TALKING CHAIR

(INDICATING CHAIR)

A PROJECT REPORT SUBMITTED FOR

SCHEME INNOVATION AWARD

FOR SCHOOL CHILDERN

PROJECT BY

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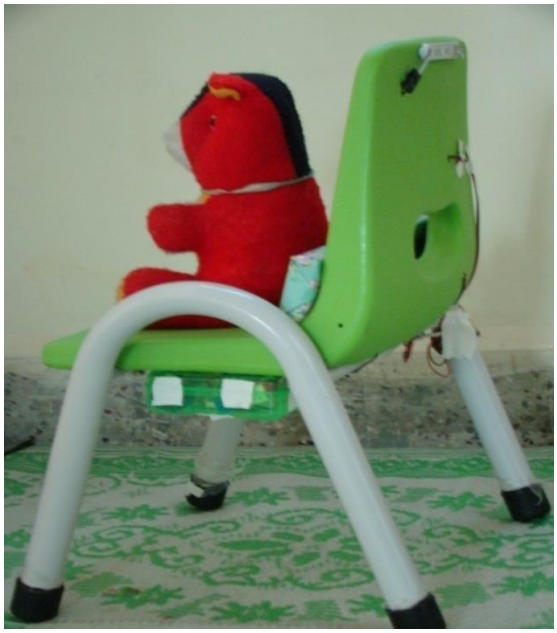
MAHARASHTRA

Following photos will help to clear ideas (based on LDR)

A Vacant Chair Light falls on LDR

2) In Dark also it is possible to identify vacant chair due to illumination of front led strip which acts as a light source to LDR

When chair Is occupied both front and back light switch off



Based On Obstacle sensor also idea can be implemented

When There is no obstacle on seat i.e. indicating seat is vacant. It will indicate light, back view and front view

When person will occupy seat means there is an obstacle, LED light will off ,indicating chair is now occupied

Present Project Cost

2 Chair	-	Rs.560 X 2
LDR circuit	-	Rs.190 (if it is readymade)
		RS.90 (if it is homemade)
Obstacle sensor Ckt	-	350
Battery (10)	-	Rs.200 (including extra batteries)
Wires (5 meter)	-	Rs.50
Soup case	-	Rs.20
Double sided tap	-	Rs.35
First aid tape	-	Rs.40
Modification of chair	-	Rs.130 (holes & cutting)
Switch	-	Rs.50 (including all)
Focus	-	Rs.15
LED strips(4)	-	Rs.40
Printouts	-	Rs.50
Charts	-	Rs.50
File	-	Rs.15
Acrylic sheet	-	Rs.54
Tape and screws	-	Rs.91
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Total	-	Rs.2500

Approximate commercial estimate using LDR sensor

One chair modification cost using LDR ckt - Rs.150 (with Homemade circuit, 3 meter wire, a switch, 2 LED strips).

Considering that 500 chairs are in an auditorium then it will cost 150*500 = Rs.75000 (this is maximum amount, in case of bulk it may reduce a cost)

One chair modification cost using opto sensor - Rs.450 (with Homemade circuit, 3 meter wire, a switch, 2 LED strips).

Considering that 500 chairs are in an auditorium then it will cost 450*500 = Rs.2,25000 (this is maximum amount ,in case of bulk it may reduce a cost)

COMMERCIAL USE

- The system of indicating chair can be implemented in auditoriums or as a single chair also.
- The system is very economical. It costs approximately Rs. 200 per chair.
- The chair number in particular row, various type of classification like VIP class, Press reporters etc. could be possible to indicate by using colorful LED strips.
- In Open Air theaters also by using this system for every single chair could be indicated if it is vacant.
- Also counter can be extended in an auditorium where fixed arrangement is possible to know the number of chairs with people sitting in the chairs and also terrace solar panels as a power source can be implemented as power consumption is low.

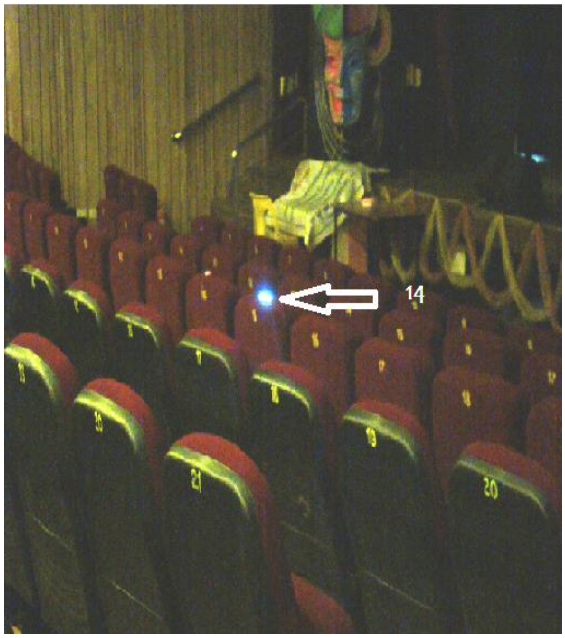
MAJOR APPLICATIONS /UTILITY OF MY PROJECT WILL BE CLEAR FROM FOLLOWING PHOTOS

In an large auditoriums some times it is difficult to locate easily vacant chair A-1 & A-2

A-1

A-2

Chair is indicating vacant positions in below diagram



B) The idea can be extended to State traveler and city buses also .Indication of vacant seats and number of vacant seats through counter will avoid such rush

It is also useful in ‘BRT’ to know vacant seats. After knowing the no. of vacant seats people won’t board the bus with luggage unnecessarily.

APPENDIX

1) APPRECIATION LETTER FROM IUCA A

2) OPINION LETTERS GIVEN BY DIFFERENT AUDITORIUMS IN PUNE.

1) Bharat Natya Sanshodhan Mandir,Sadashive Peth ,Pune (established in 1894)

2) Tilak Smarak Mandir,Tilak Road,Pune

3) Balgandarwa Rannga Mandir