

HEALTH MONITORING DIGITALIZED MASK:

Adarsh Chinggaonkar(B.tech E&TC) , Sudhir Shinde(B.tech,E&TC),

Abhishek Nevase(B.tech,E&TC)

Under The Guidance of :Prof.M.M.Raste [M.Tech]

Abstract-In this paper the information about the Healthcare digitalized mask .its a new concept for precaution of health in extremely careful condition like pandemic like covid or any industrial accident.

INTRODUCTION

Personal Health and avoiding human to human and contact virus is became more important in pandemic . Air quality also dropped by pollution now a days. Hence we thought to advance our precaution equipment Mask as it contribute more in safety.

And hence we are introducing a smart mask with new features.

AIM & OBJECTIVE

To provide a Smart solution for accidents in Industry due to dropped air quality as well from leak from hazardous gases . Monitor Health and avoid human to human spread virus like covid.

DISCUSSION

Since pandemic started demand of mask is increased in we avoid direct contact.health has become to much important for everyone.Dropped air quality and leakage of hazardous gases made too many deaths in industry.

So we found that the society requires more safety and health equipments.

Sudhir[2] has investigated about symptoms of hazardous gases in air and how they affect human body and designed ckt like body sensor ,Adafruit board,and bluetooth module accordingl

Adarsh[1] has done work on algorithms and made product to meet requirements as it surrounded with many parameters .Made coordination with the ckt components .

Abhishek[3] surveyed for opinion of people and demand . How much should be spend on production of product so that it will give more market response in affordable price. Soo in survey we found that people became more aware about health and product in more demand in industrial as well as in city level areas

SURVEY FOR PRODUCT

Survey is important for product future scope. We collected some data for product requirement for Future product scope.

Number of people participated in survey-70

Total Participation	Positive Response	Suggestion on product
70	40	30

People who gave positive feedback reasons-

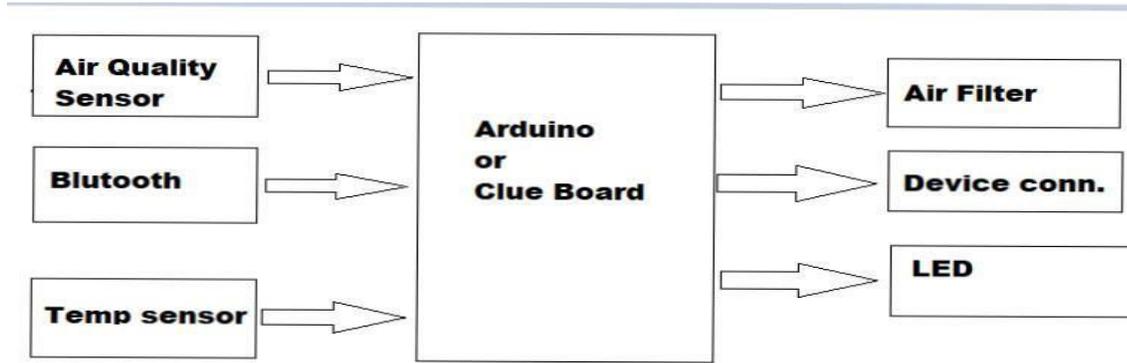
1. Good device in such pandemic
2. Industry useful where much harmful gases are present that may cause serious impacts.

Suggestions-:

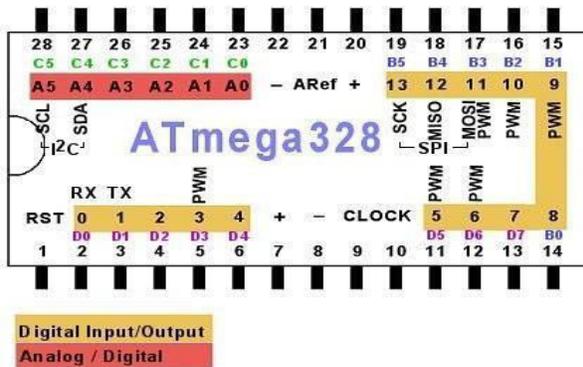
1. Common man can not have use of it as like professionals.

PRODUCT INFORMATION

BLOCK DIAGRAM:-



ARDUINO:-



Arduino microcontroller is an powerful and high performance Board for data processing. We can collect ,process and give appropriate output for user or requirement. By executing powerful instructions in a single clock cycle, the device achieves throughputs approaching one MIPS per MHz, balancing power consumption and processing speed

TEMPERATURE SENSOR:-



This DFRobot DHT11 Temperature & Humidity Sensor features a temperature & humidity sensor complex with a calibrated digital signal output. By using the exclusive digital-signal-acquisition technique and temperature & humidity sensing technology, it ensures high reliability and excellent long-term stability. This sensor includes a resistive-type humidity measurement component and an NTC temperature measurement component, and connects to a high performance 8-bit microcontroller, offering excellent quality, fast response, anti-interference ability and cost-effectiveness

Gas Detection:-MQ-6



The MQ-6 module is used in gas leakage detecting equipment in family and industry, This module has high sensitivity to LPG, iso-butane, propane and LNG. It can also be used to detect the presence of alcohol, cooking fumes, and cigarette smoke. The module gives out the concentration of the gases as a analog voltage equivalent to the concentration of the gases. The

module also has an onboard comparator for comparing against an adjustable preset value and giving out a digital high or low. It can be easily interfaced with your Arduino or Raspberry Pi.

CONCLUSION

Its Seen That-

1. We can reduce Health issues by simply adapting Healthcare Devices
2. We can avoid industrial gas leakage deaths by adapting Proper devices and technology

FUTURE SCOPE

Product found more user friendly and economically affordable for professionals.

REFERENCE

- [1] Riazul Islam, S.M., Kwak, D., Kabir, H., Hossain, M., Kwak, K.S. (2015). The internet of things for health care: a comprehensive survey. IEEE Access, 3: 678-708. <http://dx.doi.org/10.1109/ACCESS.2015.2437951>