

Weekly Progress Report

INDUSTRIAL INTERNSHIP REPORT ON

EMBEDDED AND IOT

PREPARED BY

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FINAL REPORT

I. Overview:

In four weeks, the primary focus was on understanding. What is IOT Deployment and what are there challenges and getting training about embedded systems basic electronics and knowing about the embedded systems circuit design and learning from the video lectures and gaining more about the knowledge of IOTS in our day to day life and there applications .

II. Achievements:

1. Learned about IOT Layered Architecture.
2. Learned about what are the functional requirements of IOT platform.
3. Learned about various cloud platforms like IOT cloud, AWS cloud & GE Predix cloud.
4. Learned about how database management evolution system is taken place from 90's to today.

TRAINING PART 1

1. Learned about basic electronics ,the components of electricity and knowing about the currents.
2. Learned about basic circuits, knowing about the multi meter how to measure the 'V','I'&'R'.
3. Learned about the safeties should take while measuring 'V','I'&'R'.
4. Learned about all basics about electronics which should be used in embedded systems.

TRAINING PART 2

1. Learned and gain basic electrical knowledge.

2. Learned about sensors and actuators and process control system.
3. Learned more deeply about sensors like commonly used sensors with examples and their characteristics.
4. Learned about actuators (a controller command signal into a change in a physical parameter) and various types of motors and how we would be programmed for that.

By this training we can able to design an embedded system using sensors and actuators. And gain the knowledge about how to design a circuit of embedded systems.

III. Challenges:

1. Design challenges.
2. Deployment challenges.
3. Security.
4. Scalability.
5. Programming challenges.
6. Taking input challenges.
7. Study of the components which we required.

IV. Learning Resources:

1. Referred form the PPT given by upskill, UCT IOT Deployment and Challenges.
2. Referred form the PPTs given by upskill, The IOT academy_training_basicelectronics part1&2and IOT academy embedded systems circuit design guide.