Assignment No: 04

Title: Draw Functional Dependency graph and DFD (Level 0, Level1 and Level2,), UML diagrams for project's problem statement.

I. Data Flow Diagram

1.DFD Level 0:

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system modelling its process aspects. A data flow diagram (DFD) illustrates how data is processed by a system in terms of inputs and outputs. As its name indicates its focus is on the flow of information, where data comes from, where it goes and how it gets stored.

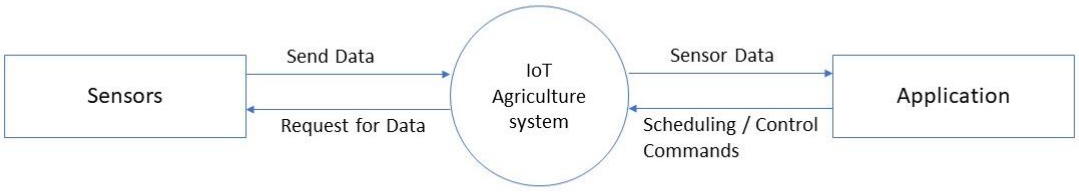

Fig:1 DFD Level 0

2.DFD Level 1:

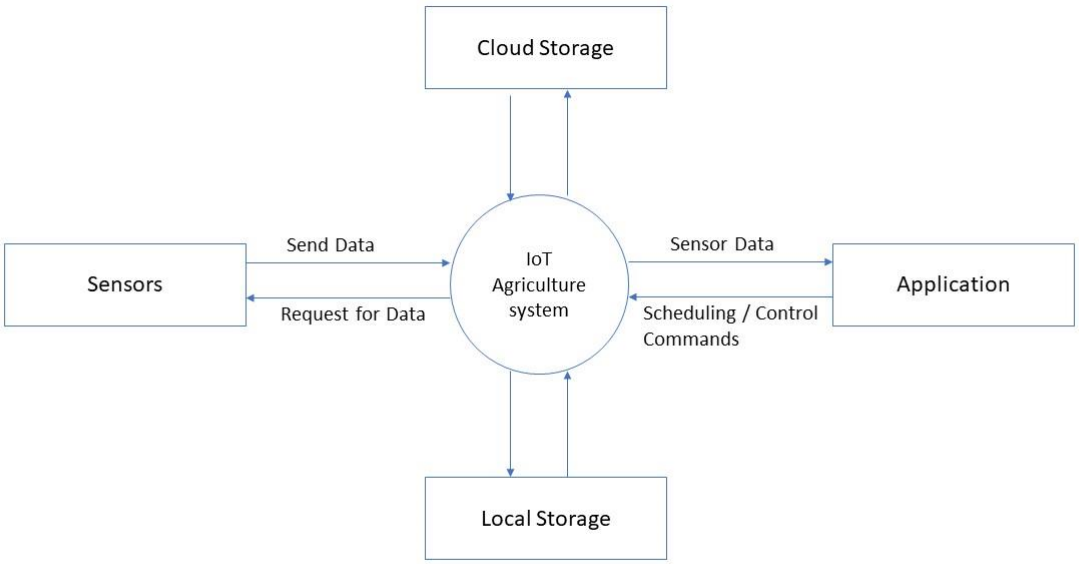

Fig:2 DFD Level 1

3.DFD Level 2:

The DFD Level 1 Increase by DFD Level 2 with More Details pracess of Data Flow. So Step By Step show the details of DFD Level 1

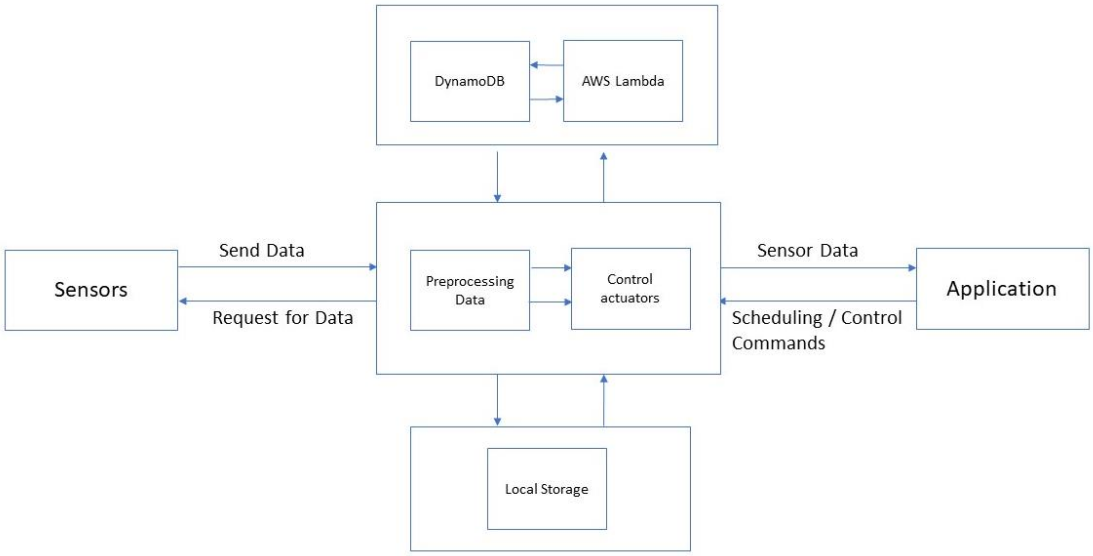

Fig:3 DFD Level 2

II. UML Diagrams :

4.Use Case Diagram:

The purpose of a Use Case diagram is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases.

