SMART AID FOR VISUALLY CHALLENGED PEOPLE USER MANUAL i4CARE

The idea is to aid visually challenged people in the most easiest and comfortable way. A simple and efficient way of communication will be established between caretaker and visually challenged person even when the care taker is away. The user will convey his thoughts and needs through a single touch input and will be acknowledged for the same. Care taker will get intimated about the emergency needs of the patient and will do the needful.

ABOUT THE PROJECT:

This sample project is aimed to aid the visually challenged people to get their assistance without conveying any physical message except for the touch. A simple touch input will convey the user's thoughts in an efficient way to the corresponding care taker. An ULK kit is used for interfaces. The interfaces involved in this module include the following.

A GLCD TOUCH INTERFACE MODULE:



The user interface touch Graphical LCD module will consist of two sections including the emergency section on left hand side and other basic needs on right hand side. The blind user must be instructed to touch on left hand side for any emergency cases and right hand side for basic necessities respectively. Once the user touches left side part of the screen a sound acknowledgement will be provided to user to get it differentiated from the other input. Other than touch no other sort of input is required for the execution of this project.

THE DISPLAY (CHARACTER LCD MODULE)

This interface is handled by the respective care taker. As the user provides any input, corresponding message will be displayed in the character LCD screen. Character Liquid crystal display is a simple display module used to display characters. Thus touch input from the user is converted into corresponding message signal.



DATASHEET OF TEST CASES INVOLVED IN THIS PROJECT (WITH FUTURE ENHANCEMENTS)

USER TOUCH	TOUCH INPUT	CARE TAKER OUTPUT	7 SEG LED COUNT OUTPUT	ACKNOWLEDGMENT
Right Side touch	Emergency side	EMERGENCY	1	YES(SOUND)
Left side touch	Basic necessities	FOOD	2	NO
Left side touch	Basic necessities	WATER	2	NO
Left side touch	Basic necessities	RESTROOM	2	NO

SAMPLE TEST CASES OUTPUTS:

CASE1: USER TOUCHING RIGHT HAND SIDE(WITHOUT COUNTER I MPLEMETNTATION)



OUTPUT:

CLCD DISPLAYING "EMERGENCY" OUTPUT

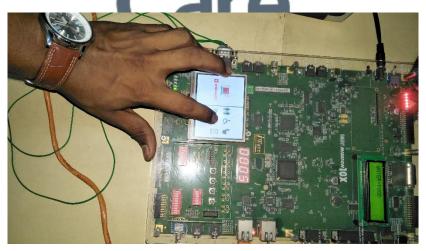
CASE 2: USER TOUCHING LEFT HAND SIDE OF TOUCH PANEL (WITHOUT COUNTER)



OUTPUT:

CLCD DISPLAYING "WATER FOOD" OUTPUT

CASE 3: WITH COUNTER IMPLEMENTATION



CASE 4: WRONG TOUCH INPUT

The character lcd will display "CANCEL".

PROJECT DONE BY:

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