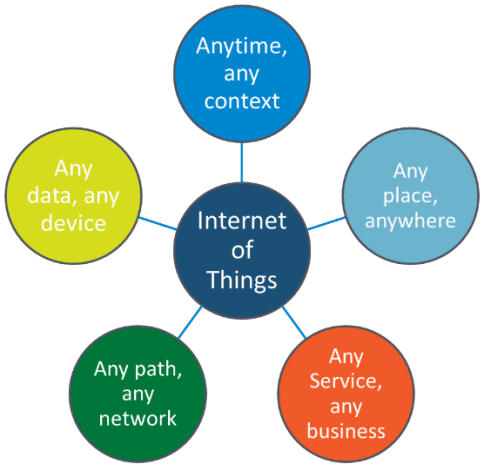
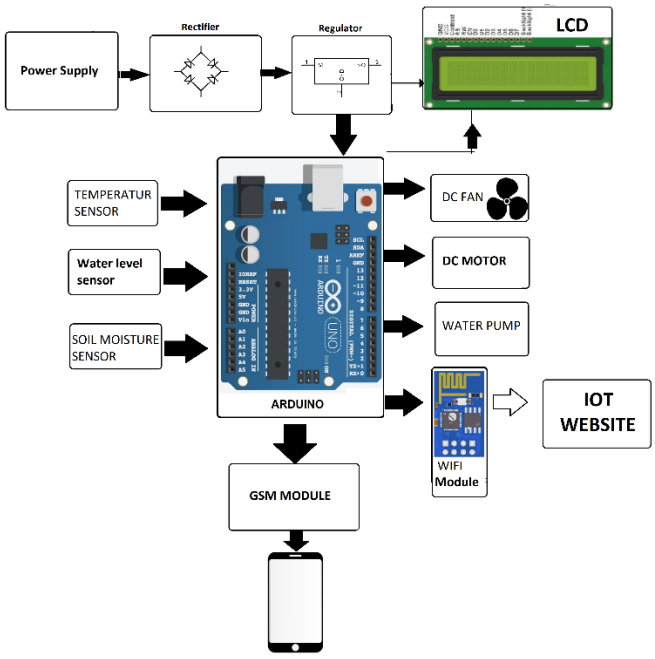
Project Design Phase-I
Solution Architecture

Date	**15 October 2022**
Team ID	**PNT2022TMID29740**
Project Name	**Project – IOT Enabled Smart farming application**
Maximum Marks	**4 Marks**

Solution Architecture Diagram:



The main goal of this Smart Farming is to optimize the harvesting land per unit by using modern methods to achieve best in terms of quality, quantity and financial return. The “thing” in IoT refers to any of the communicating or non-communicating object on earth. IoT supports the interaction between "things" and allows more-complex structures by developing distributed applications and distributed computing. The working of IoT is done on the basis of Machine–to-Machine (M2M) communication and this M2M is defined for communicating between two machines without the involving manpower. The term smart farming is also known as Precision Farming which uses a wide range of technologies, including GPS services, sensors and etc. These technologies are very much required in agriculture sector includes the climate forecasting, temperature sensing, to sense the moisture of the soil. The machines are the elements used to direct the work in agriculture in improving the production and farming techniques.



The Smart devices in the agriculture field consist of some key features. They are as follows:

1. Different agricultural parameters like Temperature, Wind, Humidity, and Moisture can be controlled and monitored by using sensors.
2. Provides awareness to the farmers by alerting while he is away from the field.
3. Controls the equipment's in the field through sensor devices like mobile phones, Tablets, computers etc...

Reference:

- Dave Evans, "The Internet of Things How the Next Evolution of the Internet Is Changing Everything", Whitepaper, Cisco Internet Business Solutions Group (IBSG), April 2011.
- Nicoleta-Cristina Gaitan, Vasile Gheorghita Gaitan, Ioan Ungurean" A Survey on the Internet of Things Software Architecture") International Journal of Advanced Computer Science and Applications, Vol. 6, No. 12, 2015.
- http://article.nadiapub.com/IJCA/vol12_no9/pdf/4.pdf#:~:text=Sophisticated%20sensor%20based%20architecture%20is,to%20a%20period%20of%20time.