

SPEAKING MICROCONTROLLER FOR DEAF AND DUMB

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Abstract

Microcontroller based speaking system for deaf and dumb is designed to give the signs, which are preloaded in the device. It is a microcontroller based device, which gives the alert sounds just by pressing the control buttons, which are given some redefined messages like asking for water, washroom etc., here the person can just press the control button which indicates the sign of water (example) then the device sounds the same with some output volume. Microcontroller is the heart of the device. It stores the data of the needs of the person. So that it can make use of the data stored whenever the person uses the device. This device helps the deaf and dumb people to announce their requirements. By this the person who is near can understand their need and help them. This saves the time to understand each other and ease in communication.

1. INTRODUCTION

It is estimated that millions of people in our country is suffering from some type of disability. A person who is not able to speak or they lost their ability in some accident, this people face the problem like they are not able to speak properly and explore their thoughts, ideas, views, knowledge or feelings in front of society. To find solution for these issues, a system is implemented called "SPEAKING MICROCONTROLLER FOR DEAF AND DUMB PEOPLE". The system is microcontroller primarily based speaking system for deaf and dumb is meant to offer the signs, that square measure preloaded

within the device. It is a small controller primarily based device, which provides the sounds simply by pressing the management buttons, that square measure given some audio messages like soliciting for water, lavatory etc., here the person will simply press the management button and speak message that indicates the sign of water(example) then the device convert it into the text and send to users to assist them.

2. RELATED WORK

It is estimated that millions of people in our country is suffering from some type of disability. A person who is not able to speak or they lost their ability in some

accident, this people face the problem like they are not able to speak properly and explore their thoughts, ideas, views, knowledge or feelings in front of society. To find solution for these issues, a system is implemented called "SPEAKING MICROCONTROLLER FOR DEAF AND DUMB PEOPLE". The system is microcontroller primarily based speaking system for deaf and dumb is meant to offer the signs, that square measure preloaded within the device. It is a small controller primarily based device, which provides the sounds simply by pressing the management buttons, that square measure given some audio messages like soliciting for water, lavatory etc., here the person will simply press the management button and speak message that indicates the sign of water(example) then the device convert it into the text and send to users to assist them

3. IMPLEMENTATION

To design a speaking microcontroller for dumb and deaf with minimum cost which works efficiently . Life span of device should be minimum of 5 years.

The project seeks to follow the following steps:

- Helps the deaf and dumb people to announce their requirements.
- The person who is near can understand their need and help them.

➤ This saves the time to understand each other and ease in communication.

The model designed by us basically contains four buttons with four different messages. When each button is pressed different sound is produced. For example if button 1 is pressed it sounds like "I need help" and when the other button is pressed it sounds "Iam not feeling well". Likewise when the other buttons are pressed sounds are produced accordingly. In this way this device helps while communicating with others. The output we get when the buttons are pressed are respectively:

Button 1-"In danger"

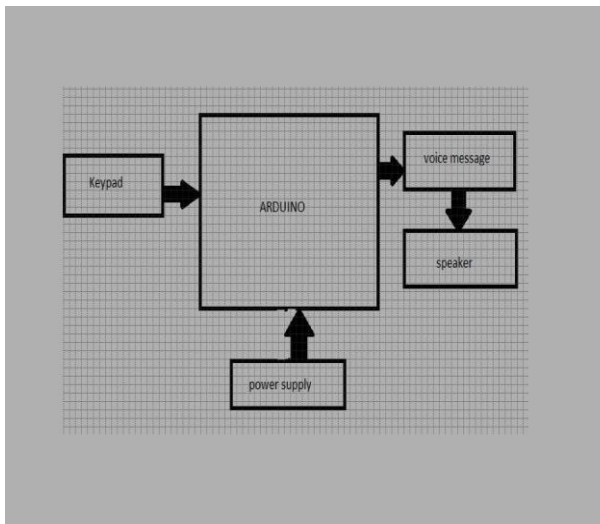
Button 2-"It's an emergency"

Button 3-"I need help"

Button 4-"I need food"

Microcontroller primarily based speaking system for deaf and dumb is meant to offer the signs, that square measure preloaded within the device. It is a small controller primarily based device, which provides the sounds simply by pressing the management buttons, that square measure given some audio messages like soliciting for water, lavatory etc., here the person will simply press the management button and speak message that indicates the sign of water(example) then the device convert it into the text and send to users to assist them. It stores the information of the requirements of the person. So, it will

create use of the information keep whenever the person uses the device. This device facilitates the deaf and dumb those who get announce their needs and send help to it persons. By this the one who is read the appliance which will browse their need and facilitate them. This protects the time to grasp one another and ease in communication using this device. It is designed to supply with a larger advantage by obtaining voice primarily based announcement from the user and output as a text. Sign language is a language which, instead of acoustically conveyed sound patterns, uses manual communication and body language to convey meaning. Sign language is difficult to understand to the normal people.

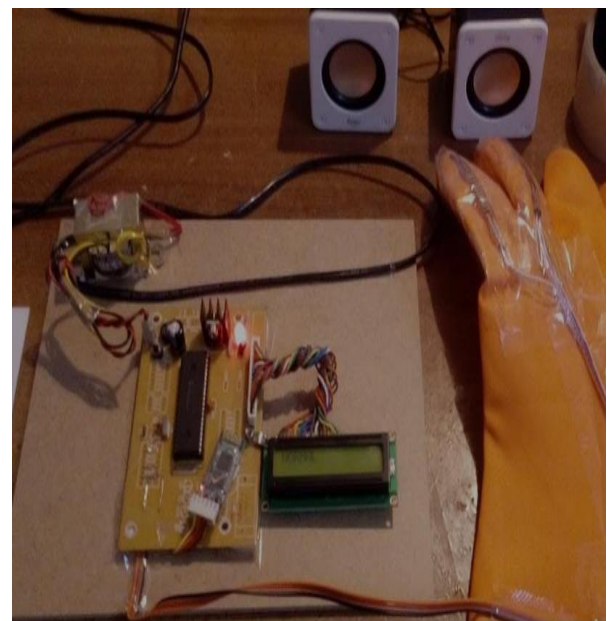


Block diagram

4. EXPERIMENTAL RESULTS

The main purpose of microcontroller based mostly speaking system for deaf and dumb is mean to provide the signs, that are

preloaded within the device. It is a small controller based device, which supplies the alert sound simply by pressing the management buttons, that are given some redefined messages like requesting water, medicine, etc. Small controller is that the main part of the device. It stores the information of the requirement of the person. This device helps the people to speak their needs. According to this the one person close to will perceive there would like and facilitate them. This device protects the time to perceive one another and ease in communication.



Communication interpreter

5. CONCLUSION

In such a way this project has two ways to take inputs one is through speech and another is from keypad. The requirements which has been taken from this input types will speak out from the speaker and at the same time sent to the operator so that they

will provide the help to the deaf and dumb people. In the case operator is unable to help they will be sent it to the higher authority and then higher authority will decide what to do with such a requirement of deaf and dumb people.

6. REFERENCE

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