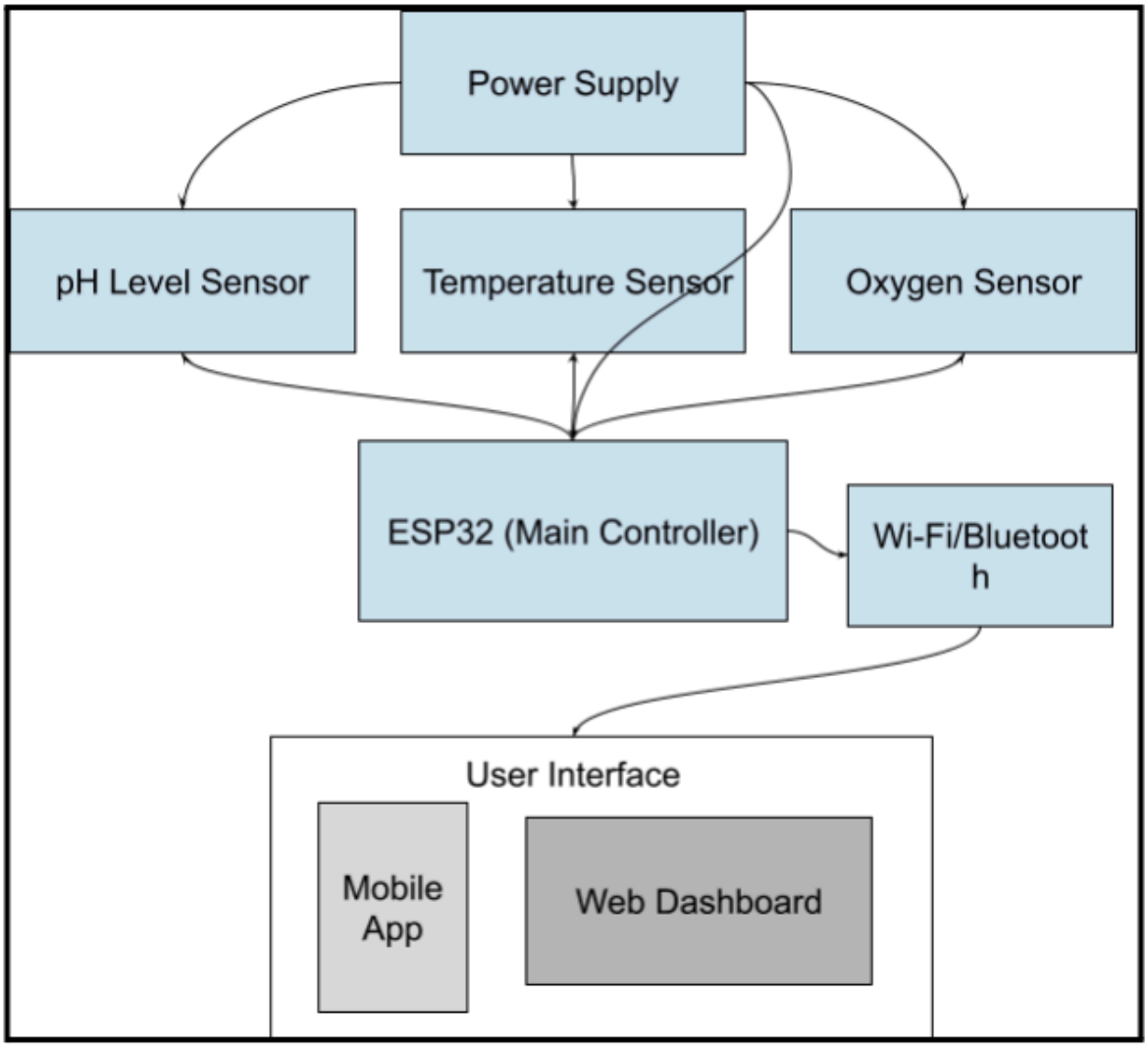
Week 2

Team Meeting #1.



HLR-1: Continuous Monitoring

- The system will track pH, temperature, and oxygen levels in real-time. It will take readings every 15 seconds and store them in a web dashboard for the user

HLR-2: Wireless Data & Alerts

- The system will use Wi-Fi or Bluetooth to send all sensor data to a web interface. If pH/oxygen/temperatures levels become too low or too high, users will receive a push notification

HLR-3: Affordable & Simple to Set Up

- The system will be low cost (target price under $80) and easy to install. It is designed for recreational (lower-grade) and professional fish owners without any technical expertise

1. One subsystem requirement

First Subsystem: pH Sensing and Appropriate Calibration

- The pH sensor will measure acidity levels in the water. The system will automatically adjust moisture thresholds based on temperature and humidity (separate subsystems) which will address false alerts. If the soil is too dry or too wet, the ESP32 will trigger an alert (HLR-2 above).