Aqua Guard :)

Simulated IoT-based Water Management System

Our Team

Team Leader :

- *Dharma Raghava Sai Shashank*

Team Members :

- *Guna Ranjan*
- *Manasa*
- *Leela Sai*
- *Vaibhav*

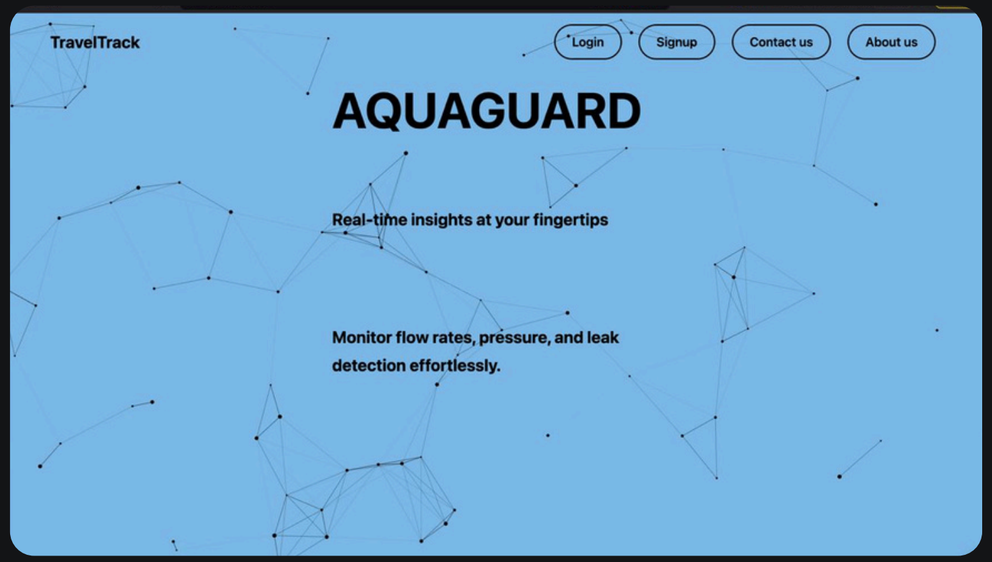
Problem Statement

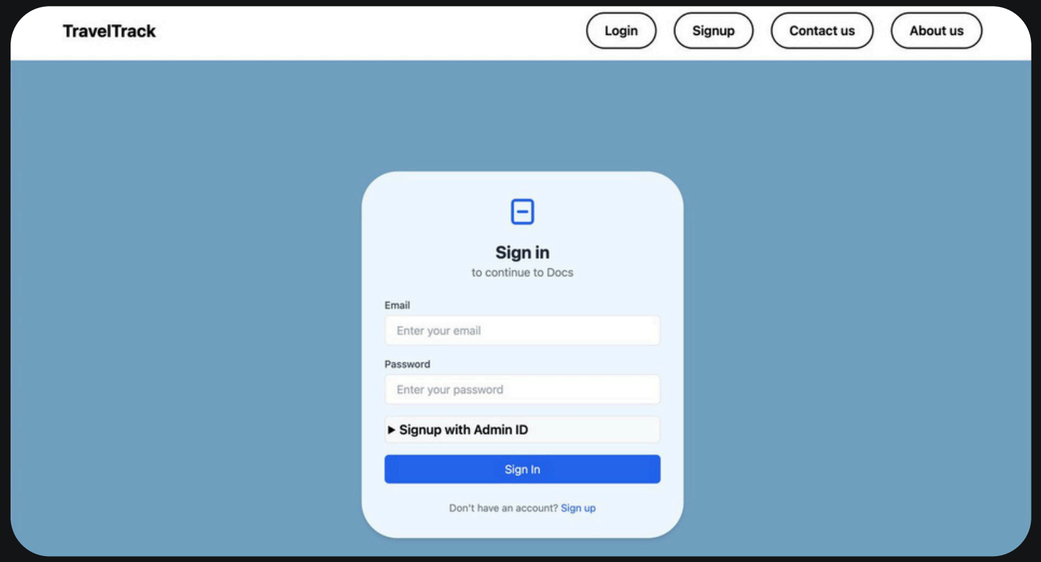
Create a software application that simulates an IoT-based water management system, which collects data from virtual sensors, analyzes trends, and provides recommendations to improve system efficiency and reduce water loss.

