## **Smart Water Bottle**

DEVAM PATEL
CS 427 FINAL PROJECT

# PROBLEM REVIEW



A lot of people don't drink enough water throughout the day.



If they do drink water, they are unsure how much they have drank.



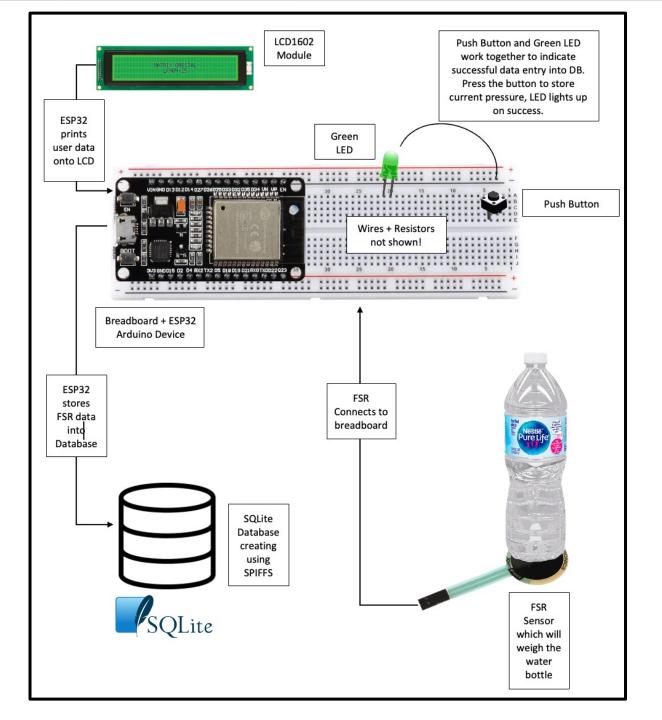
Not drinking enough water can lead to dehydration, especially during the summertime.

## PROPOSED SOLUTIONS









# System Diagram



## Demo

### Challenges

01

Building the backend with SPIFFS and SQLite.

- Found a SQLite3 for Arduino Git Repo
- Poor Documentation

02

Combining different components (LCD, Button, FSR, LED) and proper wiring.

#### Reflection

#### What got done:

- User can track the amount of water in the water bottle at a given time
- Users can track their total daily intake (by doing some sql queries)
- User can store the current water weight into an SQLite Database

#### What did not:

- Database does not track 'datetime' in the log.
- Reminders for users to drink water
- Ability to see last water intake time
- Ability for users to set custom goals