Data Flow Diagram &User Stories

Date	06 November 2022
Team ID	PNT2022TMID14644
Project Name	Efficient Water Quality Analysis and Prediction Using Machine Learning
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.

DFD (Industry Standard):

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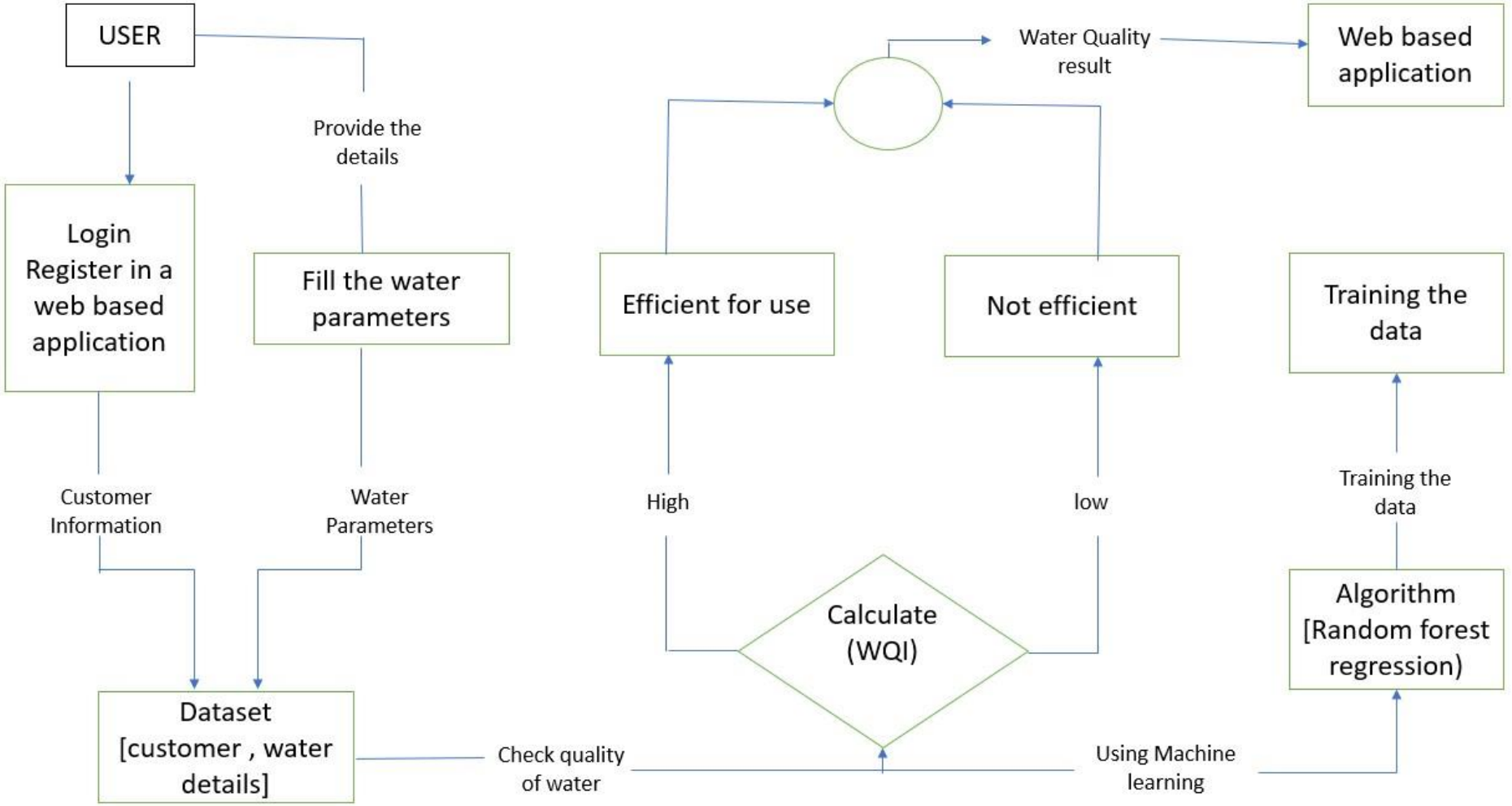
USER
Provide the details
Login Register in a web based application
Fill the water parameters
Customer Information
Water Parameters
Dataset [customer , water details]
Check quality of water
Calculate (WQI)
High
low
Efficient for use
Not efficient
Water Quality result
Web based application
Training the data
Training the data
Algorithm [Random forest regression)
Using Machine learning

User Stories

User Type	Functional Requirement	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard.	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application.	I can receive confirmation email & click confirm.	High	Sprint-1
		USN-3	As a user, I can register for the application through Facebook.	I can register & access the dashboard with Facebook Login.	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password		High	Sprint-1
	Dashboard	USN-6	As a user, I can check my login details and work details		High	Sprint-1
Customer (Web user)	Web Access	USN-7	As a user, I can enter the values about the water.	I can access the webpage through internet.	High	Sprint-1
		USN-8	As a user, I can submit the values into the webpage.	I can click the submit button.	High	Sprint-2
		USN-9	As a user, I expect correct coefficient of water.		Medium	Sprint-3
	Data preprocessing	USN-10	As a user, I can see the loading information.		Medium	Sprint-3

	User Input Evaluation	USN-11	I can see the evaluation quickly.		High	Sprint-4
	Prediction	USN-12	As a user, I can see the result of the water efficient.	The results are visible on webpage.	High	Sprint-4
Customer Care Executive	Solving Customer issues.	USN-13	As a customer care executive, I solve the customer issues in using the application and webpage.	It results in user interaction.	Medium	Sprint-5
Administrator		USN-14	I can manage the application.		Medium	Sprint-5