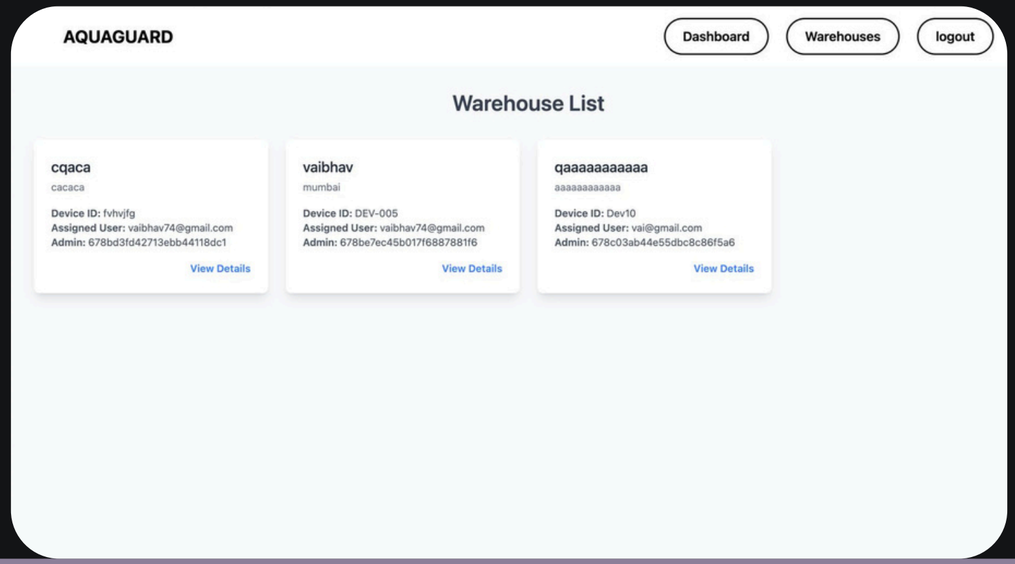
Sensors in the System

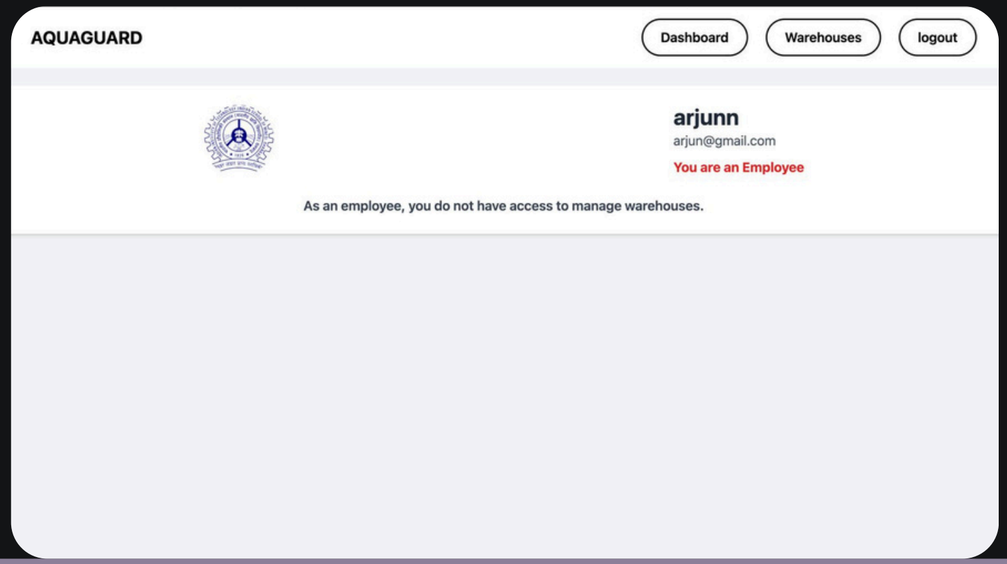
- *Water Flow: Monitors the amount of water passing through pipes.*
- *Pressure: Tracks water pressure at key system points.*
- *Temperature: Detects anomalies like overheating or freezing.*
- *Leak Detection: Identifies possible leaks via pressure or flow drops.*

