

# Problem statement

Power manager telemetry for sustainable 5G & Edge computing environments

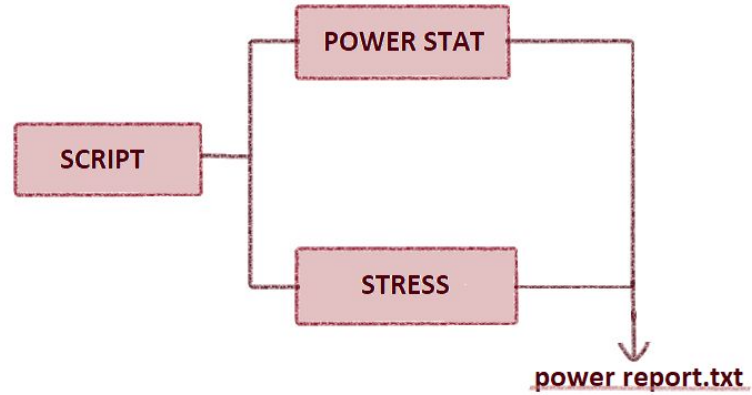
## Unique Idea Brief (Solution)

- Proposed to use pre-existing softwares for extracting power telemetry data of the system and perform stress tests on it. Then we put the shell script into a docker image so that it can be used easily.
- We used powerstat for getting power usage data and stress to stress the cpu and memory of the PC. the output file of this is then analysed by python and shows us graphs for our usage.

# Features Offered

- Simulate and stress test the CPU and memory as per requirements of the user.
- Detailed log file showing the results of the stress test and the power usage during the test.
- All documents and requirements in a docker file for ease of use and implementation without installing dependencies everytime

# Architecture Diagram



# Technologies used

- Powerstat: to record the power telemetry data
- Stress: to stress test the cpu & memory
- Docker: to containerise the application

# Team members and contribution:

Team member: Aditya Kumar Sharma

Contribution: shell scripting, containerisation of the application

# Conclusion

- Created shell script to generate power usage of the cpu and memory of the device by using powerstat and stress by simulating the necessary conditions set by the user
- Shipped the app in a container to make it easy for user to access and perform power telemetry of the system when required.