

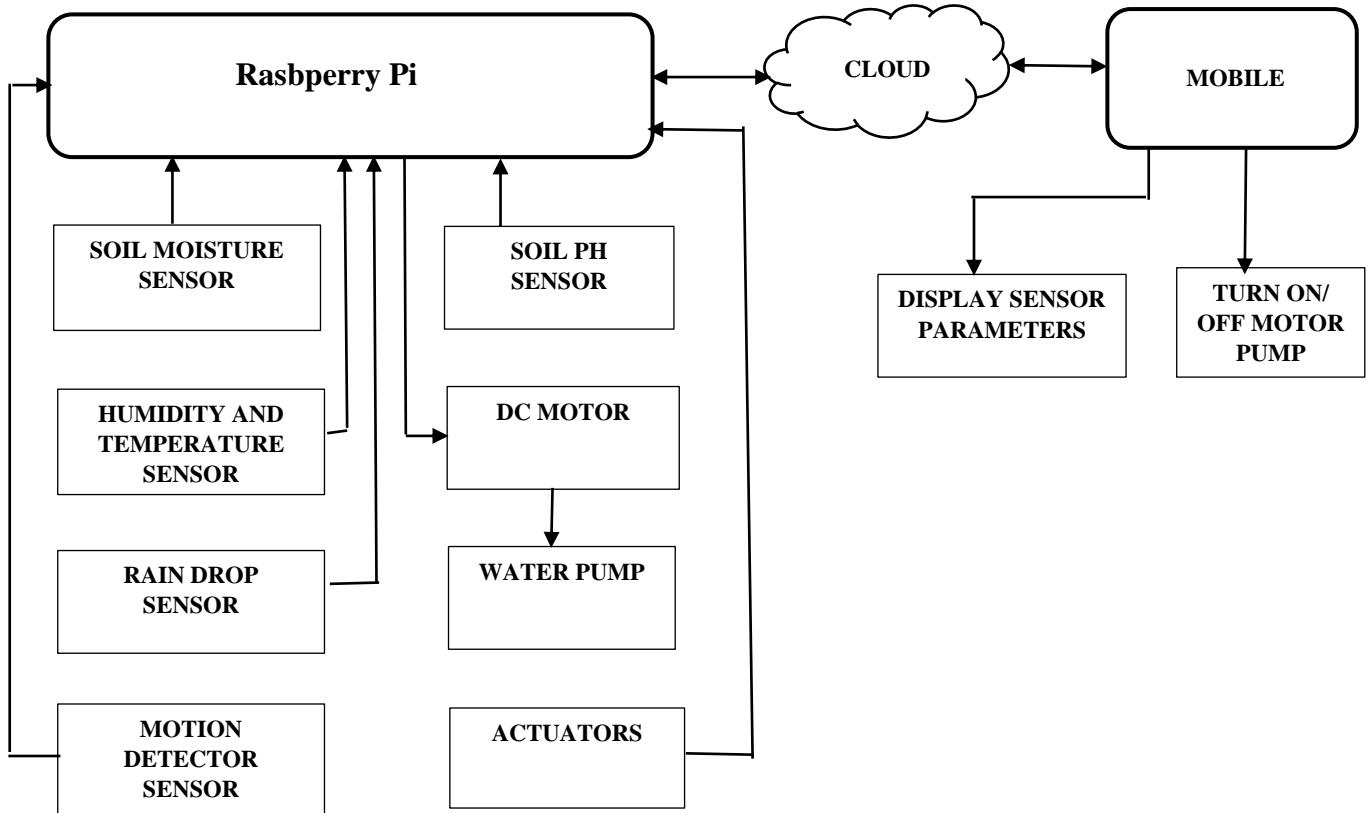
Project Design Phase II

Data Flow Diagram & User Stories

Date	21 October 2022
Team ID	PNT2022TMID18233
Project Name	Smart Farmer- IoT based smart farming Application
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story/ Task	Acceptance Criteria	Priority	Release
Farmer (Mobile App)	Display the sensor parameters fixed in the field	USN- 1	The farmer can view the parameters values like soil moisture, humidity, motion detection, soil alkalinity	Display the parameters	High	Sprint- 1
Farmer (Mobile App)	Turn on/ off the motor	USN- 2	Can turn on/ off the Dc motor if the moisture level and rain the reaches a threshold	Turn on/ off the dc motor for water pump	High	Sprint- 1
Raspberry Pi	Microcontroller setup in the fields	USN- 3	The soil moisture sensor, humidity and temperature sensor, rain drop sensor, motion detection sensor, soil Ph sensor and DC motor connected with the water pump are interfaced with the micro- controller	Measures the parameters by the sensors interfaced with the micro-controller in the fields	High	Sprint- 1
IBM Cloud	Data transfer	USN- 4	The micro-controller in the field is connected to the IBM cloud and transfers data from and to the remote user	Transfers data between the fields and the user through internet	Medium	Sprint- 2