01



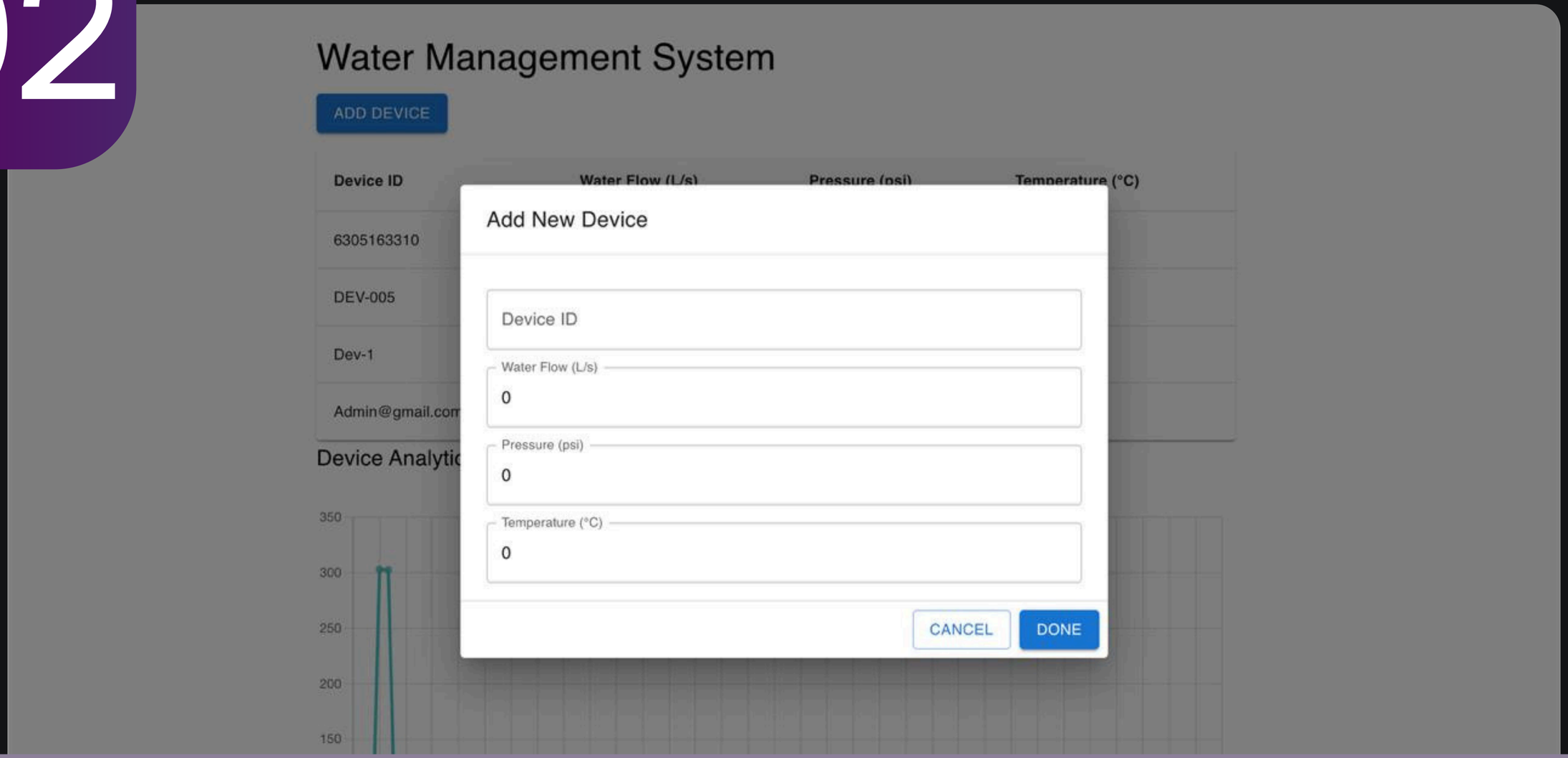






"Simple and interactive user interface for better decision-making."

