

A/C Troubleshooting Device - AirWise

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Purpose

- Create individualized control for personal spaces.
- Predict temperature for optimized comfort

Main Goals

- Temperature Change
- Temperature Maintained
- Time of temperature Change
- User Temperature Satisfied
- System Individualized and Personalized
- System Learns and Predicts Temperature
- Universal Fit

System Design

- The design uses RFID
- VAV with one heat exchanger
- A damper with an actuator will control air volume
- User will enter in preference through hot/cold button
- SQL database will control data storage/manipulation

Challenges

- Predicting accurate data for comfort
- Integrating electrical and mechanical components
- Implement design based on current A/C system

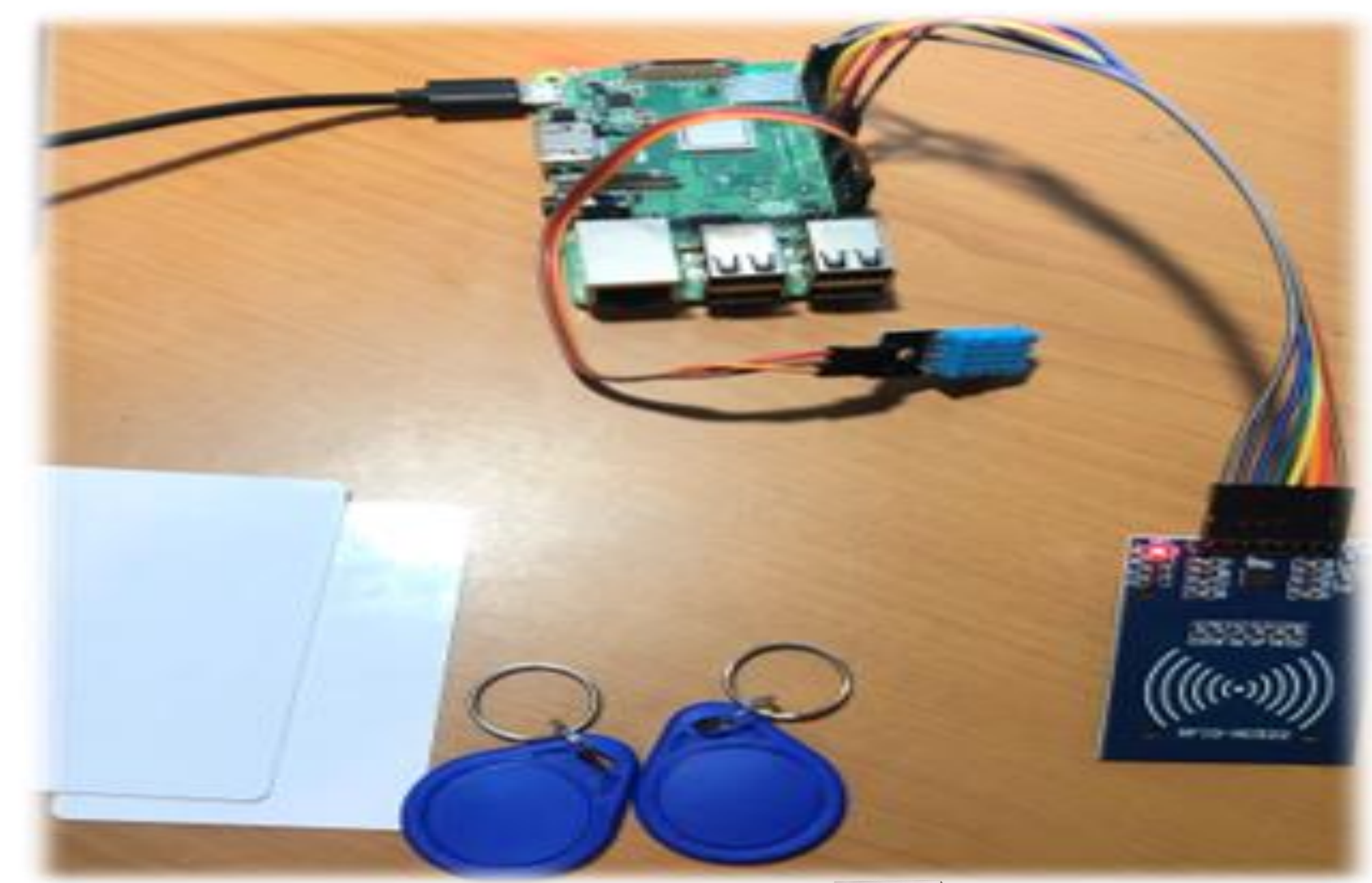
Future Work

- Finalize design
- Test Prototype
- Validate Design
- Graduate

Acknowledgments

A special thanks to Dr Yaghoobian for her technical advising on the project. We would also like to thank Dr McConomy and Dr Hooker for their guidance through the project. Last, but not least, we also want to thank Dr Devine for giving us the entrepreneur sight of the project

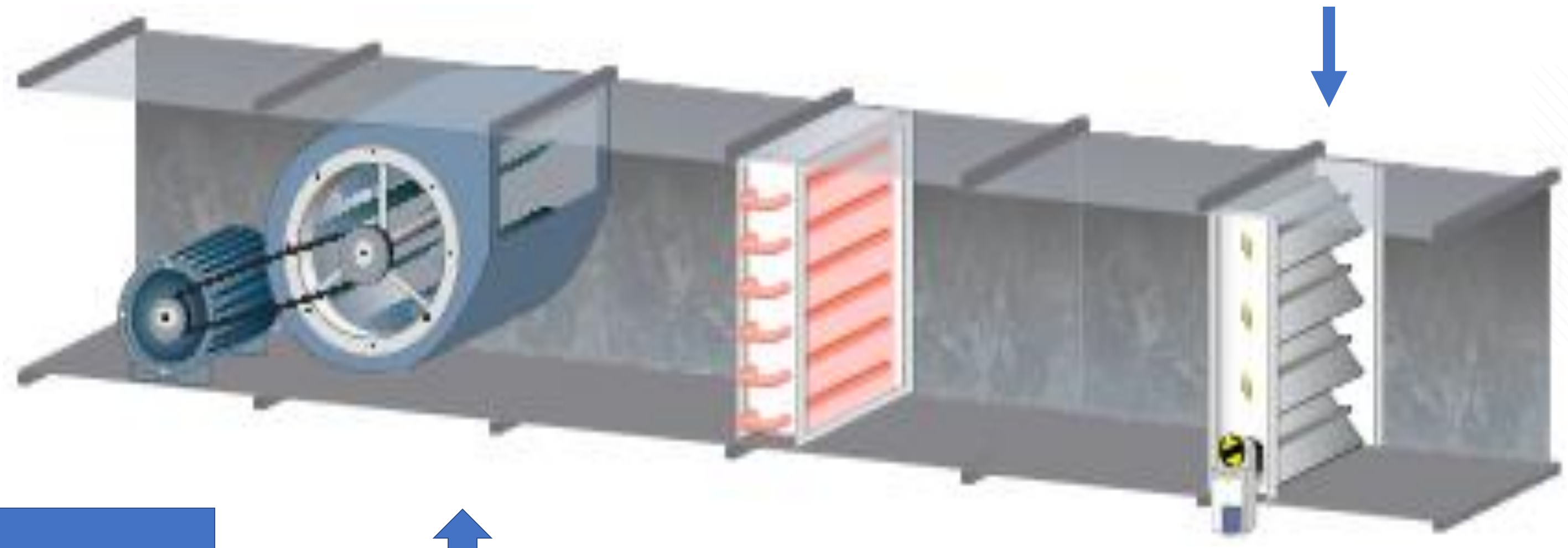
It's time HVAC is individualized.



Raspberry Pi Hardware

Testing Prototype

Prototype



RFID