Er. PERUMAL MANIMEKALAI COLLEGE OF ENGINEERING – HOSUR.

Smart Energy Auditing System

Mentor

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Team

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Objective

- The main objective of this project is to develop an Mobile application for energy auditing and notifying the user about the power usage of specified appliance

- The main goal of this work is to alert the user about excess usage of power and alerting when the appliance is used more than the specified time

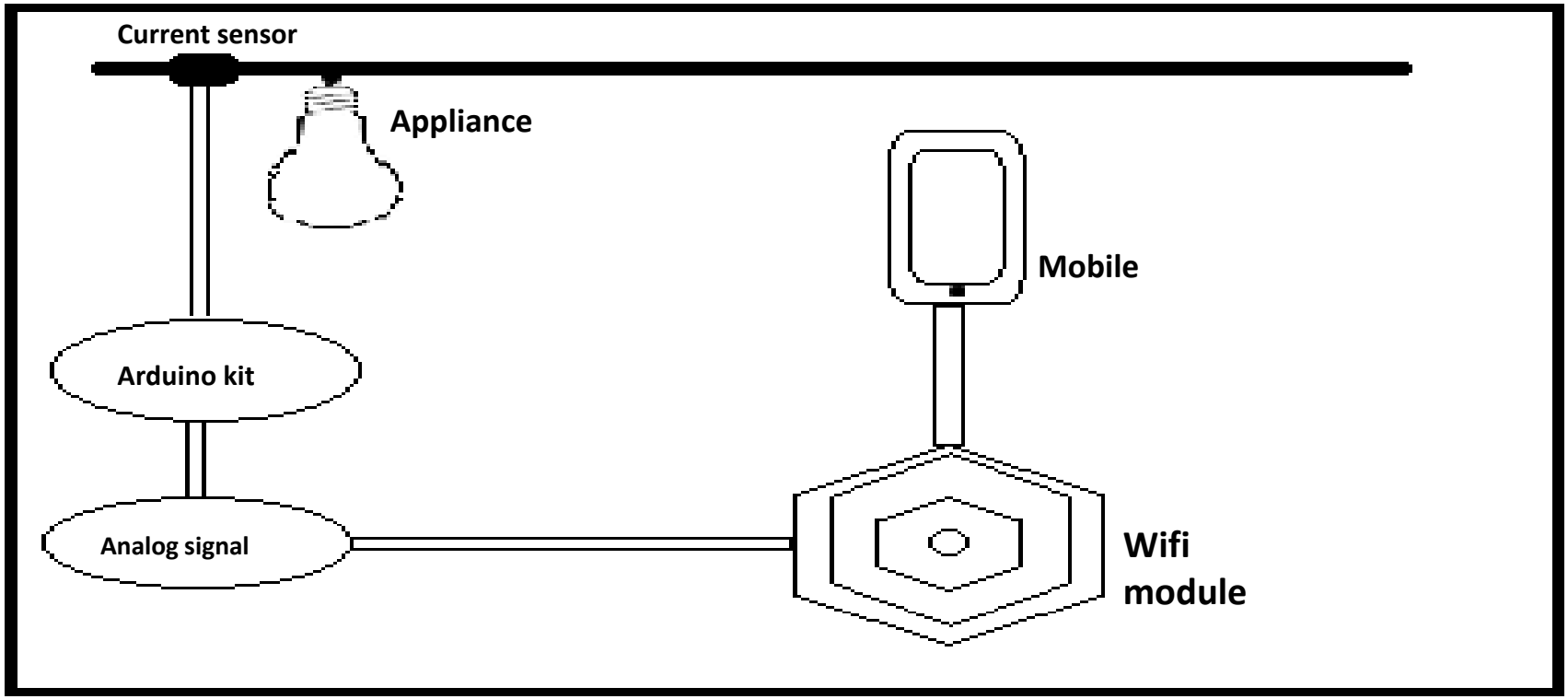
Background work / Survey

- The electricity consumption rate increases by 7% every fiscal year.
- Electrical energy requirement in the next 10 years is expected to grow by 79%.
- In the year 2017 the total electricity in India was **1,142 BU**
- In the year 2027 it is expected to rise to **1,743 BU**

