

# Automatic Control Incubator using a Sensor and Monitoring Software

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**Abstract:** *This Paper presents the design and implementation of a cost-effective incubator using an Arduino microcontroller, equipped with a DS18B20 temperature sensor and a DHT11 humidity sensor. The system aims to provide precise control of temperature and humidity, essential for applications such as egg incubation and medical uses. The integration of these sensors with Arduino allows for real-time monitoring and control, ensuring optimal environmental conditions. The thesis details the hardware and software components, system architecture, implementation, and testing results, demonstrating the effectiveness of the proposed incubator design.*

**Keywords:** Arduino, Temperature sensor, Humidity sensor, Monitoring