

SRI VENKATESWARA COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)

R.V.S NAGAR, CHITTOOR – 517 127. (A.P)

(Approved by AICTE, New Delhi, Affiliated to JNTUA, Anantapuramu)

(Accredited By NBA, New Delhi & NAAC, Bengaluru)

(An ISO 9001:2000 Certified Institution)

2023-2024

PROJECT DETAILS: (MID-COURSE PROJECT)

CLASS : Third year ECE(second semester)

COURSE NAME: Applied industrial IOT

PROJECT NAME : Smart City Using Cisco Packet Tracer

BATCH: Batch 57(4)

1.SIMHADRI THONDLAM (22785A0427)

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PROJECT

Smart City using Cisco Packet Tracer

AIM: To Design and build an intelligent urban environment for city monitoring, incorporating smart surveillance, intelligent street lighting and fire monitoring within Cisco Packet Tracer.

PROBLEM STATEMENT: Cities are facing increasing challenges in managing safety and security, energy efficiency, and resource utilization. Traditional monitoring systems are often inefficient and lack real-time intelligence, leading to delays in response and increased risk to residents. There is a need for a comprehensive solution that integrates smart technologies to address these issues effectively.

SCOPE OF THE SOLUTION: The solution aims to create an intelligent urban environment capable of real-time monitoring and response to various situations, including surveillance for security, intelligent street lighting for energy efficiency, and fire monitoring for safety. The system will utilize sensors, actuators, and intelligent algorithms to gather and analyze data, enabling proactive decision-making and efficient resource allocation.

REQUIRED COMPONENTS TO DEVELOP SOLUTIONS:

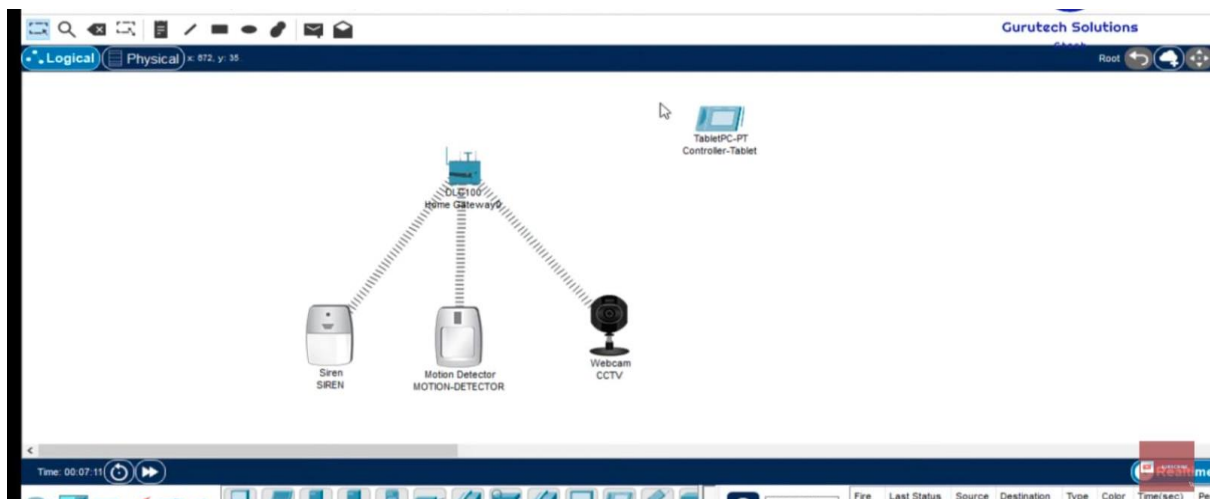
1. Cisco packet tracer (software)
2. PCs
3. Simulated sensors (e.g., motion sensors, temperature sensors), actuators (e.g., LED lights, fire alarms), and networking devices (e.g., routers, switches) within Cisco Packet Tracer.

