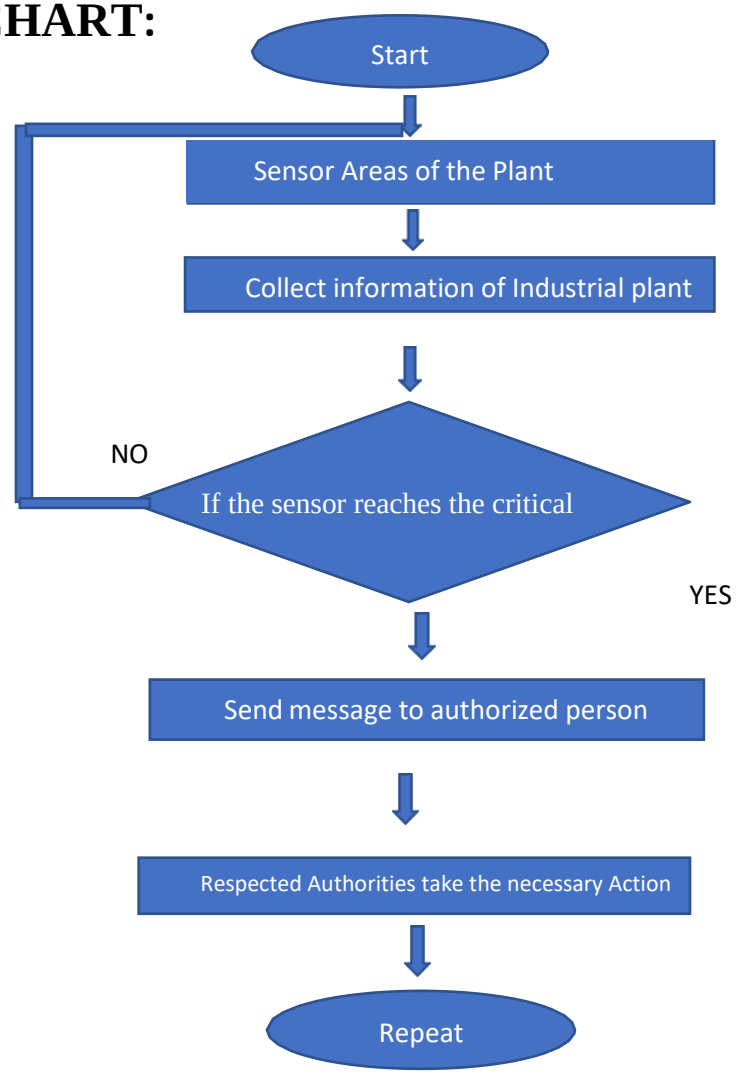
UTILIZATION OF ALGORITHMS, DYNAMIC PROGRAMMING, OPTIMIZATION

Date	November 18, 2022
Team ID	PNT2022TMID28572
Project Name	Hazardous Area Monitoring for Industrial Plant powered by IoT

ALGORITHM:

1. Start the program, sensors are used to measure and monitor the industry environment.
2. Collecting the information from the beacon devices installed in the industrial plant.
3. Continuously the plant is monitored.
4. If any of the sensor values are crossed the critical value then send a message.
5. The plant Supervisor, Engineer can take the necessary action to fix the issue.

FLOWCHART:


Start
Sensor Areas of the Plant
Collect information of Industrial plant
NO
If the sensor reaches the critical
YES
Send message to authorized person
Respected Authorities take the necessary Action
Repeat

DYNAMIC PROGRAMMING:

Dynamic programming is a method for solving a complex problem by breaking it down into a collection of simpler subproblems, solving each of those subproblems just once, and storing their solutions.

OPTIMIZATION:

1. To Avoid Fault Detection and transferring of the wrong message to the Plant Authorities the value of the sensor is stored continuously and verified.

2. Entire System is End to End Encrypted so the data security is enhanced with this product.

3. Engineer, Supervisor and Admin have their own login credentials to monitor the activity of the plant.