02



Add new devices to initialize our system

03

Water Management System

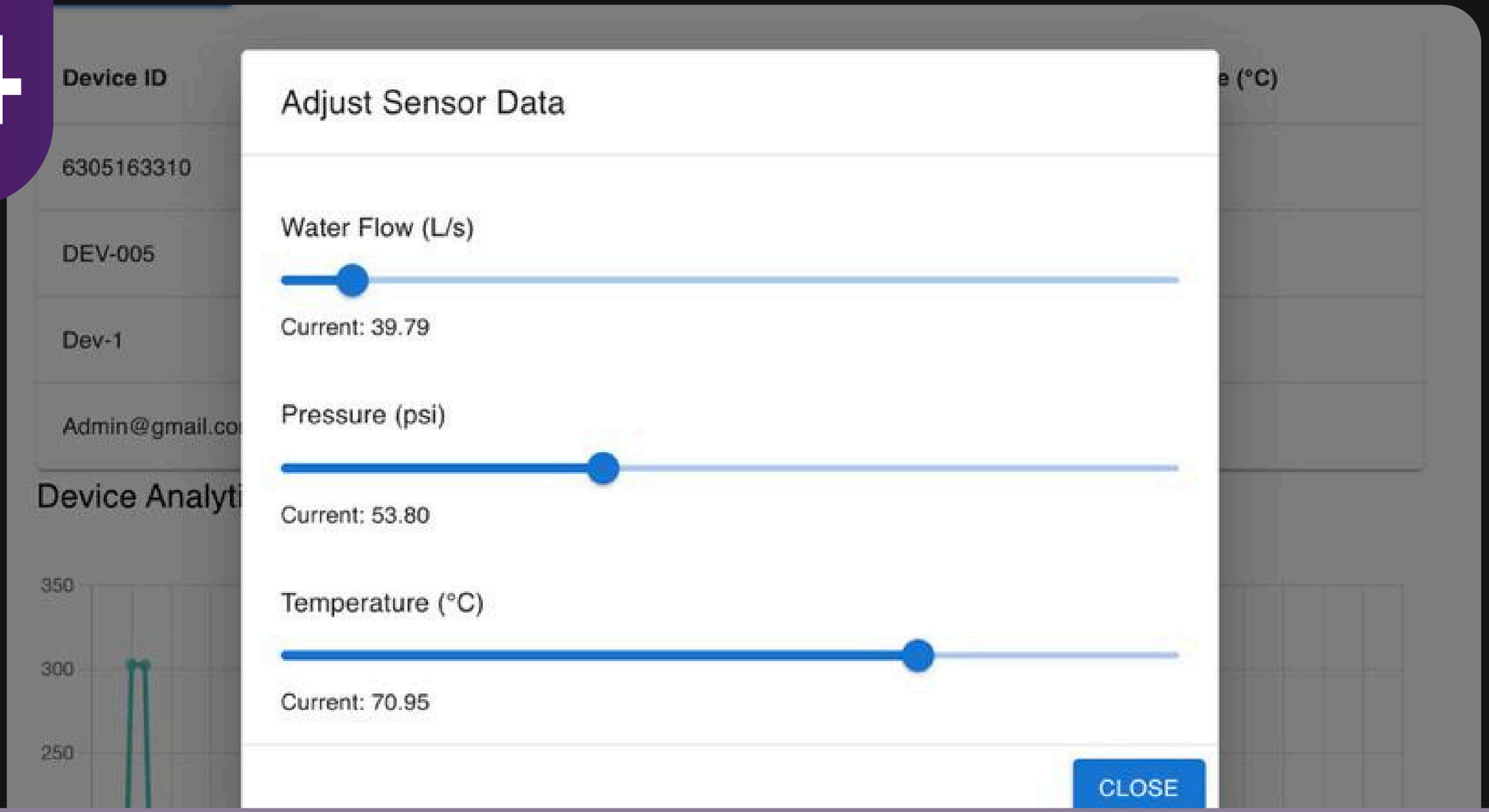
ADD DEVICE

Device ID	Water Flow (L/s)	Pressure (psi)	Temperature (°C)
6305163310	38.23	54.49	70.93
