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Ministry of Higher Education
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University of Babylon
College of Information
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Department of Information
Networks



College Temperature and Humidity Monitoring System based on IoT

A Project

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Prepared by

Elaf Thamer Wahid

Supervised by

Assistant Leacture:Safa Ridha Albo Abdullah

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Abstract

The College Temperature and Humidity Monitoring System based on IoT (Internet of Things) is designed to provide real-time monitoring and management of environmental conditions within college campuses. With the increasing importance of maintaining optimal indoor environmental quality for student health, comfort, and productivity, this system offers a comprehensive solution for monitoring temperature and humidity levels in various indoor spaces such as classrooms, laboratories, libraries, and offices. This research aims to build a developed monitoring system for monitor temperature and humidity in College. The temperature and humidity monitoring system consists of IoT sensors strategically placed throughout the campus to continuously measure temperature and humidity levels. These sensors are connected to a central monitoring and control unit via a wireless network, enabling data collection and analysis in real time. The collected data is then processed and visualized through a user-friendly interface, accessible to college administrators, facility managers, and other stakeholders. Overall, the College Temperature and Humidity Monitoring System based on IoT provides an effective and efficient solution for ensuring optimal indoor environmental quality, enhancing student comfort, and promoting a conducive learning and working environment within the college campus. The purpose of the temperature and humidity monitoring system is to monitor temperature and humidity conditions that can be used to determine whether the room is in a comfortable condition or not. The proposed system was evaluated in IT Collage, and the highest temperature obtained was 30 °C in the morning and 28.5 °C in the afternoon. The highest humidity was 53 % in the morning and 58 % in the afternoon.