasks. Due to their high computational requirements ECAs are usually run on desktop computers, but with the recent development of hand-held devices both in hardware and software, it becomes necessary to move ECAs to that new mobile scenario. Thus, we propose an open-source based platform for developing ECA based interfaces on Android-equipped devices. We also present a prototype for controlling fight hospitality for disabled people. The main aim of this project is to construct a user friendly multi language communication system for the hospitality for people travelling by air lines. It can also be useful for the illiterate people. So in this project we are building a device that helps passengers in expressing their needs with the airhostess i. e , request them if they need anything in the flight like coffee, drinks etc.,.android app is developed for Touch screen and Voice to text converter and connected to ARM7 developed Board interfacing to monitor. Java application at the receiver gives details of seat and their requirement in flight.*

I. INTRODUCTION

The main aim of this project is to construct a user friendly multi language communication system for the hospitality for people travelling by air lines. It can also be useful for the illiterate people. So in this project we are building a device that helps passengers in expressing their needs with the airhostess i. e, request them if they need anything in the flight like coffee, drinks etc. Communication is one of the important aspects of life. With the advancement in age and its growing demands, there has been rapid growth in the field of communications. Signals, which were initially sent in the analog domain, are being sent more and more in the digital domain these days. Presence of guard band in this system deals with the problem of inter symbol interference (ISI) and noise is minimized by larger number of sub carriers. But the large Peak to Average Power Ratio of these signal have some undesirable effects on the system. Since the very genesis of man, communication has been one of the main aspects in human life .Previously various methods like sign languages were implemented for this purpose.

As various civilizations started coming into existence, many innovative ideas came to the minds of the people special birds and human messengers were employed to meet these challenges. As ages rolled by, post system developed and transportation vehicles like trains and ships were used to maintain link between people miles apart. But by the turn of the nineteenth century, a great leap in communication system was observed when wireless communication was introduced. After the advent of wireless communication huge change has been observed in the lifestyle of people. Wireless communication which was initially implemented analog domain for transfer has is now a day's mostly done in digital domain. This project was designed to provide a user friendly communication system for deaf, dumb and blind people travelling by airplanes using Bluetooth technology. In our project we are using HC-05 Bluetooth module. The android apps are installed in mobile phones. Here we are using mobile phone touch screen to display the items which are required for passengers in the airplane. The touch screen in mobile phones was designed for deaf and dumb people.

II. PROPOSED MODEL



Block diagram

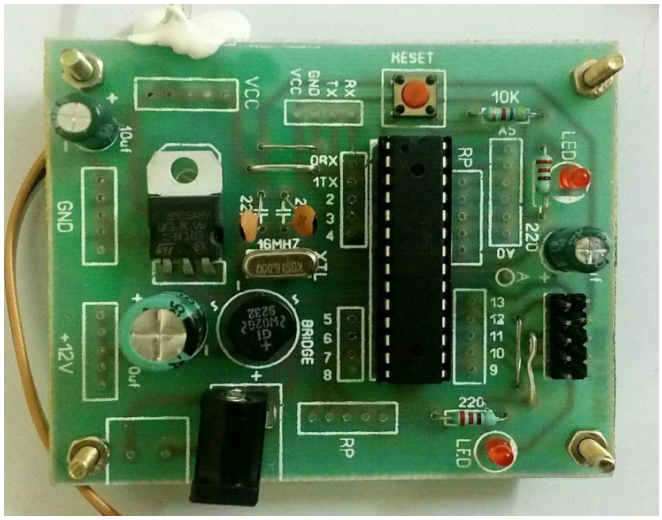
Here we are using mobile phones to display the items which are used for passengers in the airplane. Voice recognition system is used mainly for dumb and illiterates as they can easily communicate. Here Bluetooth is used as an

interface. Arduino is used as a controller in this system. We use Buzzer as an indication to the airhostess that hospitality should be needed.