DEV-005	264.48	152.82	7.2
Dev-1	449.11	106.66	65.04
Admin@gmail.com	408.57	94.89	73.14

Device Analytics: Admin@gmail.com

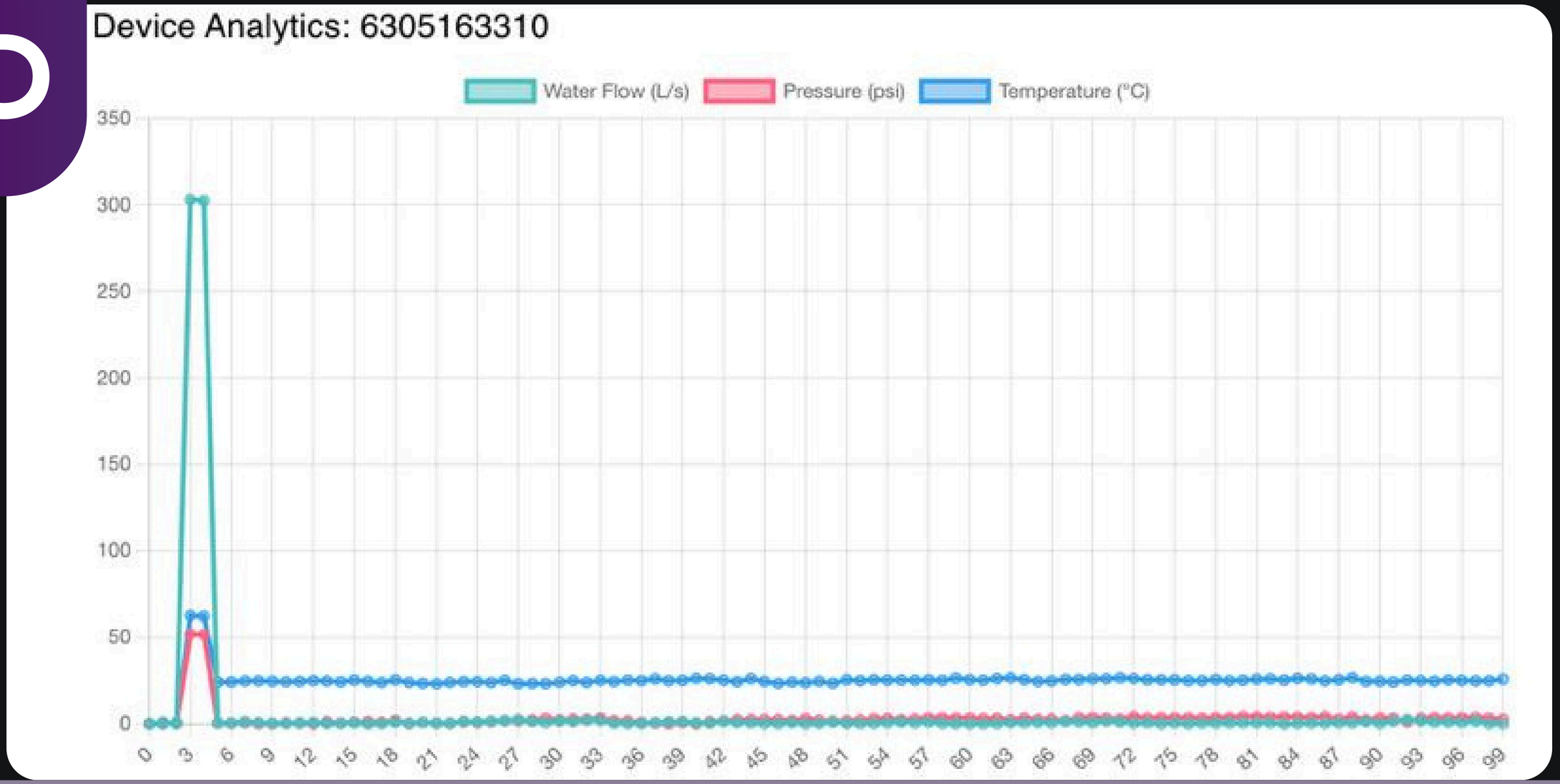
"Acquiring virtual data at regular interval of time."

