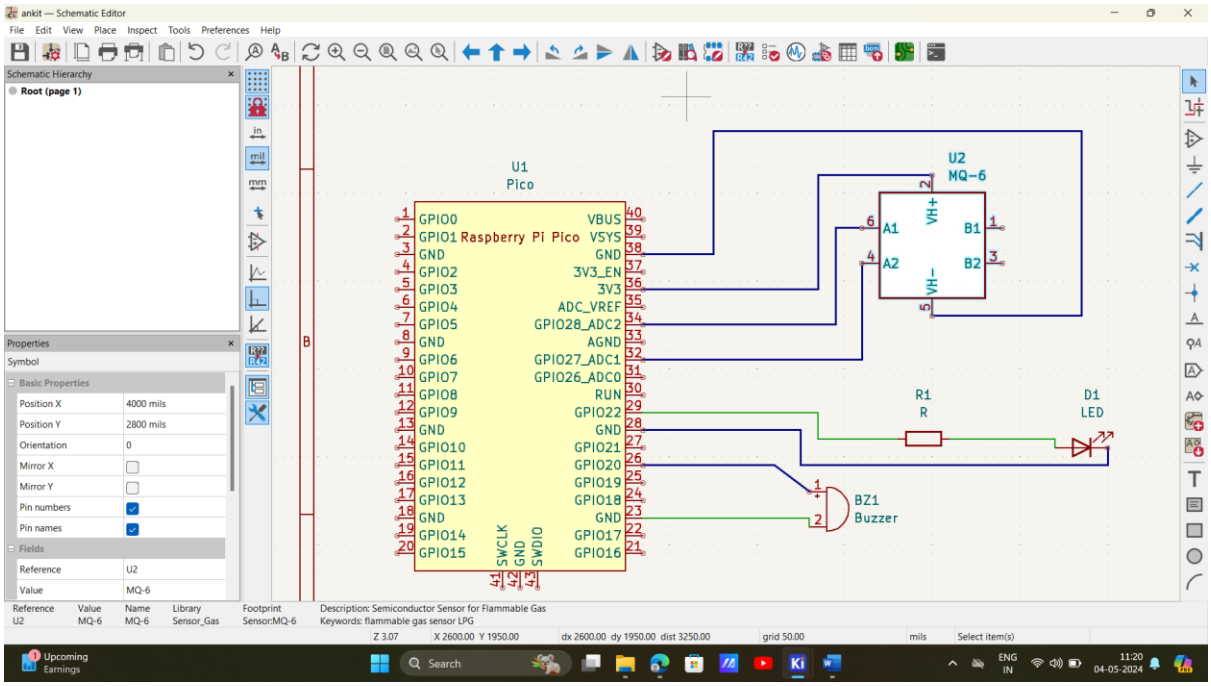
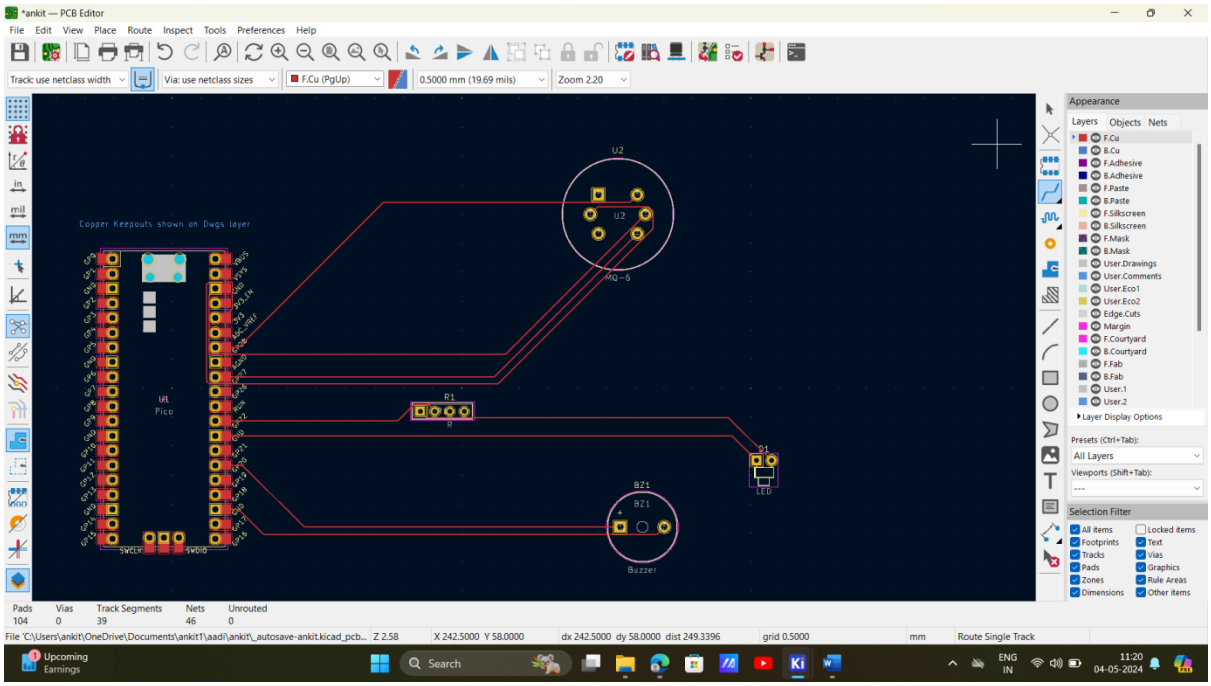
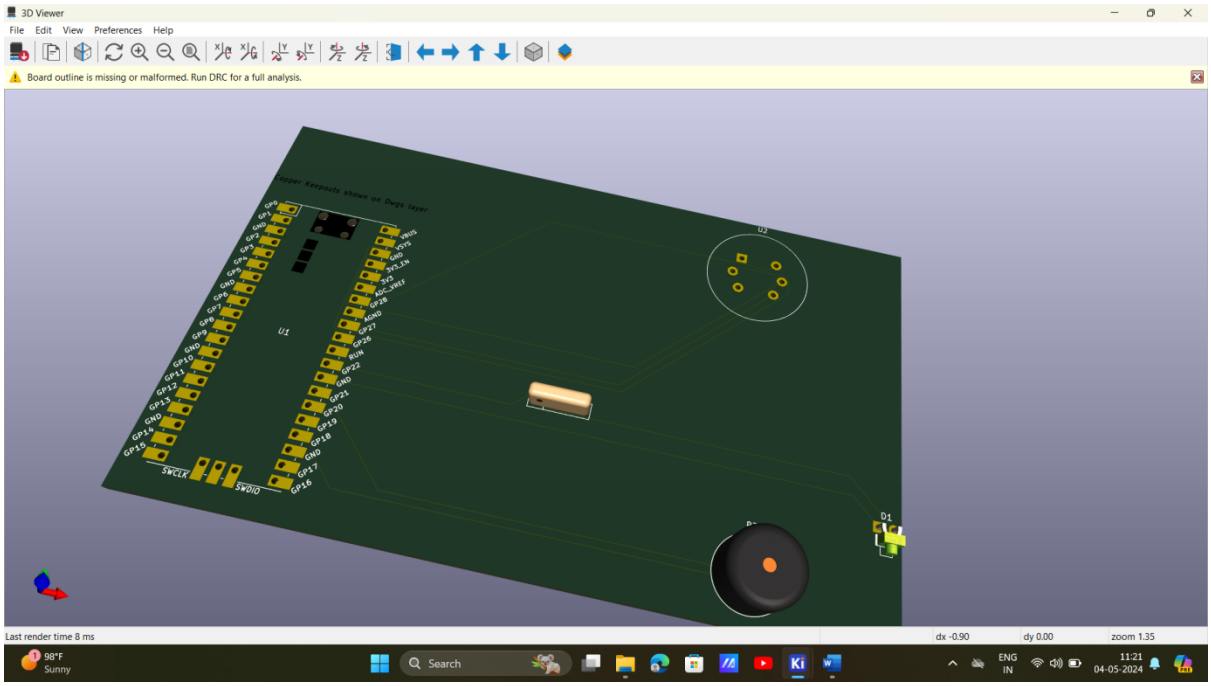
Hazardous Gas Detection System

Name: Ranvir Kumar (21781A04M8)