.SIMULATED CIRCUIT(Cisco Packet Tracer):

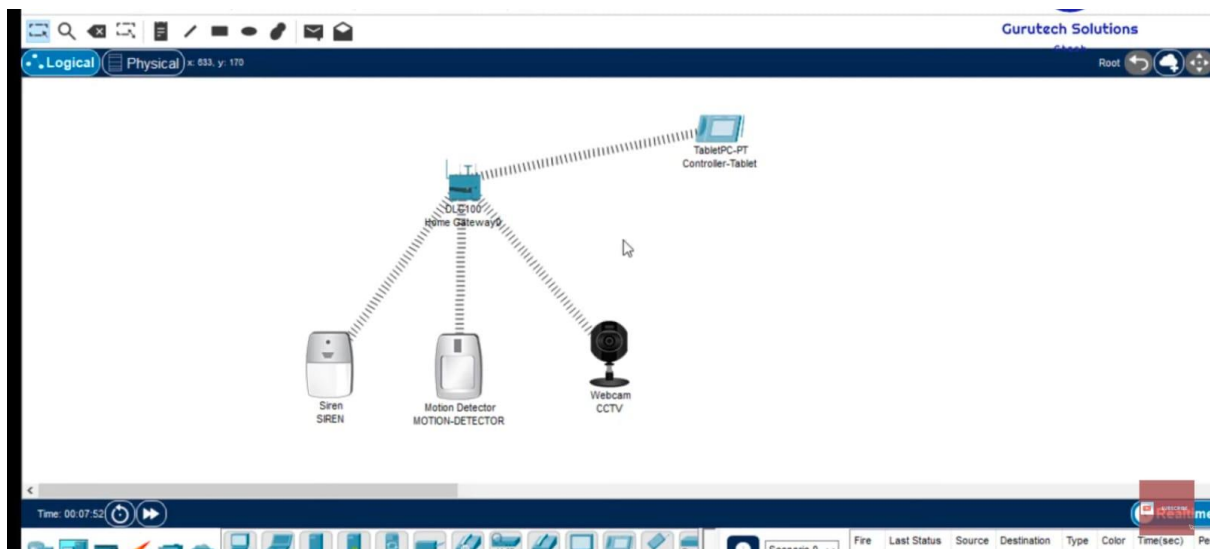
DESIGNING AN INTELLIGENT URBAN ENVIRONMENT FOR CITY MONITORING:

1.SMART SURVEILLANCE :

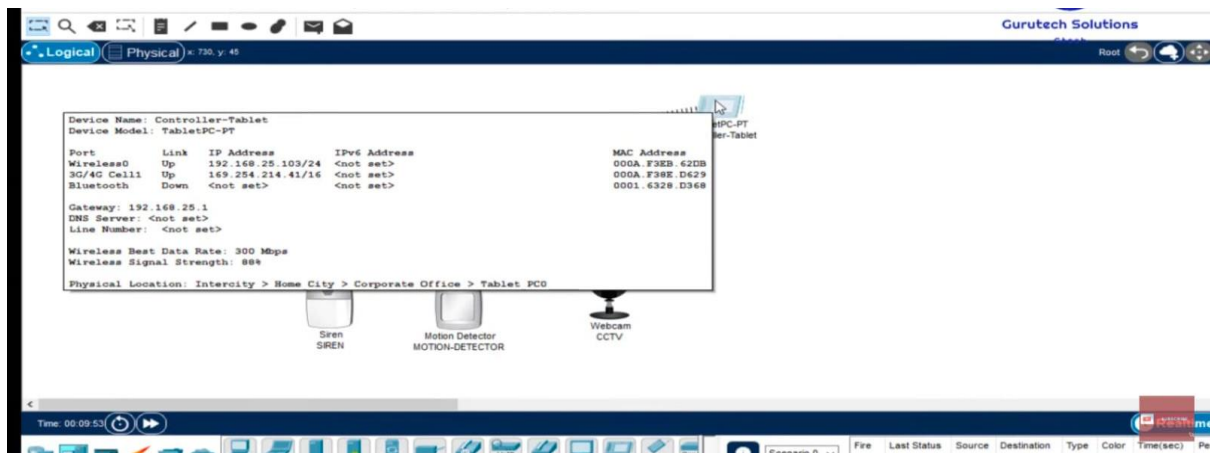
1. Consider required components.