04



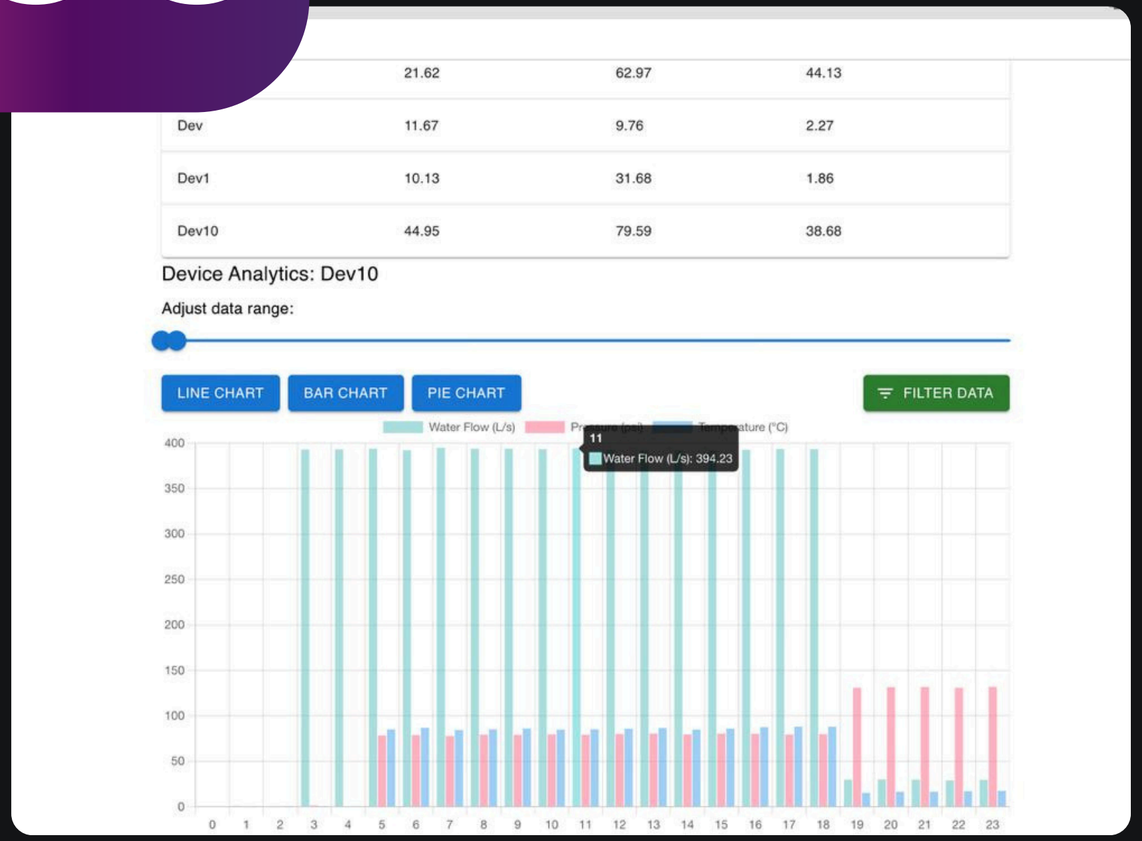
Admin can adjust the data manually in case of sensor failure