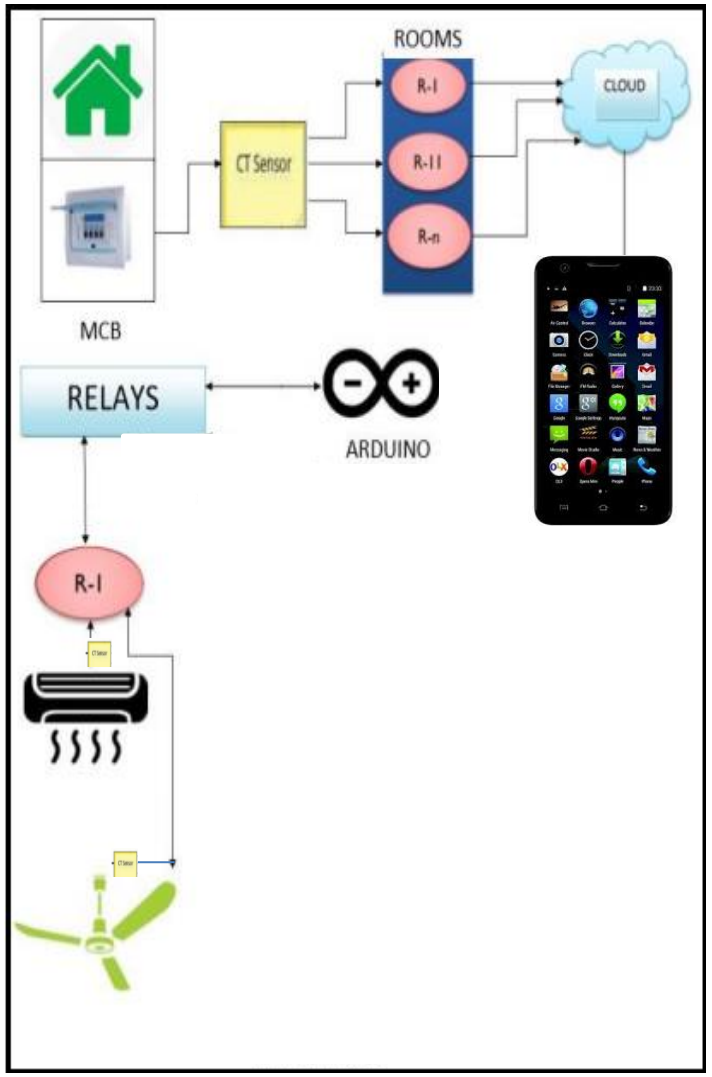
https://www.financialexpress.com/economy/electricity-consumption-in-india-power-demand-to-rise-7-cagr-in-5-year/716957/

Working principle

- ✓ Current sensor(ACS712 current sensor) uses magnetic induction.
- ✓ When connected through an Arduino kit it produces an analog signal.
- ✓ WIFI module ESP8266 is used to transmit data to the mobile.
- ✓ Mobile phone is used to report the output.



WORKING MECHANISM



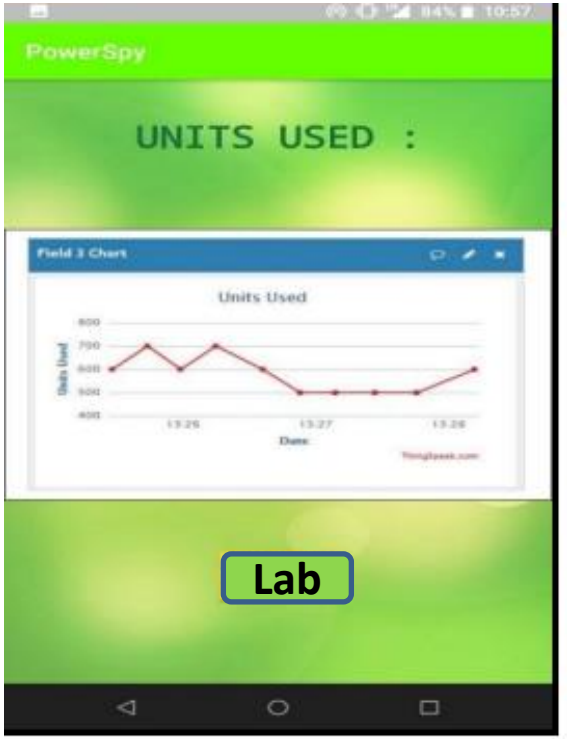
School	College	Factory A
Research institute	Hostel	Factory B

Classroom A	Classroom B	Classroom C	H.O.D office
Laboratory	Reception	NET LAB	Classroom D
Principal office	Auditorium A	Library	Auditorium B

Very High
High
Average
Normal
Low

Software Graphics User Interface

Aaron auditor



Market Potential

Target Customers

- ✓ Colleges
- ✓ Schools
- ✓ Houses
- ✓ Factories

https://www.indcareer.com/find/all-colleges-in-krishnagiri?page=1

http://cdn.s3waas.gov.in

EXPENSES AND EXPENDICTURE

Sl.no	Instruments	COST in Rs
01	Arduino board	5ooo
02	Current sensors	20000
03	Wifi moduler	2000
04	App development and Testing	25000

Total cost-Rs 52000

References

- https://www.financialexpress.com/economy/electricity-consumption-in-india-power-demand-to-rise-7-cagr-in-5-year/716957/
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THANK YOU