2. Connect to home gateway.



3. Check IP address.



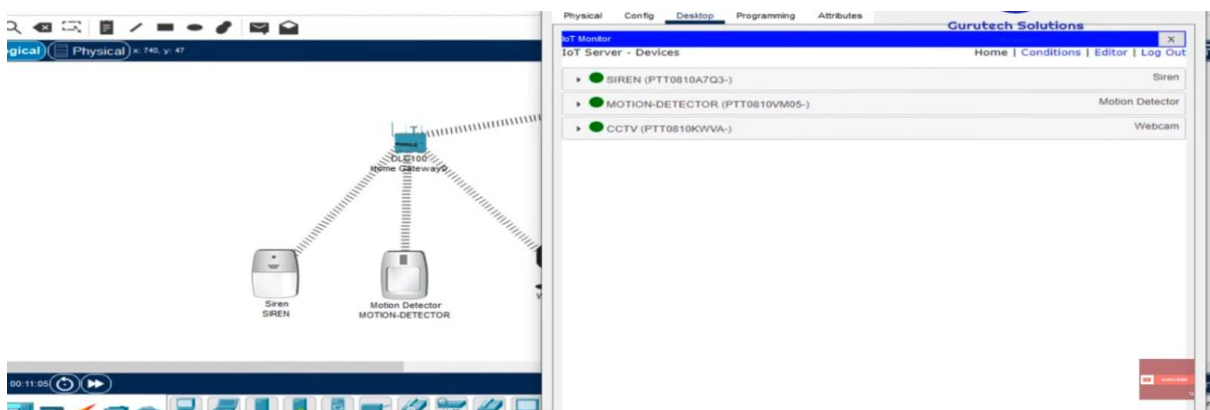
4. Go to IOT monitor.



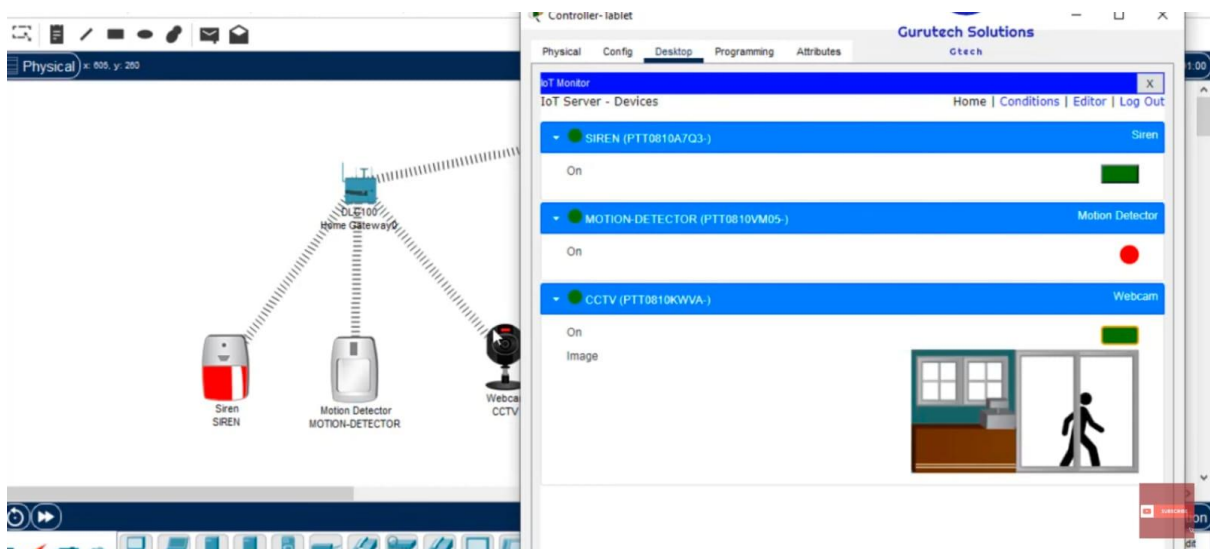
5. Login .



