Smart Classroom

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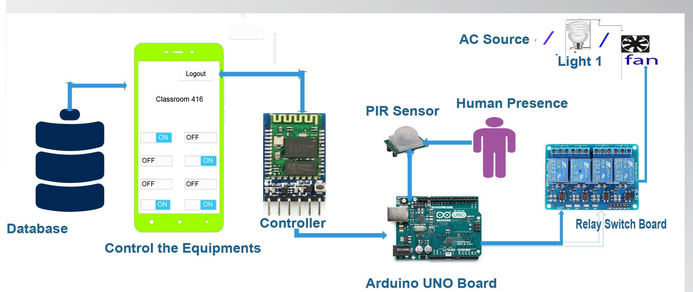
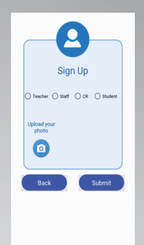
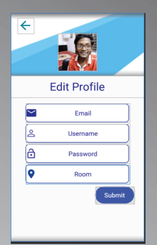
ABSTRACT

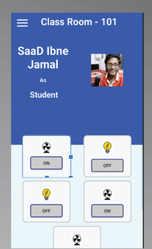
As the sector of smart classroom is very outstretched, we haven't developed our system including all the features of a smart classroom. This system will provide the facility to ensure a centralized control on the classrooms, labs, office-rooms electricity system and bring the whole institute under an automation service. Any authorized person can view and access the classrooms situation from any place and any time he/she wishes.

SYTEM ARCHITECHTURE AND PROTOTYPE









INTRODUCTION

It often happens that we forget to switch off the electric equipment in our room and later we remember that. But that time we don't have chance to come to our home/office/classrooms, and these incidents cause great waste of energy and sometimes great danger like fire due to short circuit can be occurred. Our system will reduce the risk of these dangers.

FEATURES

1. View the classroom any time.
2. Access the classroom if user is authorized.
3. Automatic electricity supply system if user allows.
4. Account authentication service by the authorized person.

FUTURE WORK

•Currently we are experimenting on less number of devices. In future we are planning to add large number of devices.
•Currently we are using mobile/web app to turn on/turn of switches.In future we are planning to use sensor to do it automatically and mobile app for verification.

OBJECTIVE

•To develop a system which will reduce unnecessary power consumption.
•To avoid accidents such as short circuit.
•To control electrical devices in easy way even not being present there.

COST ANALYSIS

Ser No	Items	Cost(TK)
1.	Arduino Uno Board	600
2.	Controller	300
3.	Relay Switch Board	800
4.	PIR Sensor	200

DISCUSSION AND CONCLUSION

Target users of this system are instructors,lab assistants and students of educational institutions. Low level users such as students can only observe the state of electrical equipments.High level users can control the eqipments.This system is developed to reduce unnecessary power consumption.