Project Design Phase-I
Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID51719
Project Name	Project : SmartFarmer – IoT Enabled Smart Farming Application
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process which is an architectural description of a specific solution. Solution architecture is a practice to provide ground for software development projects by tailoring IT solutions to specific business needs and defining their functional requirements and stages if implementation.
It is comprised of many subprocesses that draw guidance from various architecture viewpoints.
The key features of solution architecture are :

- Analyzing the technology environment.
- Analyzing enterprise specifics.
- Analyzing and documenting requirements.
- Setting the collaboration framework.
- Creating a solution prototype.
- Participating in technology selection.
- Controlling solution development.

Solution Architecture Diagram:

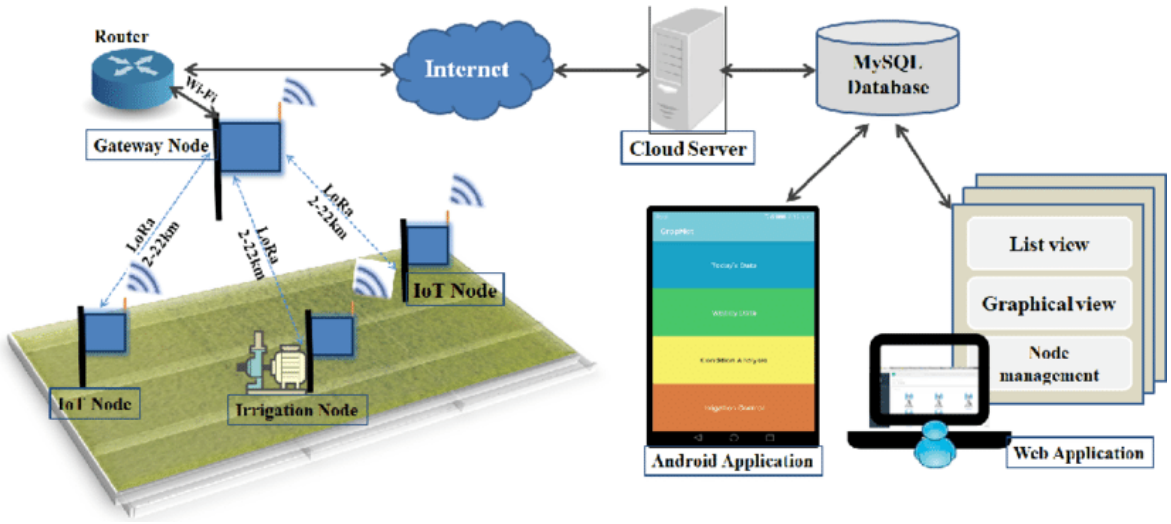

Figure : Architecture and data flow of smart farming application

Reference:

[1] Nicoleta-Cristina Gaitan, Vasile Gheorghita Gaitan, Ioan Ungurean" A Survey on the Internet of Things Software Arhitecture") International Journal of Advanced Computer Science and Applications, Vol. 6, No. 12, 2015.

[2] S. B. Shen, Q. L. Fan, P. Zong, Q. Y. Mao and W. Huang. Study on the Architecture and Associated Technologies for Internet of Things. Journal of Nanjing University of Posts and Telecommunications (Natural Science), 2009, 29(6): 1-11.

[3] https://ondo.io/the-challenges-that-smart-agriculture-technologies-successfully-combat/

[4]https://www.researchgate.net/publication/338300823_Issues_and_Challenges_in_Smart_Farming_for_Sustainable_Agriculture

[5] Vangala, A.; Das, A.K.; Kumar, N.; Alazab, M. Smart Secure Sensing for IoT-Based Agriculture: Blockchain Perspective. IEEE Sens. J. 2020, 21, 17591–17607.