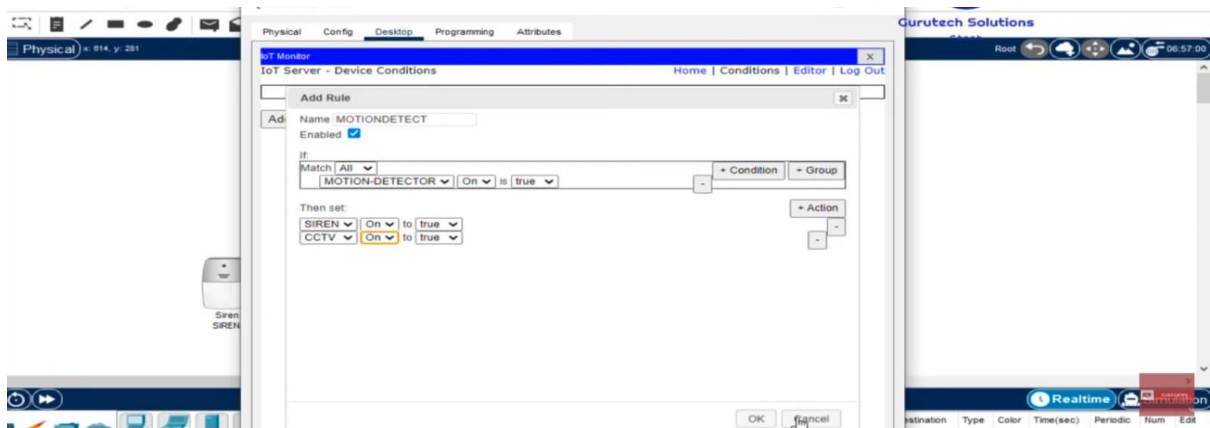
6. Open desktop.



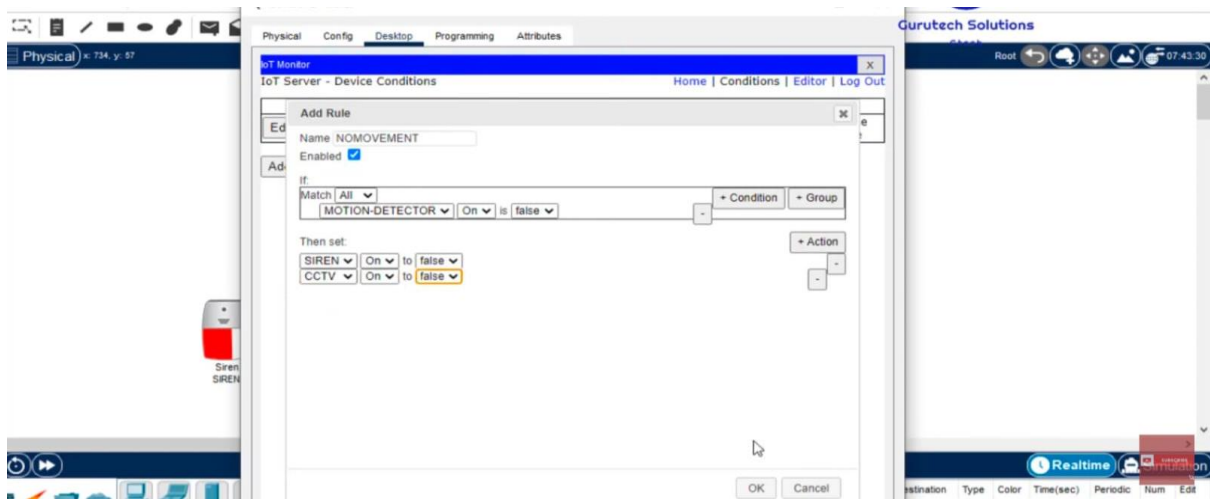
7. Observe the figure.



