



Course:	Internet of Things (Lab)

IoT Lab 1: Temperature & Humidity Sensors

Overview

Temperature & Humidity sensors solution suitable for multiple applications. In this lab, you are supposed to get an interactive dashboard with the ability to observe real-time data.

Requirements

Design and implement an IoT dashboard that displays temperature and humidity in real time.

Hardware:

- ESP32 or ESP32 S3 Development board.
- DHT20 or DHT11 temperature and humidity sensors.
- Connectors.

Technical Risks:

Test Plan

Test Cases:

- Connection test.

Approach

- Monitor the temperature value displayed on the dashboard. Then, attempt to change the temperature reading by using your breath or finger. Observe any changes in the displayed value.



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Questions

- List some technical specifications of your temperature and humidity monitoring IoT solution.
- Write instructions and notable points when deploying the solutions.

Instructions:

- Do a quick test of the development board and development environment by running “hello world” example.
- Run a DHT20 example to read sensor data and print out to the serial monitor to make sure your hardware is working as expected.

Resources