

## Brainstorm & Idea Prioritization

Here we use this template to represent our problem statement and give our ides to prevent that. It gives workers to be work in trustable field. It helps to save so many peoples, workers, students and others life from fire Accidents.



## **Problem Statement**

Without a Problem we can't get any inventions. Inventions are based on problems which we are faced in our daily life. Here we Take one problem in our day to day life and represent our ides.

Fire Detection Systems are now widely used in various safety and security applications. The major amount of fires tarts due to the electric short circuit. It leads to damage to property and also loss of life. To avoid that or to minimize the damage caused by fire outbreaks due to electric short circuits an IoTtechnology is used to control such a kind risk.

Traditional fire detection systems are not that effective and quick to alert the owner about fire, in case no one is present on the location. To overcome this problem in this paper we present the design and development of IoT based Fire Detection System. A system that combines qualities for fire, temperature and smoke detection, sendingalert Text Message about the fire to the user along with onsite alarm(buzzer), updating temperature, humidity and smoke on ThingSpeak cloud every 15 seconds, and it also moves manually with the help of Android Application. The Fire Detection System consists of four main parts: Multiple sensors, communication system (Bluetooth, GSM, NodeMCU), motion planning (Manual patrolling), and Android application for manual patrolling of the system. This Fire Detection system can be used in



## Brainstorm

By understanding our problem statement some Ideas that come to my mind that address our problem statement.

→ 10 minutes

# VIJAY ANAND G

#### Regular fire flammable materials in a evacuation drills safe area

**VENKATESH R** 

Systematic

approach for

monitoring

and control

To get real

life data

using IOT

technology

Detection

Fire alarms tested and maintained periodically

**Emergency** 

alerts are

notified to

fire station and

authorities

interior

design

of fire

extinguishers i

Storage area equipped with asmoke alarm Python code

Using Fire retardant materials for random sensor data

# MOHAMED USHMAN A

Installing

automated

chamber

nidity, and smoke

form at periodic

intervals

Maintenance

Water tank with

separate piping

with hose reel

analyze the data and

response extract conditionaly to launch water sprinklers

Early detection using smoke sensor

along with onsite

alarms

Provision of clear

signage indicating

exist routs and

location of fire

EVACUATION

PLAN

locking Sending alert text Electrical message about fittings must fire to the user

of the be properly emergency maintained lighting

Webapp to To provide a MAKE SPECIAL monitor the low cost fire ROOM FOR FIRE nperature, gas MANAGEMENMT alarm system and Flame

# STAINS BOVAS M

kistence of mergency opulation warning methods	transferring messages through wireless technologies	Put up signs and contact information for emergencies
eate node ed flow to t data from devices	Creating an Emergency fre exit	If flame is detected sprinklers will be switched on automatically
Usage of	Android application for	Implementing adequate

patrolling

of the system

safety equipments all the floors conditions If any gases are Multi sensors are USE SPECIAL present the exist used to detect BLANKET FOR fans are INSTANT FIRE any changes in powered Cloudant DB A web page created PERSONAL nodes to EMERGENCY

store

the recieved

sensor data

Software

deigned

to with stand

harsh industrial



## Brainstorm Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

⊕ 15 minutes

#### Preventive Measures





Storage of flammable fittings must materials in a be properly safe area with hose reel

all the floors

emergency lighting

Fire alarms tested and maintained

periodically

using IOT

patrolling

# Advantages



Workers to a trustable place



## Prioritize

Priorities given to our project by time.

→ 5 minutes

# co Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact



Regardless of their importance, which tasks are more feasible than others (Cost, time, effort, complexity,