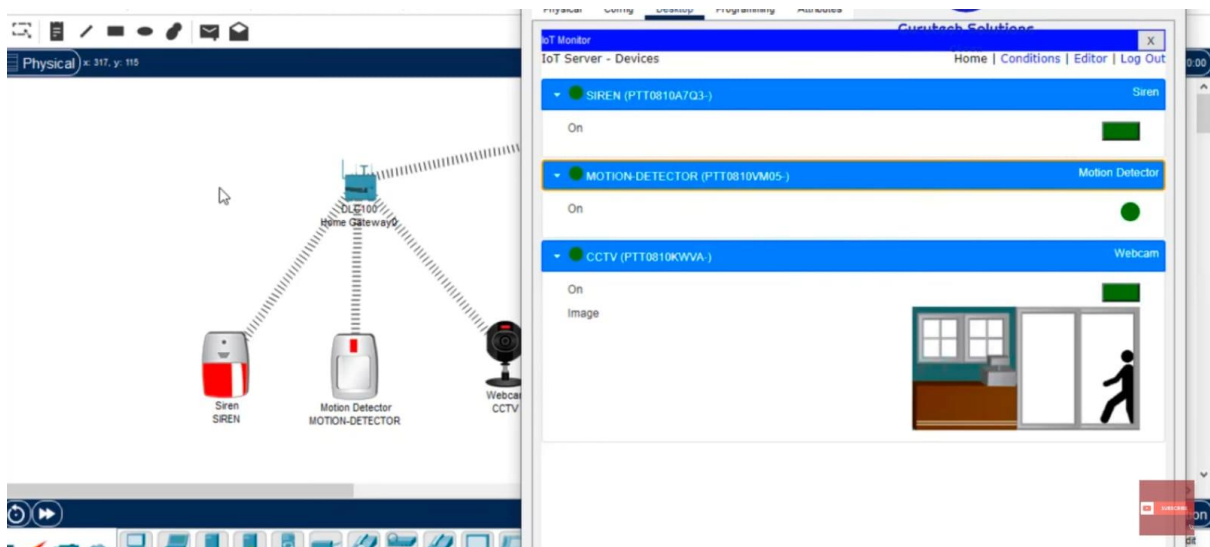
8. Give the motion detect conditions.



