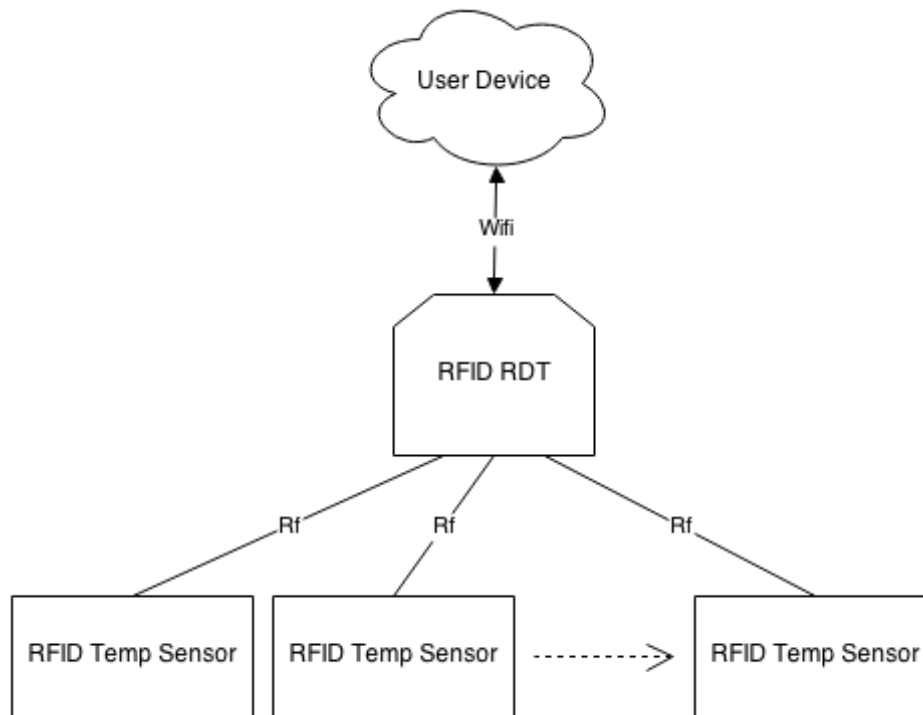# RFID RDT

Background:

Established in 1984, 4E is a full service engineering design, manufacturing and consulting firm specializing in the printing press, electrical and automation sectors. Every day, businesses around the globe rely on 4E's straightforward, profit-enhancing solutions and service; they know 4E puts their wellbeing foremost.

Project Details:

This Capstone project attempts to build a RFID RDT (Reader/Data Logger/ Transmitter). The system will read temperature data from passive RFID temperature sensors then collect the data and transmit it via Wi-Fi.

Requirements:

- Implementation of multiplatform user application
- Circuit design and schematic capture of the system via PCB design software.
- Working systems meeting specification

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- Wireless Wi-Fi communication

Skills Needed:

- PCB layout
- Circuit design and Schematic
- Microcontroller programming
- Strong knowledge in networking
- TCP/IP or HTTP programming knowledge is big plus
- Good communication skills

Team Descriptions:

The team will consist of three students; one computer engineer and two electrical engineers.

The computer engineer for this project will be creating a multiplatform user application that displays the data that is acquired from the RFID reader. The application will also need to create logs that record the data.

Electrical engineer #1 for this project will develop a board that interfaces with an RFID reader and microcontroller.

Electrical engineer #2 for this project will power circuitry that recharges a lithium ion battery and powers the board.

If you have any questions regarding this project, feel free to contact David Cipoletta: dcipoletta@eagleelectric.com