3D Viewer
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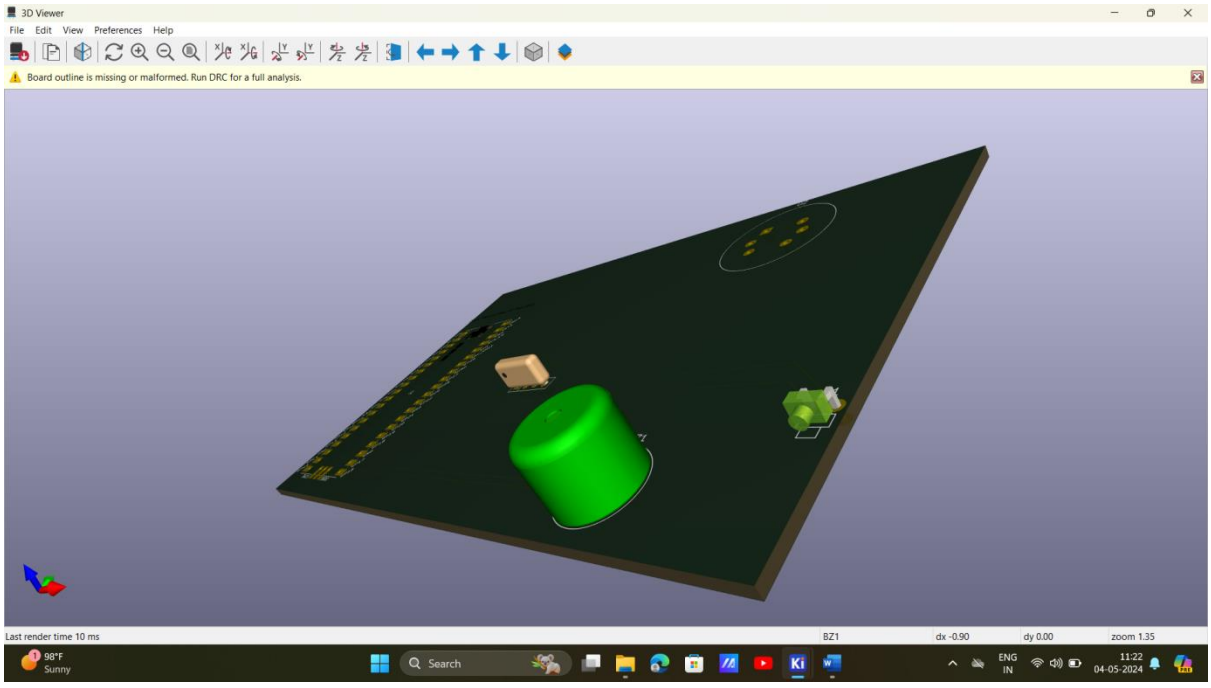
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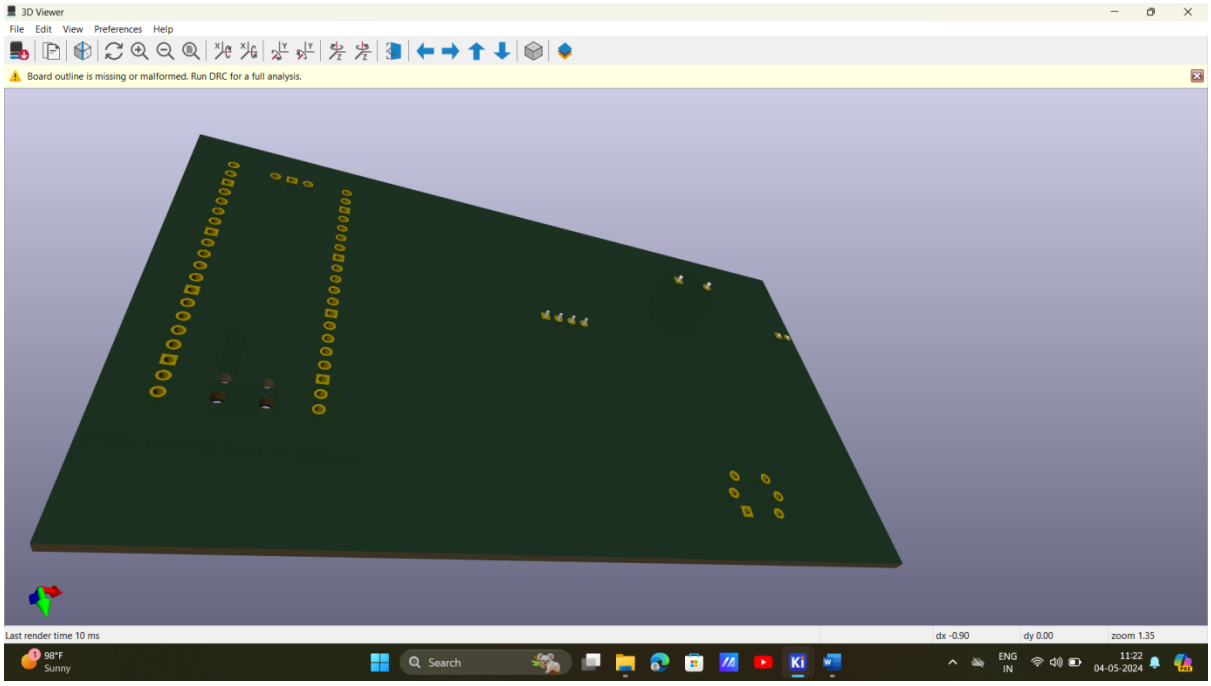