9. Give the no movement conditions:

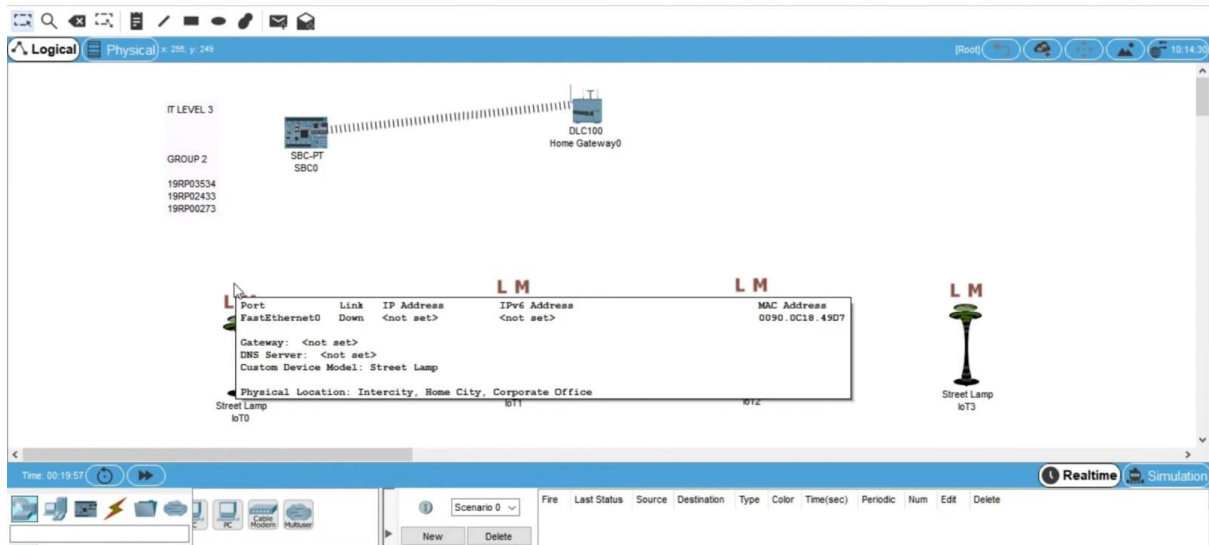


10. You can observe at siren and CCTV.

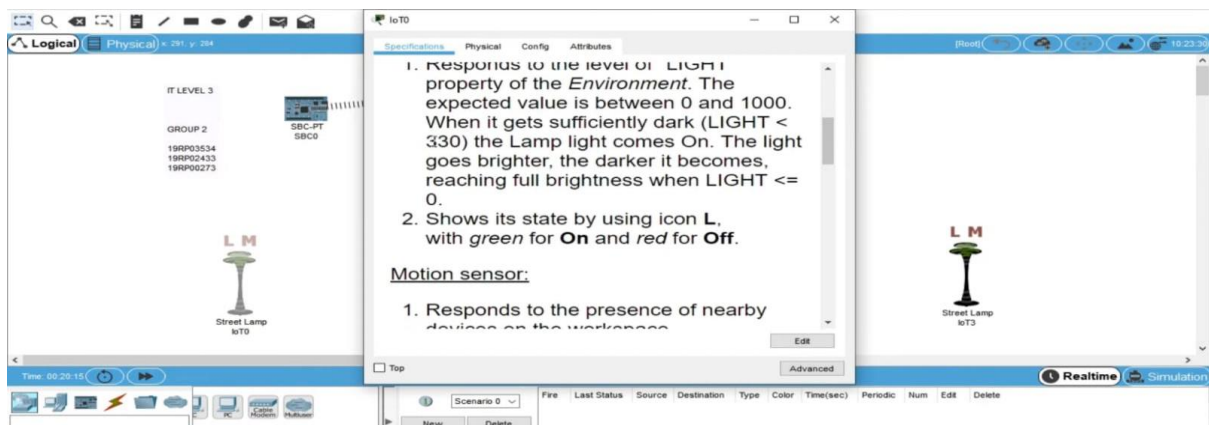


2. Intelligent street lighting:

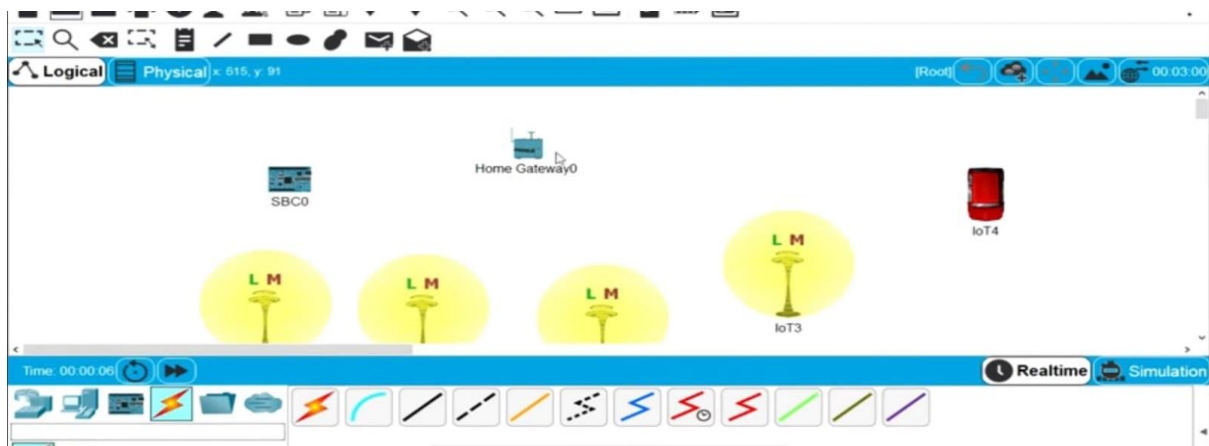
1. Consider required components.



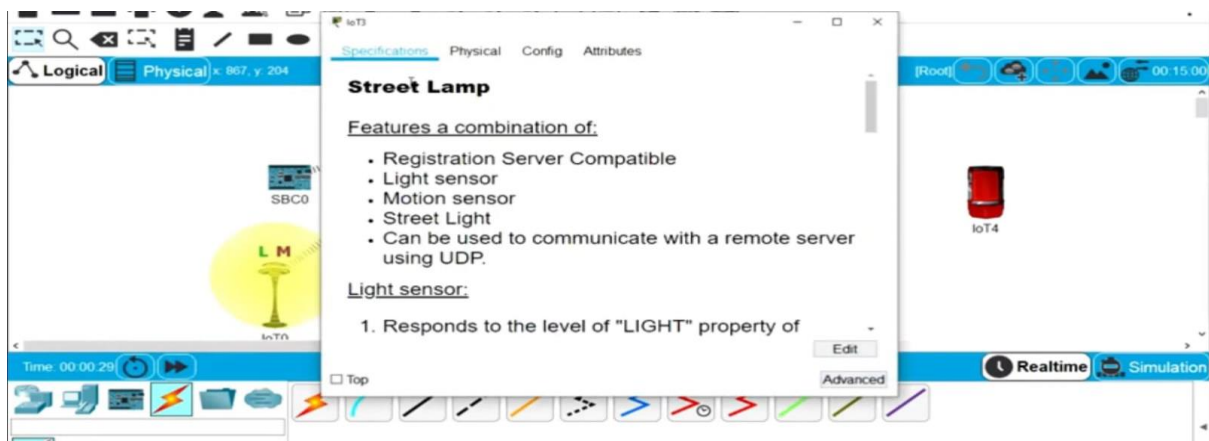
2. See the specifications at any lamp.



