

# Project: Temperature Monitoring System

I am doing an individual project and having the weekly meeting with Professor Coker, Brandilyn N. The project will be to design, build, test an temperature monitoring system, a system that records the temperature from at least two positions and tracks/stores/and displays the temperature information. There are three parts to my project. First, making the temperature sensor to test the temperature. Second, programming the code makes the temperature data out in Arduino. Third, transfer the data from Aruino to Matlab and display the data in Figures on PC.

In the beginning, I spent two weeks doing the research. My first design problem is choosing the temperature sensor. I chose to use the temperature chip for the first time. I thought it would be easy to connect with Arduino and matlab. However, after I did the research, I found that I would have some programming problems. Because I need to think about I am doing an individual project, time management is important. Thus, I do the quick research for the thermistor. I found that the thermistor is also easy to test the temperature, and when I do the research, I already know how to do the programming. Overall, I decided to use the Thermistor for the temperature sensor in my project. When I am doing the project, I still get a little problem that I cannot transfer the data from Arduino to Matlab. However, after I do the research and have the weekly meeting with Professor Coker, Brandilyn N, I just change to read the whole data, but read the first letter of the data and make the letter bring the data out. Finally, I got the data and drew the figures in Matlab. For the improvement of this project, the project right now can only show the temperature by sample time, so if I improve the project, I would like to improve the time. It may test the temperature by a second or test the temperature when I push some button. I also got lots of delivery problems, however the reason is the COVID19 which is the special situation. Thus, except the delivery problem, every part of this project is finished on time. There is the graph of the timeline at the end of the page. (If you cannot see it clear, I also put the document in the project detail link).

I think it's a pity that I didn't experience the cooperation of the team in this project, but I also learned a lot when I was doing an individual project, such as the allocation of time. And,because I completed all the processes individually this time, I also learned more project management skills than others. This project is a great opportunity for me. If I participate in a group project next time, I will know how to separate each part of the project to everyone, and how to manage the vacant time during the project. I think I will become a good team captain. This is a great harvest for me or my future team members.

