To,
IITD-AIA Foundation of Smart Manufacturing

Subject: **Weekly Progress Report for Week 5**

Dear sir,

Following is the required progress report to the best of my knowledge considering relevant topics and project objectives covered.

What happened last week - W4:

- Deployment of the built application
- Using various deployment platforms and services
- Heroku, Netlify, Google Cloud Platform (GCP), Vercel
- Finally finishing the project

What's happening this week - W5:

- Working on the documentation end of the project.
- Phase reports

PCB Fault Detection - INTP2022-ML-3 (PCB-fault-detection.herokuapp.com)
The deployed Web-Application for detecting PCB Defects, given any input image

PCB Fault Detection by Keivalya Pandya | INTP22-ML-3 IITD-AIA-FSM 2022 - YouTube
The demonstration/tutorial of the working of the application

Weekly Progress:

June 27:
(Monday) Documentation is being carried out in the README.md file of the initial GitHub Repository for the reference of FSM.

June 28:
(Tuesday) Parting documentation into different aspects and that is how the project has been divided and can be followed conveniently.

June 29:
(Wednesday) Exploratory data analysis was carried out, and currently working on how efficiently the data can be taught to someone who is looking at it for the first time.

June 30:

(Thursday) Starting out with the report of first phase, that is Exploratory Data Analysis. This consists of using the pre-integrated tools such as Weights and Biases in order to generate the gradient descent graphs while training the data through 500 epochs.

July 1:
(Friday) Working on the documentation of the project that is describing the data in a well understandable format.

July 2:
(Saturday) Struggling with the documentation and how some things need to be shown to the reader. Visualization is the key hence working on how that can be improved in order to make a more reliable documentation.

July 3:
(Sunday) Finally finished with the Exploratory Data Analysis part of the documentation. Yet to write the report of the same.

PCB Fault Detection - INTP2022-ML-3 - Swagger UI (pcb-fault-detection.herokuapp.com)
This is the deployed application.

(1766) PCB Fault Detection by Keivalya Pandya | INTP22-ML-3 IITD-AIA-FSM 2022 - YouTube
The demonstration/Tutorial to use the app can be found here.