IOT BASED DETECTION AND INDICATION SYSTEM

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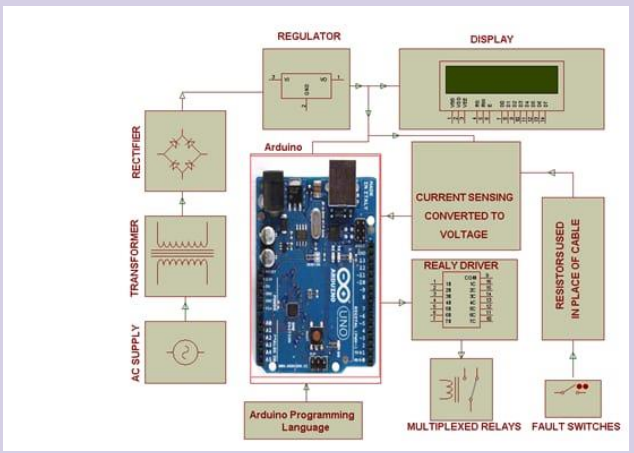
ABSTRACT

- Building cables are prone to a wide variety of faults due to building conditions, wear and tear, rodents etc.
- Diagnosing fault source is difficult and entire cable should be taken out from the ground to check and fix faults. The paper work is intended to detect the fault in Building cable lines from the base station to another substation using a Microcontroller.
- To locate a fault in the cable, the cable must be tested for faults and fault creation is made by a set of switches at every known distance between two substations.

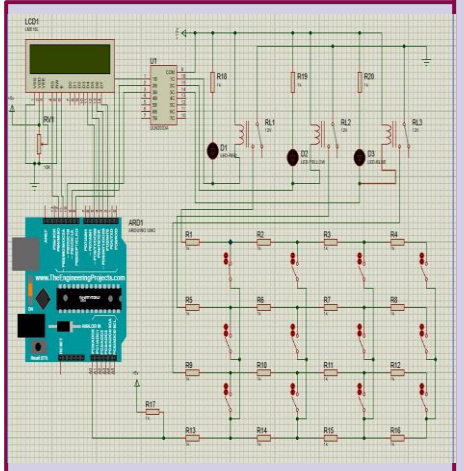
OBJECTIVE

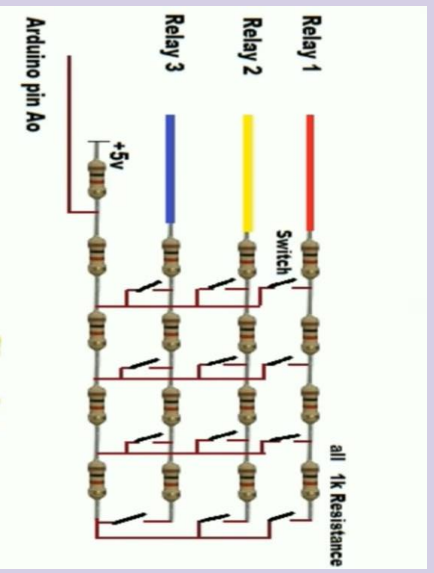
- A power supply circuit is a very basic circuit in learning electronics. The power supply which we will design here is very basic and it is a linear technology based design whichwill go through each design step.
- The design of any circuit begins with a well-made general block diagram. It helps to design the sections of the circuit individually and then at the end put them together to have a complete circuit which is ready for use.

ARCHITECTURE DIAGRAM



RESULT





- The work automatically updates the status of every substation on IOT.
- Building cables are preferred in many areas especially in urban places. With the help of this system, we can get to know the location of the fault in the cable which are buried under ground.
- Therefore, this system does not lead to debugging of the entire area to detect the fault. Hence, the expenditure and manpower gets reduced.
- The benefits of fault are fast repair to revive back the power system and improves the system performance.

CONCLUSION AND FUTURE WORK

Building high voltage cables are used more and more because they are not influenced by weather conditions, heavy rain, storm, snow and pollution. However, cables can be easily damaged by incorrect installation or poorly executed jointing, while subsequent third-party damage by civil works such as trenching or curb edging. Fault in a cable can be any defect that can break the path of the performance of the cable. So it is necessary to correct the fault .

REFERENCES

[1] Kunal Yogeshkumar Parikh, Brajesh Kumar and Vijay Raval, “GSM Based Underground Cable Fault Distance Locator”, International Journal for Scientific Research & Development (IJSRD), Vol 6, Issue 4, 2018, pp 1174- 1176.

[2] B.Y.V.N. R Swamy, D. Rama krishna, CH. Purna chandu, K.Venkatesh and A. Sasidhar Reddy, “Underground Cable Fault Detection”, International Journal for Research in Applied Science & Engineering Technology (IJRASET), IC Value: 45.98, SJ Impact Factor: 6.887, Vol 6, Issue 3, March 2018, pp 3060-3064.

[3] Summi Thomas, A.Vimenthani and Kaleeswari, “Automatic underground cable fault locator using GSM”, International Journal of Advanced Research Trends in Engineering and Technology (IJARTET), Vol 4,Issue 19, April 2017, pp 260-265.