

Task:

The competition requires the participants to come up with a system to automatically sends alert on a mobile application if a bottleneck machine is broken down and have an algorithm to calculate the potential loss for the business.

Features of the system and mobile application:**PRIME**

- **Alert on breaking down of bottleneck machine**

A particular production has multiple machines but the bottleneck machine determines the rate of production, once it is down the whole production will stop.

The current drawn by the machine determines whether the machine is down or not, once the current drawn by the machine stops the system should send the alert on the mobile. So you have to make an system which will track the breakdown of the machine and an application on which the alerts would be received.

- **Alert on Preventive maintenance of machine**

Its well said that prevention is better than cure, so if we could make a system to give an alert when the machine needs maintenance, lots of money can be saved. The system should track the current drawn by the machine, if it is going through fluctuations for a particular period, there is a need for maintenance, so the alert must be sent to a concerned person.

- **Algorithm to calculate potential loss of the business due to delay in production or no sale**

The application should comprise of the feature which shows the loss the company would face in case of stopping the machine for maintenance and when it is broken down.

ADDITIONAL

- **Keep a track of health of the machine**

the system to be attached with the machine gives us the track of the health of the machine and update on the mobile application to be made

- **Tells the part of the machine which is broken down**

The system tells us exactly which part of the system is broken down, this would decrease the time to repair and hence decrease loss

Rules:

1. The models should be built from scratch and not purchased models.
2. A team member can't be a part of more than one team.
3. Bring your college/student I-Card at the time of competition.
4. Any of the above mentioned rules, if found violated, teams would not be allowed to participate in the competition.

Format of the Competition

The competition will only be in one round where all the participants will submit their proposals (models) and will be evaluated on the same

The evaluator will judge the participants on the basis of the accuracy and efficiency of the model

Note that at any time, the latest information will be that which is available on the website. The information in the pdf downloaded earlier may not be the latest. However, registered participants will be informed through mail about any such changes.

Judging Criteria :

Participants will be judged on the principle of Quality, Cost and delivery (QCD) and below points:

User interface
Size of the app
Accuracy on the data and alerts
Efficiency of the whole system

Team Structure :

Maximum of 4 members in a team.

Individual participation is allowed.

Professionals apart from students are allowed too.

No restriction on the number of participations from one college and in total.

Eligibility :

All students with a valid identity card of their respective educational institutes are eligible to participate in the event.

Certificate Policy :

1. Top 3 teams will be awarded certificate of excellence. This will be judged combinedly on basis of ideation and making the app.
2. Top 2 teams will be awarded certificate of excellence solely on the basis for presenting the best idea.
3. Top 2 teams will be awarded certificate of excellence solely on the basis for making the best application.
4. Teams who disqualify the above criteria are not eligible for any certificate.