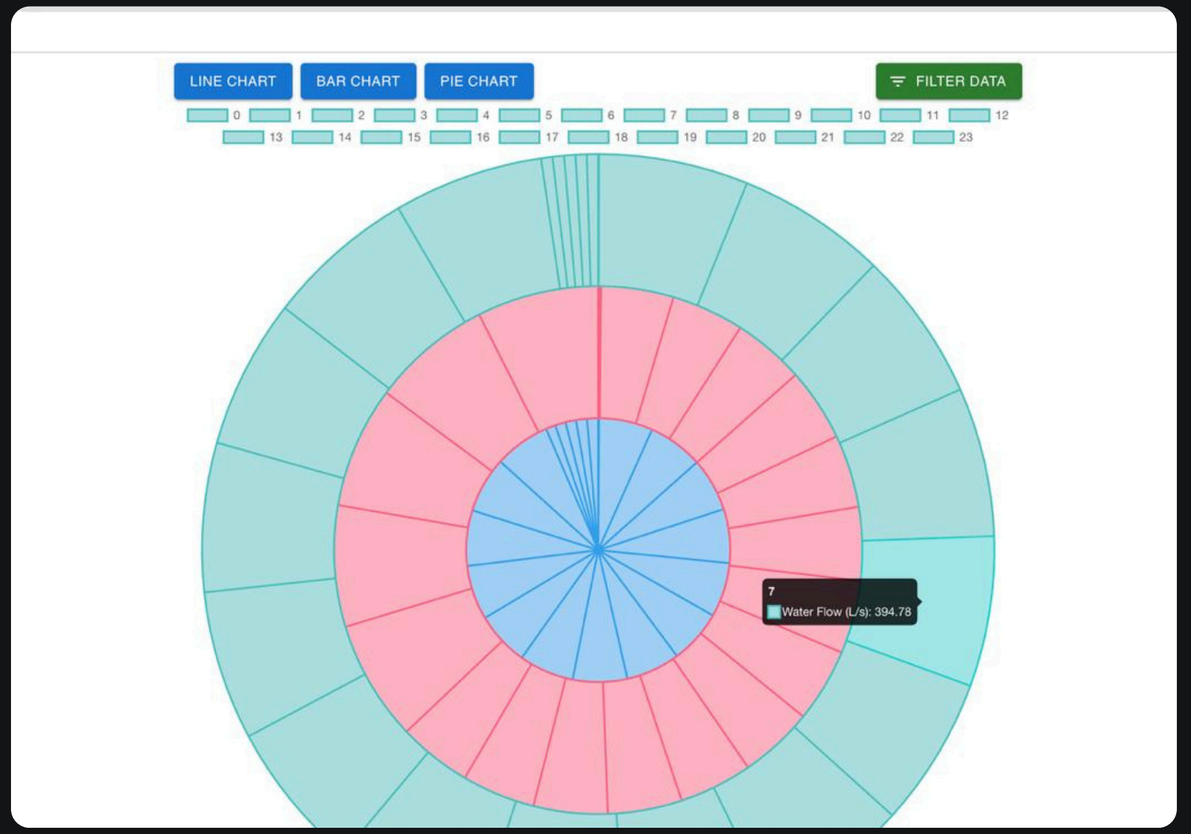
05



"Detecting leaks through pressure drops and flow anomalies."

