# Sleep Enhancing System

Team 1 - IoT Project

## INTRODUCTION

The objective of this project is to leverage room environmental variables, including temperature, humidity, and ambient noise levels to enhance sleep quality.



# **APPLICATIONS**



Food processing



Pharmaceutical & chemical industry



Seeds storage and preservation



Moisture removal

# **HARDWARE**





**DHT11** LM393 Temperature and Sound detection sensor humidity sensor

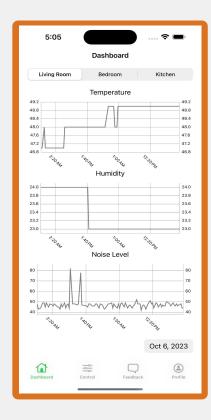
**Arduino board** 

# FRONTEND MOBILE APP

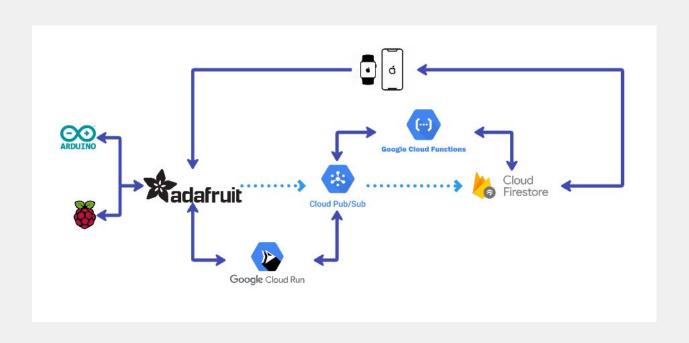
The mobile app is developed in Swift.

#### The basic function includes:

- User Authentication
- Personal Data Management
- Dashboard of Collected Data
- Remote Control of Smart Plug
- Sleep Quality Feedback
- iOS HealthKit Integration



# BACKEND DATA PIPELINE





# Thank You

## References

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Amazon.ca: Home. (n.d.). https://www.amazon.ca/Tosot-Dehumidifier-Certified-Basements-Portable/dp/B07B4WHPMF?th=1

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