Auditorium Seat Management System!

A report submitted in partial fulfilment of the

requirement for the award of degree of

BACHELORS OF ENGINEERING

in

ELECTRONICS AND COMMUNICATION ENGINEERING

By

Pankaj Saha: 18BEC1180

Nandita Rajput: 18BEC1178

Abhishek Sharma: 18BEC1172

under the guidance of

Mr. Ashish Sharma

Assistant Professor

Electronics and Communication Engineering

Electronics and Communication Engineering

UIE, Chandigarh University

Brief Introduction.

'***Auditorium Seat Management system***' is one of the prominent solutions to solve problem like social distancing in managing seats in Auditorium during this crucial time. Previously, managing seat for auditoriums were done via manual process, which acts as a fuel for time consumption and other issues.

Our project focuses on absolutely zero indulgence of human's presence. Hereby, our project deals with latest electronic component and also its somewhat cost effective. From setting up a switch for counter to connecting a servo motor to automatically open/close the entrance and exit point.

Sensor's the one of the most important components to transfer physical signals to electrical sensor. Hence, we have used a flex sensor, to provide us with pressure value, when an attendee occupies his/her seat in Auditorium.

Prominently, it focuses on how to manage a number of people in auditoriums in an efficient way. We all know that when we are attending a seminars or any programs, there creates a chaotic situation about finding a vacant seat because of the poor visibility in the hall due to darkness .So, we have come up with an idea that in a hall we will be placing LED'S connected with pressure sensor in the seats .When there is no one sitting in the seat then LED's will keep glowing which will be pointing that seats are vacant and when someone sits in the seat, pressure sensor will sense some pressure and will turn the LED as LOW. Moreover, this project does solve most of the problem with ease and almost with 90% efficiency

"*AUDITORIUM SEAT MANAGEMENT SYSTEM*" will be extremely beneficial for the effective management and to reduce time consumption and chaos between people. With the feature of maintaining social distancing, it will be useful in the fight against COVID-19 as well. This project can also be applicable in car parking system which has been discussed earlier. The hardware part of the project helped us to understand Arduino. We also had a chance to practice circuit designing on Arduino. We part helped us to have a better understanding of embedded systems programming and project management skills. The prototype is developed and its successfully working in TinkerCad and performance of the system is found satisfactory. We have completed the project on time and matched the project objectives. We are sure that the experience that we have gained while doing this project will help us throughout our future career.