III. HARDWARE DESCRIPTION

ARDUINO

Arduino boards are able to read inputs such as light on a sensor, a finger on a button, or a Twitter message and turn it into an output like activating a motor, turning on an LED, publishing something online. You can tell your board what to do by sending a set of instructions to the microcontroller on the board. Arduino also simplifies the process of working with microcontroller



Arduino module

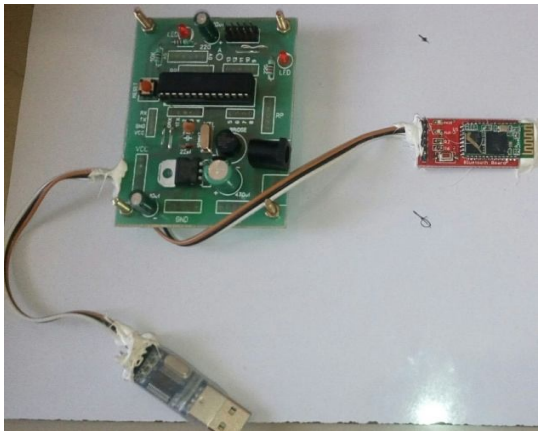
BLUETOOTH

Bluetooth devices use the ISM band around 2.4 GHz. This can be used worldwide, without the need to pay license fees, but many other devices like DECT telephones (wireless phones), smart tags with RFID, baby phones use it too. Bluetooth uses the same bands as some WLANs, but the modulation technique is different.

C-05 Bluetooth Module

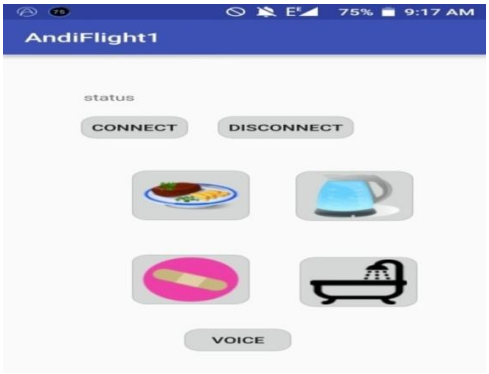
IV. RESULTS

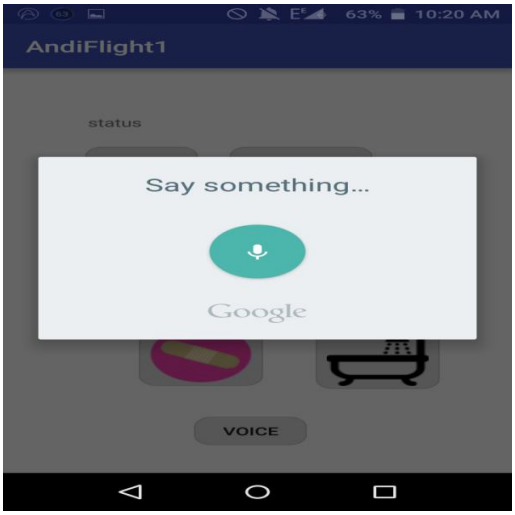
This project was designed to provide a user friendly communication system for deaf, dumb and blind people travelling by airplanes using Bluetooth technology. In our project we are using HC-05 Bluetooth module.



HC-05 Bluetooth interface

INPUTS:





Transmitter Section

As shown the fig1 android apps are installed in mobile phones. Here we are using mobile phone touch screen to display the items which are required for passengers in the airplane. The touch screen in mobile phones was designed for deaf and dumb people. The voice recognition system was designed for blind people. Deaf and dump can get their needs by clicking the icon in touch screen and blind people get their needs by voice recognition. The information from the transmitter reaches the receiver using Bluetooth technology.

Outputs:

Receiver Section

The information which is received from Bluetooth will be converted in to hex code by arduino. If the hex code matches with the decoded database then respective output will be displayed as shown in fig

V. CONCLUSION

The main aim of this project is to construct a user friendly multi language communication system for the hospitality for people travelling by air lines. It can also be useful for the illiterate people. So in this project we are building a device that helps passengers in expressing their needs with the airhostess i. e, request them if they need anything in the flight like coffee, drinks etc. Communication is one of the important aspects of life. With the advancement in age and its growing demands, there has been rapid growth in the field of communications. Signals, which were initially sent in the analog domain, are being sent more and more in the digital domain these days. Presence of guard band in this system deals with the problem of inters symbol interference (ISI) and noise is minimized by larger number of sub carriers. But the large Peak to Average Power Ratio of these signal have some undesirable effects on the system. It can also be useful for the illiterate people. So in this project we are building a device that helps passengers in expressing their needs with the airhostess i. e, request them if they need anything in the flight like coffee, drinks etc.,.android app is developed for Touch screen and Voice to text converter and connected to ARM7 developed Board interfacing to monitor. Java application at the receiver gives details of seat and their requirement in flight.

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