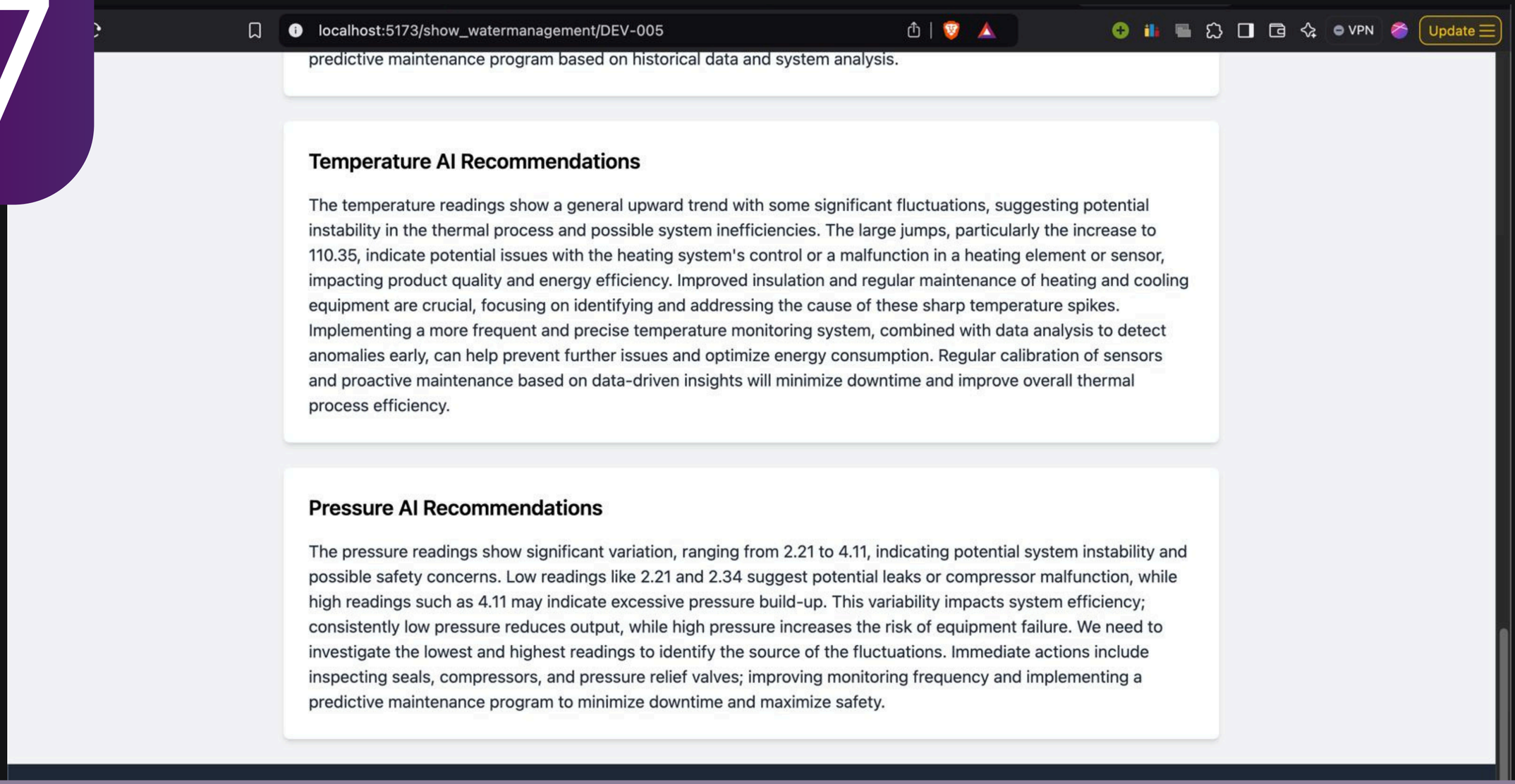
06





"Visualizing data for actionable insights and intuitive understanding."

07



"Dynamic recommendations to optimize water usage and prevent loss."

"Together, let's ensure efficient water management for all!"

Thank You :)