

**Domain:** clean water

**College code:**1-3516209872

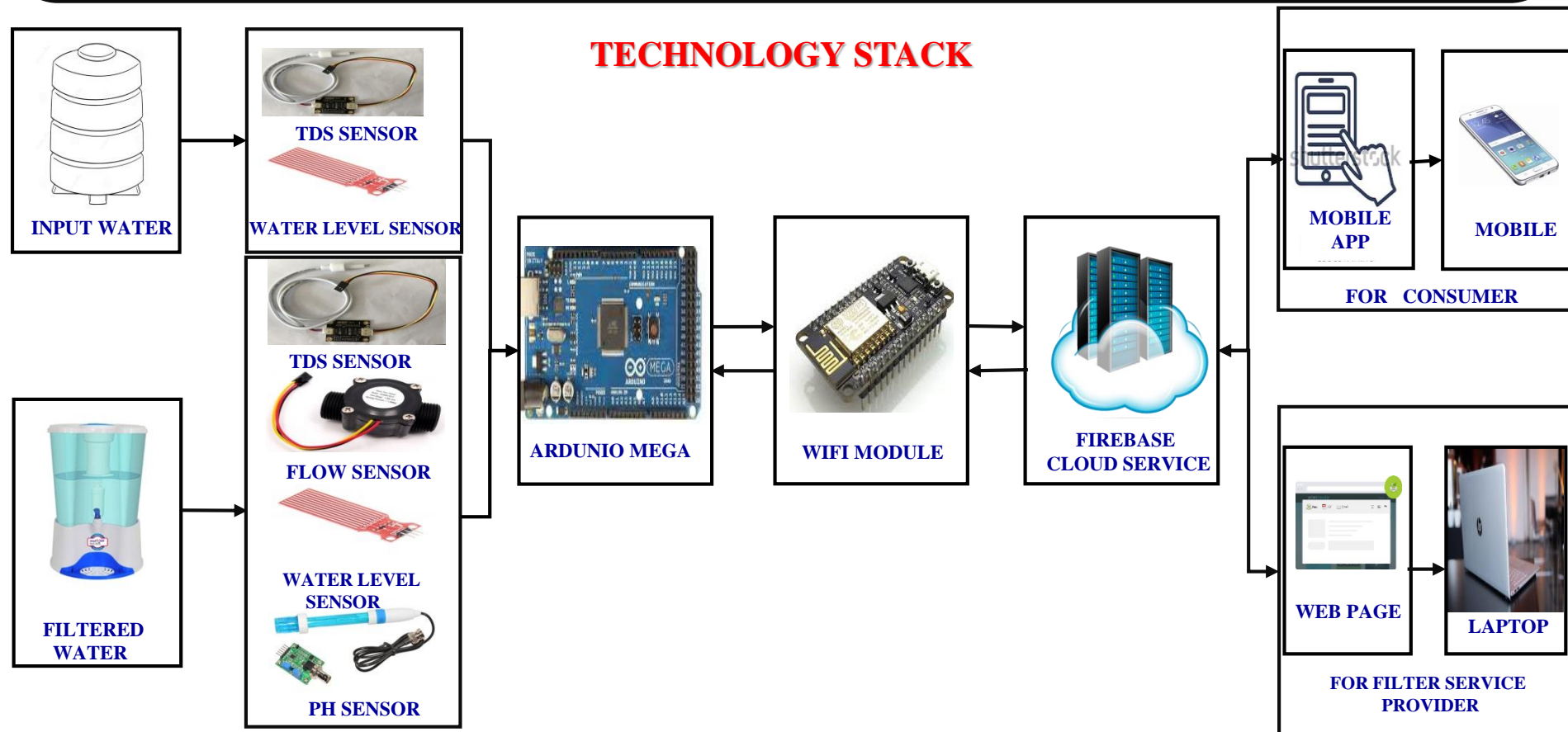
**Problem statement:** Monitoring input water quality and output water quality through smart sensing in Home water purifier

**Team Leader Name:**

### IDEA

- The IOT based system uses a cost effective Total Dissolved Solids(TDS) sensor in the input side and output side of filter. This sensor reads the TDS value of water at both ends and compares with the standard values.(input TDS based on filter ,output TDS <300 ppm.). Water source level, filtered water level water flow and PH of output are continuously updated to the Firebase Cloud Service.
- App alerts the user as well as service provider of filter when water level goes low, input and output TDS and PH changes which affect water quality and filter adversely. If consumer requires help there is a feature to ask queries in App.
- If filter is not working then the user can authenticate the service requirement, so that the service provider will be notified about the problem with the help of Mobile App.

