# Diary

## Student Details

Name: Amartya Pandey

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PS Instructor: Prof. P. Srinivasan, Prof. Arun Kumar Jalan

Week: 2nd (24th May-31st May,2020)

Plan for the Week: (what was your plan for this week in terms of learning and project objectives)

1. Meeting with Industry mentors Mr. Aravind and Pradeep and getting to know them.
2. Lecture on Environmental effects of Powerplants by Prof. P. Srinivasan.
3. Discussion on the project.
4. Readings and Tutorials regarding project.

## Learning Outcomes of the Week

### About the PS 1 Station

1. Adani Power Udupi has installed capacity of 1200 MW (2x600) The plant became fully operational in September 2012.
2. The plant is operated by Udupi Power Corporation Limited which is a subsidiary of Lanco Infratech.
3. It is the first independent power project which uses 100% of imported coal as fuel in the country.

### About the Project Domain

1. In the project, we have to make device which captures attendance and Body temperature of every individual before he/she enters the powerplant and sends the data to cloud for storage. It also sends a notification to Chief Security Officer if the person has a body temp. more than 100F.
2. Project seeks to aid in the smooth running and management of powerplant and tries to make a safer working conditions during pandemic such as COVID-19.
3. Project is the “Electronics” domain which makes use of Arduinos, sensors, actuators and Cloud service.

## Skills Gained (Technical as well as soft skills)

1. Arduino and its functionality, its uses and use cases.
2. To write a sketch to operate Arduino based device.
3. Functions and uses of Raspberry Pi, Dragonboard and Samsung ARTIK.
4. Operating Cloud based IoT services like AWS, GCP and IBM Bluemix.

## Major Learning & Project Milestones

1. I came to know about the uses of IoT services and its impacts and integration in daily life.
2. I came to know about the history, current scenario and future prospects of IoT based devices.
3. I came to know about the working principles of various devices and sensors which Arduino makes use of.

## Major Challenges

1. Since I had no prior experience with Arduino and things in this domain, I faced difficulty without any proper guidance.
2. I had to searching everything and I was not able to access many things.
3. Since this project requires Arduino boards and many electronic components, it is very hard to get these days.

## Work Plan for Next Week

Next week starting 1st June, there will be a meeting with our industry mentor about progress on project. I must seek guidance from him regarding the topics to study. We will also have to see that how we could get the electronic components for the project. So, the next week is basically about starting to build the project and arranging the things required in the project.