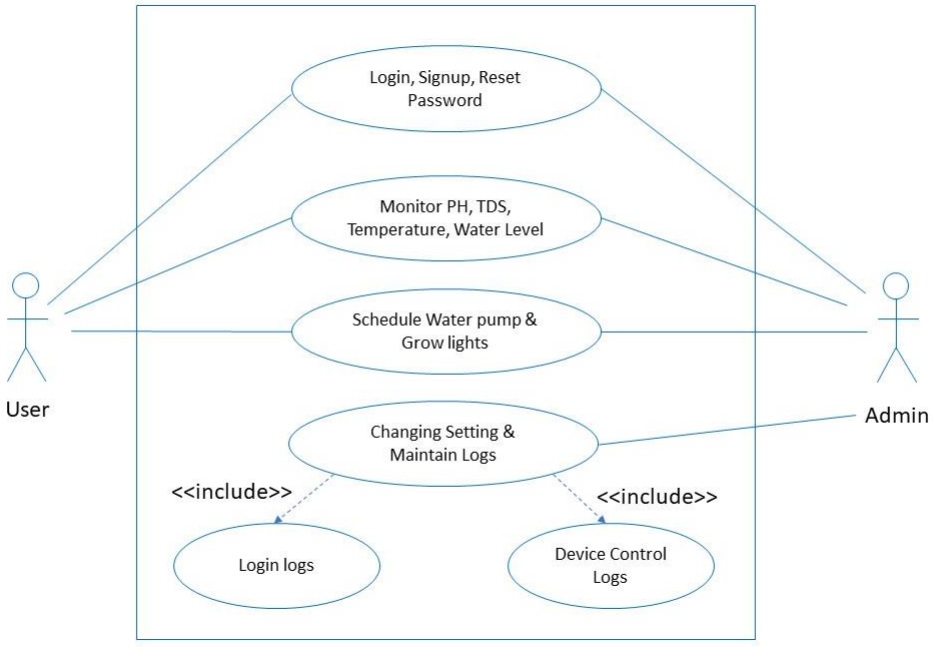

Fig:4 Use Case Diagram

5. Sequence Diagram:

A sequence diagram in Unified Modelling Language (UML) is a kind of interaction diagram that shows how processes operate with one another and in what order. It is a construct of a Message Sequence Chart. Sequence diagrams are sometimes called event diagrams, event scenarios, and timing diagrams.

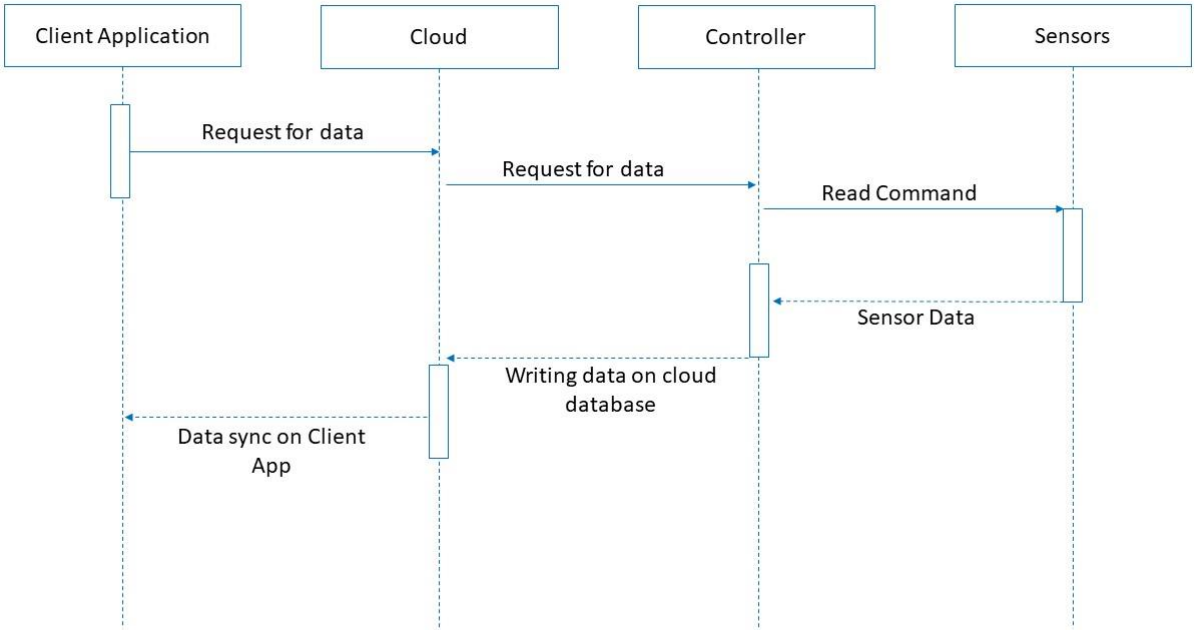

Fig:5 Sequence Diagram

6. Class Diagram:

In software engineering, a class diagram in the Unified Modelling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among the classes. It explains which class contains information.