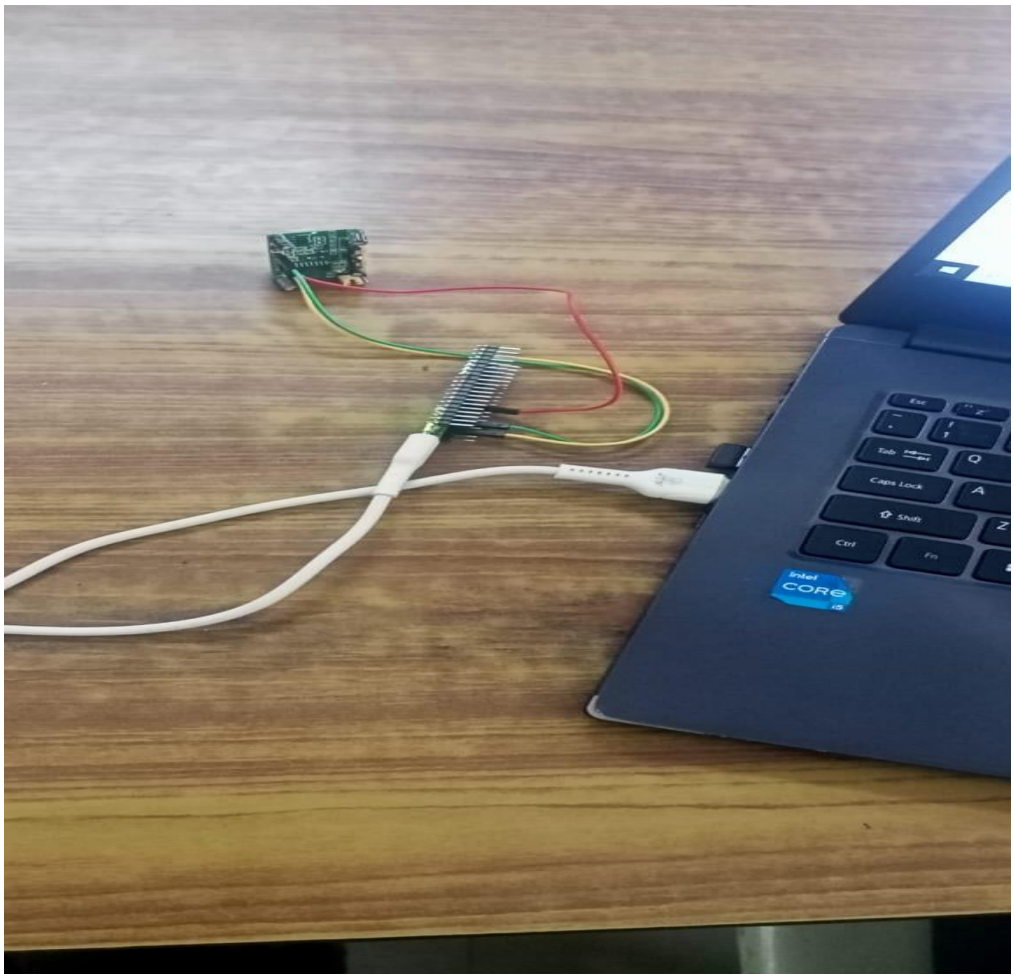
PROGRAM

```
import machine
import time
 # Define pin numbers
PIR_PIN= machine. Pin(27, machine. Pin.IN)
BUZZER_PIN =machine. Pin(6, machine. Pin. OUT)
# Function to activate the buzzer
def activate_buzzer():
    BUZZER_PIN.on()          #Turn buzzer on
    time.sleep(0.5)           #Keep buzzer on for 6.5 seconds.