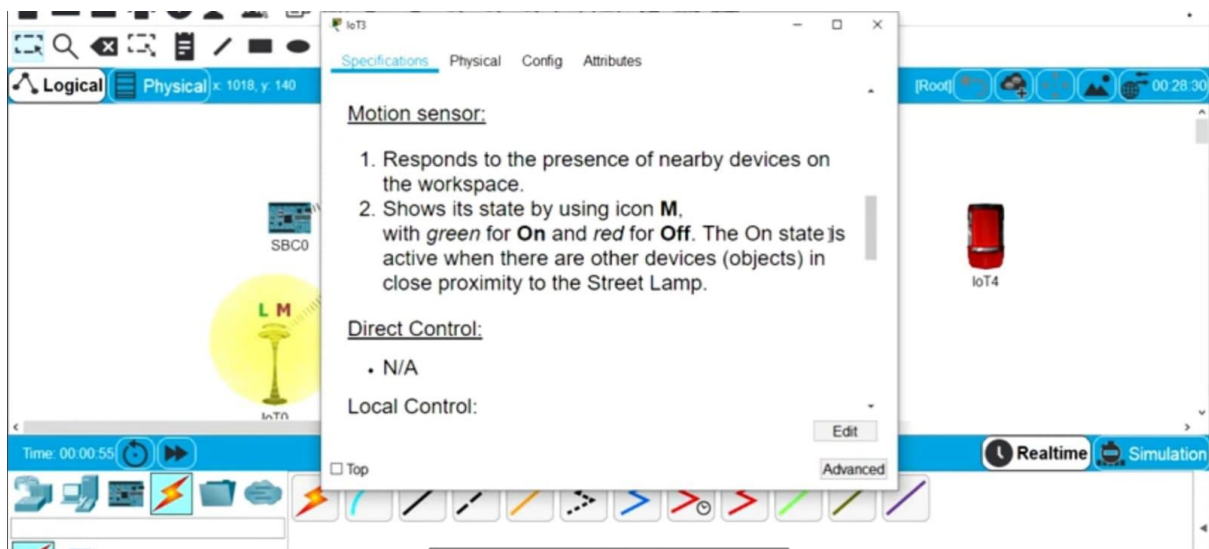
3. Take an old car.



4. Observe the features.



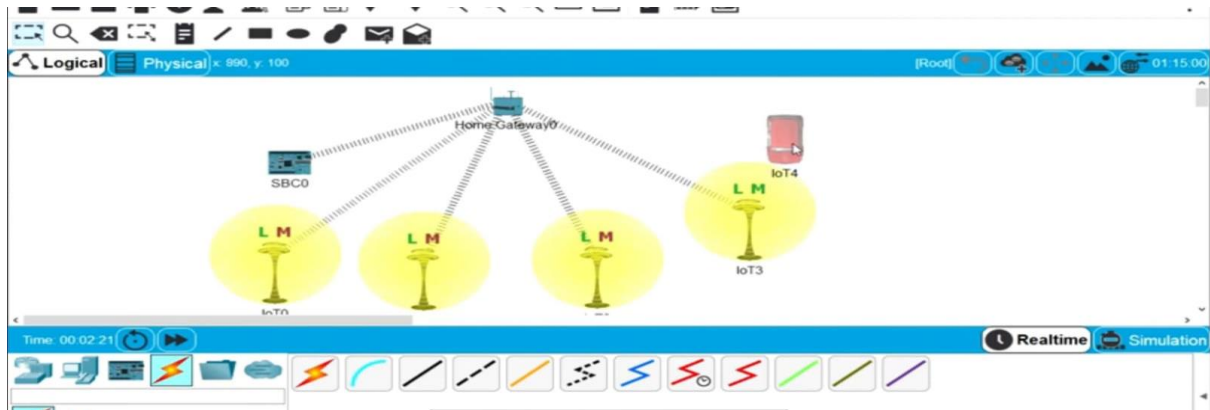
5. Observe the figure.



