

# ASJ

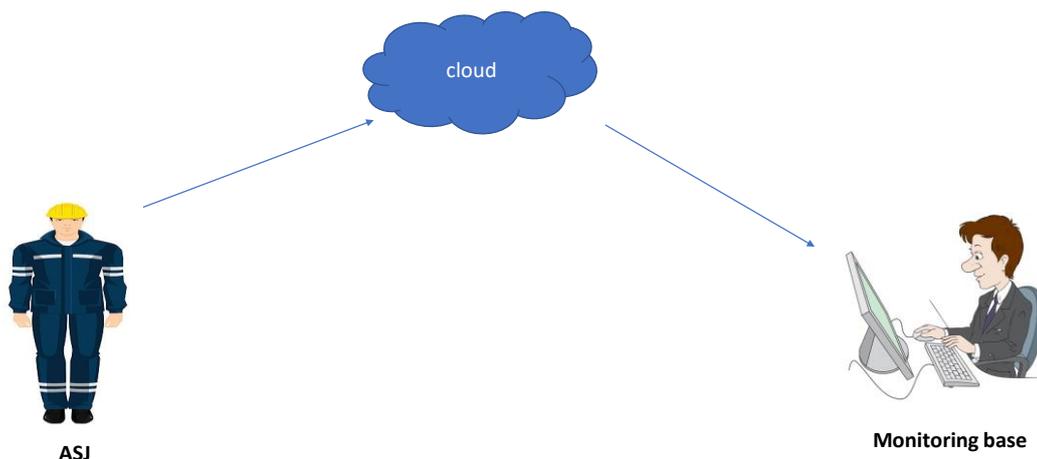
ASJ stands for advance safety jacket it has various health detection sensors which can detect heart rate, blood pressure sensor, Oximeter , temperature/ humidity sensor, body temperature sensor, air quality index sensor.

- Jacket will be embedded with anti-infrared feature .
- Jacket have smart safety shoes which can charge the battery of jacket (defense variant).
- Jacket have cooling system help to cooling body in side of jacket.

**Concept:-** We are using iot technology Jacket have emergency button which workers can press during emergency to call help , if workers pressing the button then sensor data will automatically send to monitoring base. Where observers can see the health of that worker.

Jacket have led indication which will show the health and area weather workers are working in safe place or there health are good or not.

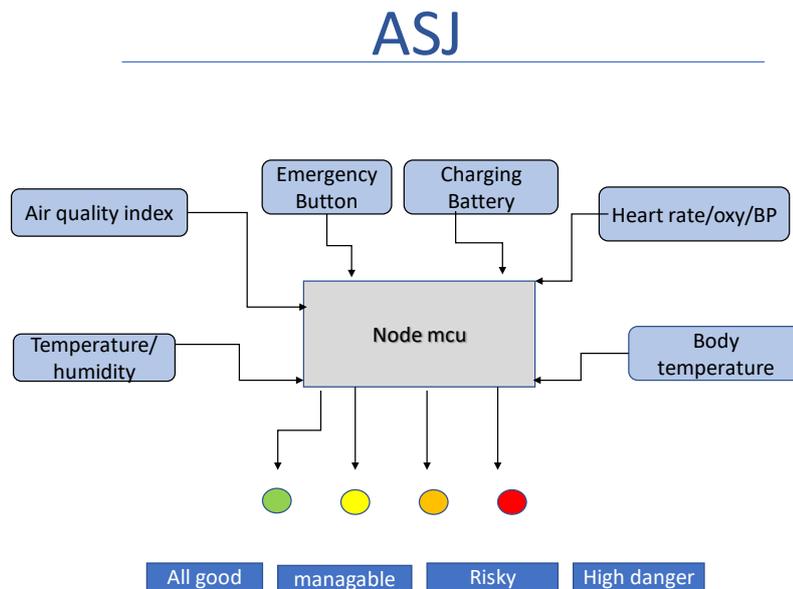
**Block diagram:-** ASJ working block diagram is divided into two parts jacket and monitoring base.



ASJ indicate data to monitoring base when worker press the emergency button, and ASJ also indicate the type of zone where worker are working .

## Uniqueness

In Our Innovation We found to develop a Advance Safety Jacket with advanced features these features and uniqueness of our project is.



This Jacket give indication to worker they are working in good safe environment or not. Jacket also sense health data and send to monitoring base if worker press the Emergency Button.

1. This Advance Safety Jacket have features to detects various health data.
  - a. It have temperature/humidity sensor which help to measure, the temperature and humidity of surrounding where workers are working.
  - b. This Advance Jacket have features to indicate the Air Quality index of surrounding where workers are working.
  - c. This Advance Jacket have features to detect heart rate, body temperature, Oximeter etc. of workers.

Above Given Features get data and give the indication to worker whether they are working in safe zone or not, whether they are in healthy zone or not.

2. If any emergency condition occurs during the work there is also a emergency button in, which worker can presses during the emergency to call help.
  - a. The important feature that worker we are providing is anti-infrared feature that defense personal can use during night to escape from night vision (thermal sensing cameras).

- b. Also there is exhaust feature which will maintain air temperature in side of jacket. Below image

### **Market Potential**

1. Every Sector even product base company.
2. Manufacturing plants and industries must need to use this kind of innovation ASJ.
3. If we bring ASJ in Market it can grow the market as well as society standard.

This Product should be show potential because we developed on the demand of (Smart India hackathon), there are mining industries demanding this kind of Jacket.

### **Application in industry**

In our growing developing generation we are focused to enhanced the standard of worker also with health issue because that is the most important factor. ASJ (Advance safety jacket) can be used in any industries.

1. Mining sector it can be used because of health feature embedded in ASJ.
2. For and local industries it can be used health feature embedded in jacket.
3. Every traffic police can wear it.
4. Defense sector that can use it because of anti infrared features that can hide troops from night vision.
5. Cement plants, security guards, construction sits, traffic police every sector can use it.

**Application:-** Major application area of ASJ

- It can be use in Defense sector.
- It can be use in mining.
- It can be use in industrial sector.
- Can be use for any kind of field work.