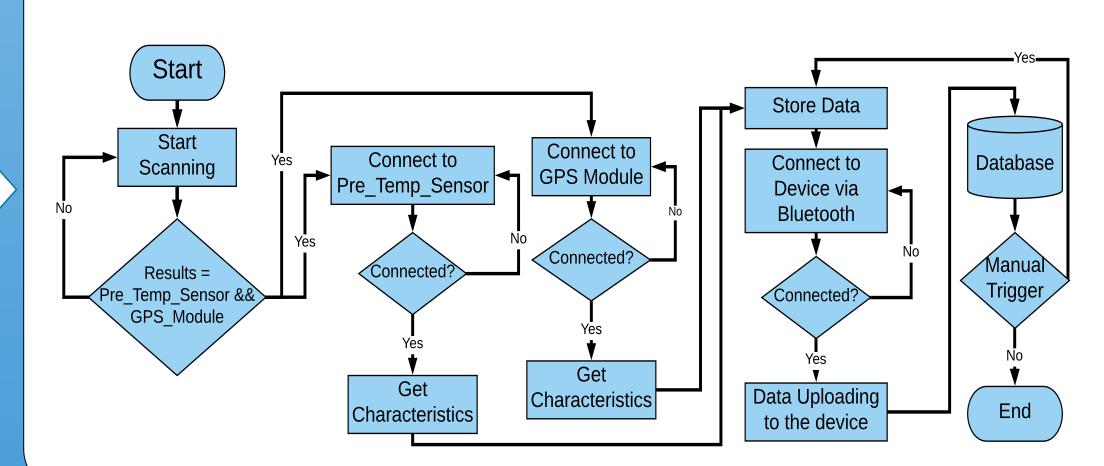
INTRODUCTION

- Sometimes it is necessary to monitor environmental conditions in closed systems.
- The project constructs a system which will help to monitor the closed system and the hardware device can be controlled via a mobile application.
- Through the use of an ESP32, it is possible to use Bluetooth to connect to the mobile application.

PROBLEM STATEMENT

- ESP 32 is connected with pressure and temperature sensor
- BME 280 and Ublox Module
- Application of the System:
- Monitoring weather at places like volcano, rain forests and etc.
- To monitor the baby's movement.

FLOWCHART





Offline Monitoring System -An IoT Application

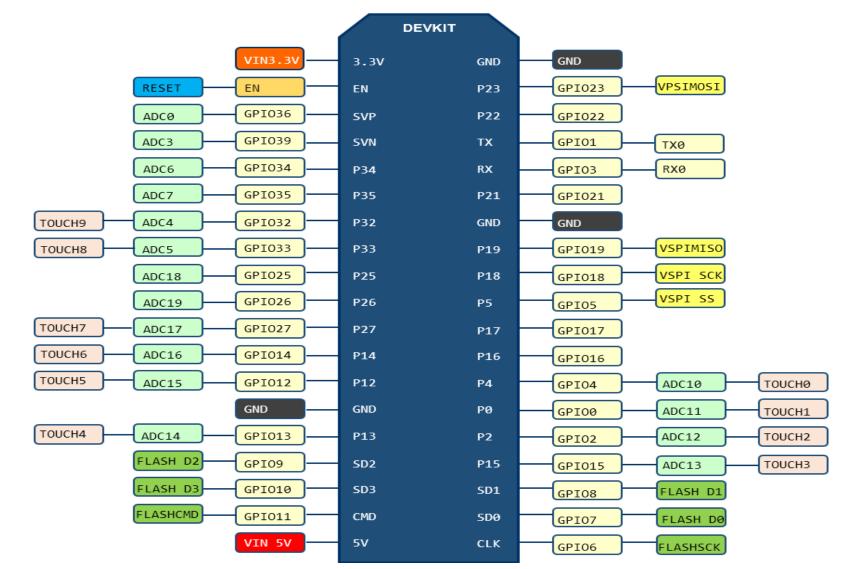


Team Mavericks
Hajera Nasreen Vidhi Sharma
Divya Kamboj Priyankaa Rajendran

Instructor: Dr. Pradeep Buddharaju Mentors: Thor Arne Lovland, COO

Channa Weeratunge, Senior Software Engineer

ESP 32 CONNECTIONS



| BME 280 | ESP 32 | Ublox | ESP 32 |
|---------|---------|-------|--------|
| VCC | 5 V | E | 5 V |
| GND | GND | V | 5 V |
| SCL | GPIO 22 | G | GND |
| SDA | GPIO 21 | Т | GPIO 3 |
| | | R | GPIO 1 |

REFERENCES

- 1. "ESP32 WeatherStation." educ8s.Tv Watch Learn Build, 4 Apr. 2018, educ8s.tv/esp32-weather-station.
- "Build Your First App," Android Developers, 22-Feb-2018. [Online].
 Available:
 https://developer.android.com/training/basics/firstapp/index.html.
- 3. "Thunkable.com: Drag and Drop Mobile App Builder for IOS and Android." Thunkable.com: Drag and Drop Mobile App Builder for IOS
- 4. Arduino Tutorials. Available: https://www.arduino.cc/en/Tutorial/HomePage.

and Android, thunkable.com

Instructables. "ESP32 WiFi Weather Station With a BME280 Sensor." Instructables.com, Instructables, 21 Nov. 2017, www.instructables.com/id/ESP32-WiFi-Weather-Station-With-a-BME280-Sensor/

CONCLUSIONS AND FUTURE WORK

- The project we created an IOT based system where an ESP32 chip is used along with BME280 Temperature and pressure sensors. The sensor that displays the temperature and pressure using the Arduino IDE programming environment.
- The GPS module was not able to give the required results due to some hardware issues, which will be resolved in the future modification in the project.

RESULTS