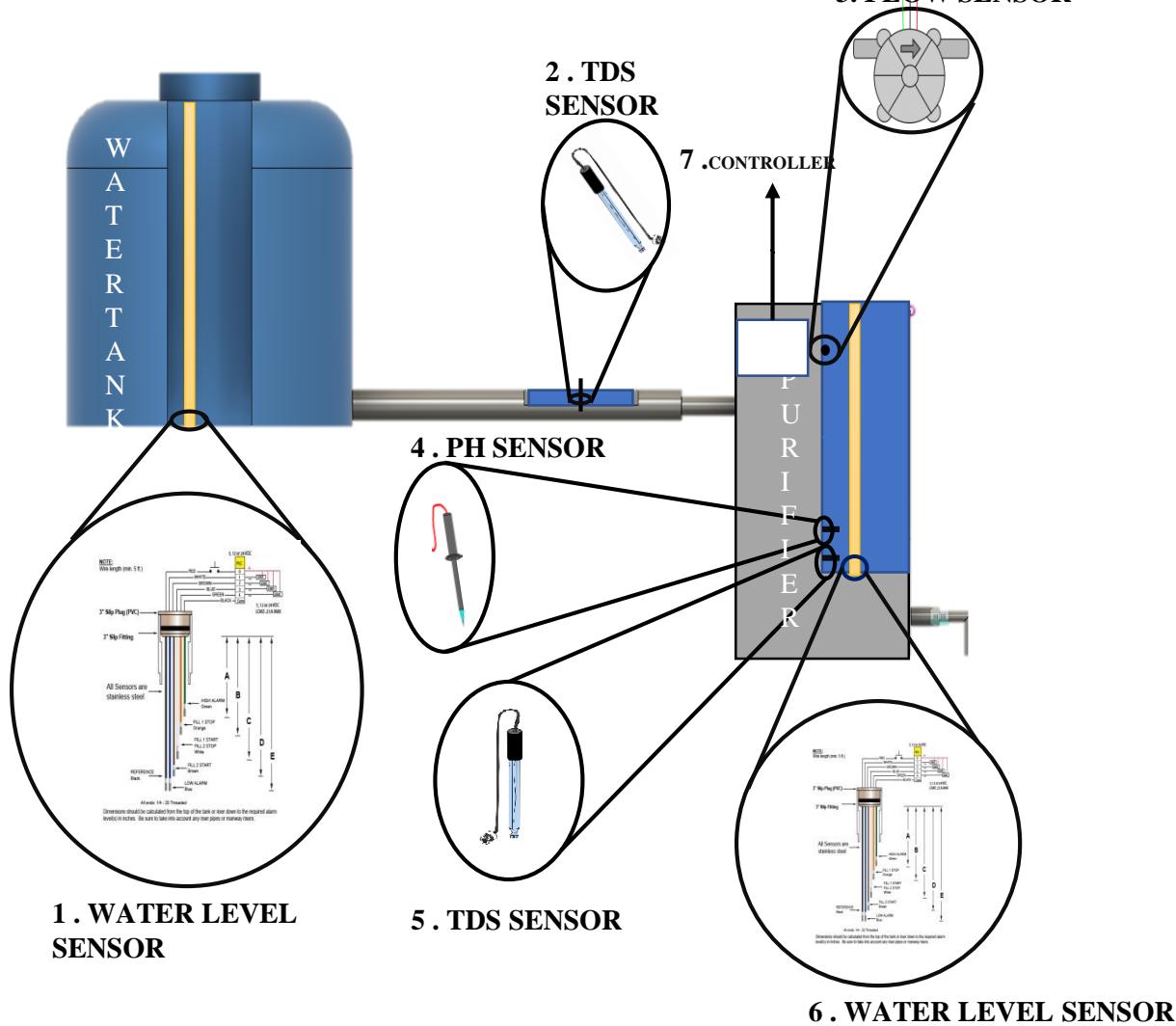
### TECHNOLOGY STACK



## USE CASE

### 3. FLOW SENSOR

## OUTPUT SCREENSHOT



PARAMETERS	INPUT PARAMETERS	OUTPUT PARAMETERS
TOTAL DISSOLVED SOLID(TDS)		
WATER LEVEL		
PH		
NOTIFICATION		
No fault in filter		AUTHENTICATION
Queries	answer	POST QUERIES
complaint		Service request

[illegible]

## SHOW STOPPER

- The home where it is installed must have Wi-Fi connection , to over come this problem GSM module can be used instead of Wi-Fi module.