Purpose:

The purpose of the class diagram is to model the static view of an application. The class diagrams are the only diagrams which can be directly mapped with object-oriented languages and thus widely used at the time of construction. So, the purpose of the class diagram can be summarized as:

1. Analysis and design of the static view of an application.
2. Describe responsibilities of a system

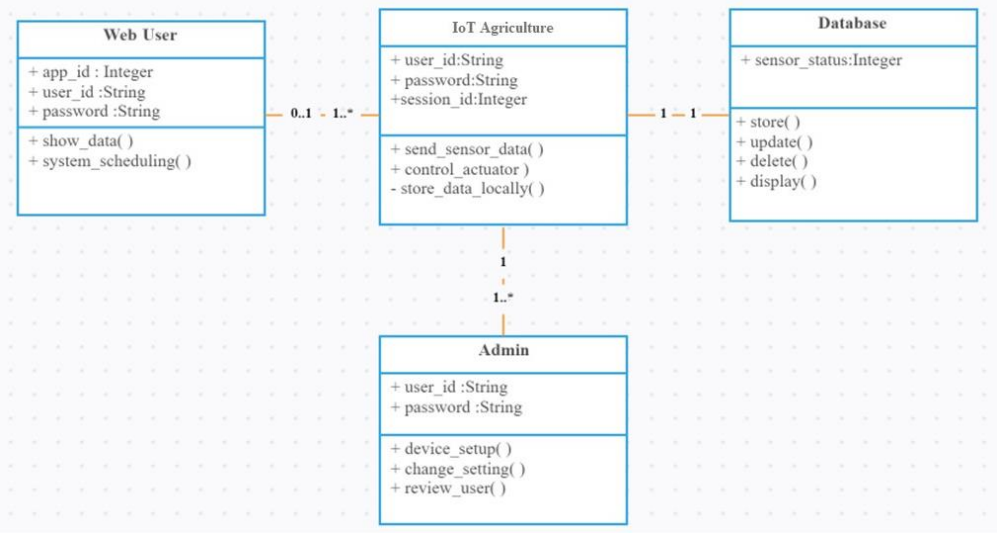

Fig:6 Class Diagram

7. Communication Diagram:

A communication diagram visually represents the message flow between objects in an application We will first show an example of a communication diagram and then break it down into its individual parts.

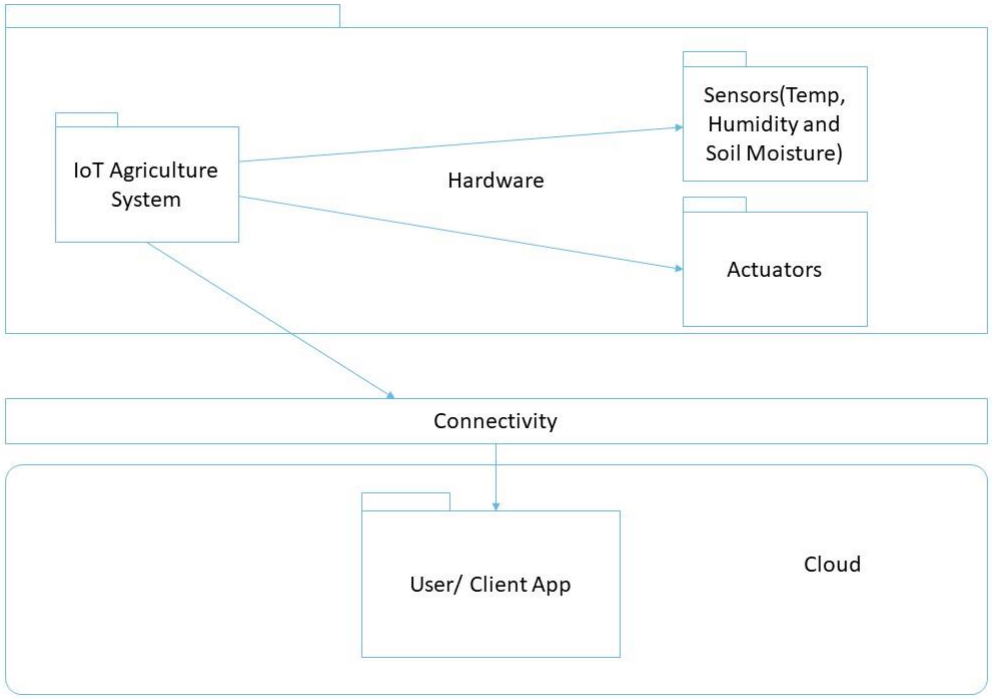

Fig:7 communication diagram

Conclusion:

Hence, we draw DFD Level diagrams and UML diagrams of our project. By using diagrams, we have design project implementation process.