    BUZZER_PIN.off()       #Turn buzzer off
 # Main loop to detect motion
while True:
   if PIR_PIN.value():   #PIR sensor detects motion
```

```
        print("Motion detected!")
        activate_buzzer() # Activate the buzzer
time.sleep(0.2) #Small delay to debounce and save CPU
```

output:

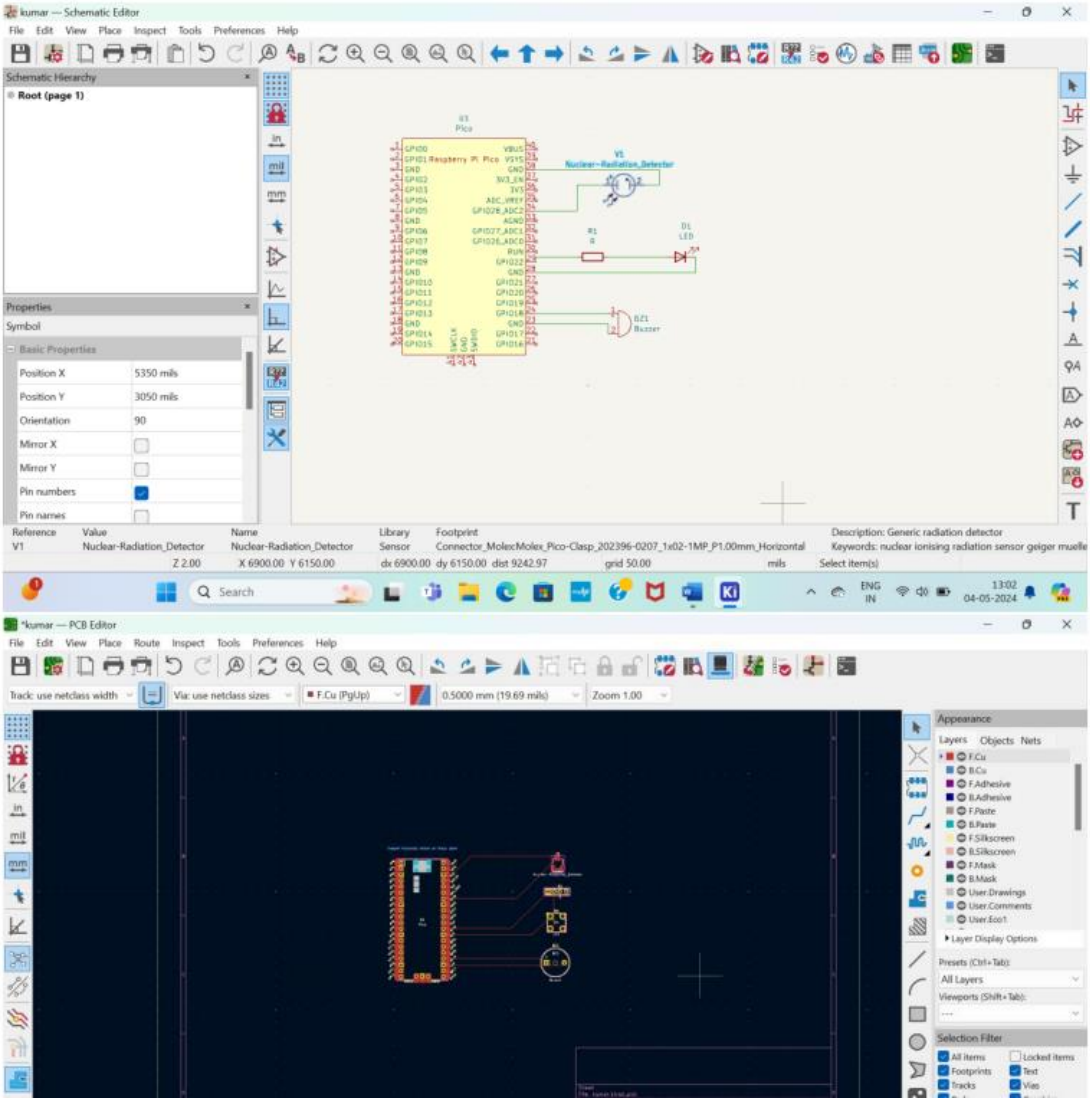
```
Motion detected
 Motion detected
Motion detected
Motion detected
Motion detected
Motion detected
Motion detected
Motion detected
```

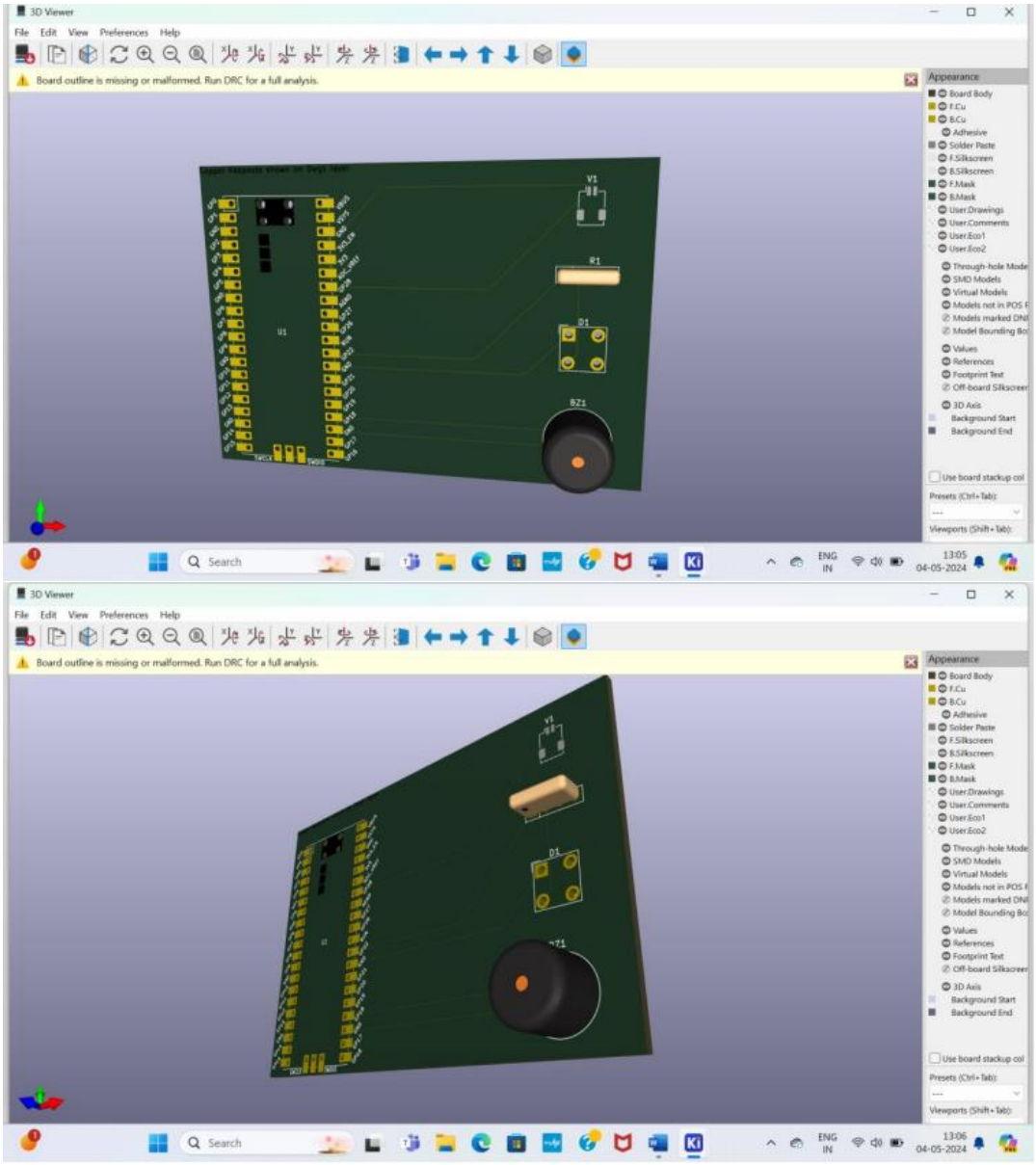


Conclusion:

In conclusion, the development and implementation of a Hazardous Gas Detection System represent a crucial step towards ensuring safety in various environments, from industrial settings to residential areas. By continuously monitoring air quality and promptly detecting the presence of hazardous gases, this system not only protects human lives but also safeguards the environment and valuable assets. Through advanced sensor technologies, data analytics, and real-time alerts, it offers proactive measures to mitigate risks and prevent potential disasters. Moving forward, ongoing research and innovation in this field will further enhance the efficacy and accessibility of such systems, ultimately contributing to a safer and healthier world for all.

Nuclear Radiation Detection System




3D Viewer
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Appearance
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F.Mask
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User.Comments
User.Eco1
User.Eco2
Through-hole Mode
SMD Models
Virtual Models
Values
References
Footprint Text
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3D Viewer
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Solder Paste
F.Silkscreen
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User.Drawings
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User.Eco1
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Through-hole Mode
SMD Models
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