**Report of Project Report**

**Team Member:** Sifan Yuan, Xinyi Yang, Haocong Wang, Yuxiang Song

**Description of Our Project**

Our project is to take advantage of PIP tag and design a system for smart home, which can sense the real-time data for light, temperature and humidity in a room. Using the system clock, we set threshold for each variable according to the time period of one day, which is used as a reference for the real-time data.

We translate the real-time data into certain ranks and display it on the screen in order to remind users. When the variables breach the threshold, the system will put warning information on the screen and send an email to the email address that is set before.

We program with Python.

This project has potential to be discovered in the future. For example, it could be connected to furniture such as air conditioner or lighting equipment. When the variable breaches the threshold, it will automatically activate the furniture to make adjustment.

**Division of the Work**

Haocong Wang is responsible for the reading and extracting data from the PIP tag. Yuxiang Song is in charge of the displaying and judging part. Xinyi Yang will do the email sending. Sifan Yuan will package all three separate parts and make it into one Python file.

**Progress of the Project**

By now we have already finished the reading and extracting data. We read the data from the PIP tag and store the results in a text file, which will record all the data after the program starts. Then we use Python to read the last two lines, the latest date, from the text file and store them into another text file.

**Future Work:**

We will connect the sensor with software, when the air condition higher or lower than the schedule data, sensor will send a e-mail to master for telling them the situation is out of anticipation.

For better user experience, we want to design an UI interface. User can read data easily and intuitively from the window.