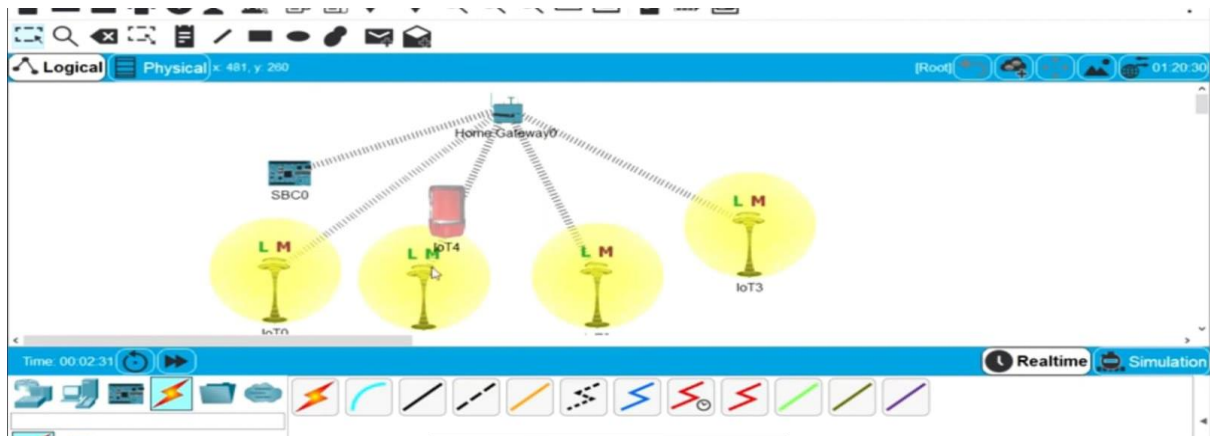
6. Enter the code.



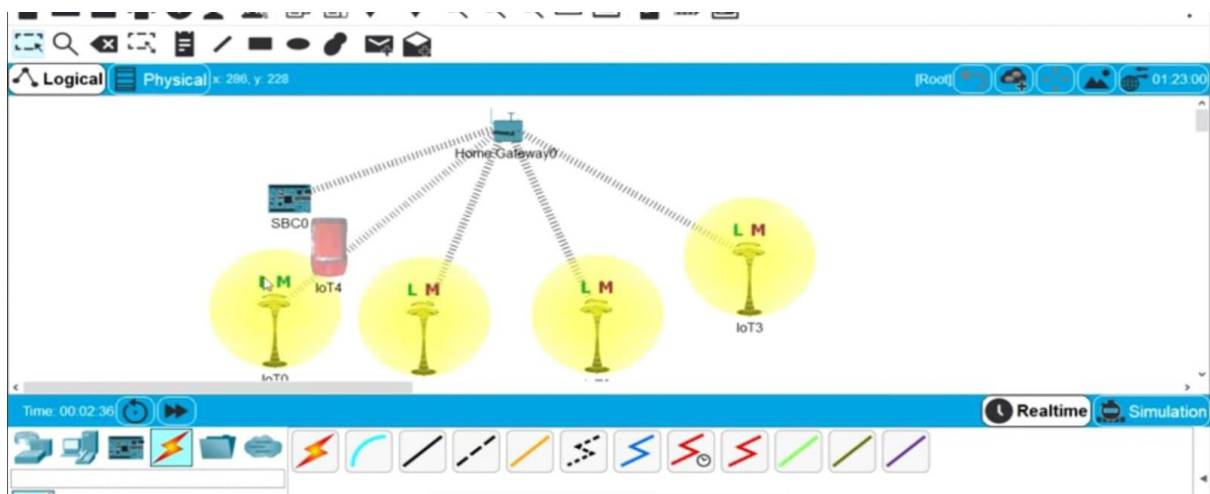
7. Place the car at first lamp, you can see the glowing lamp.



8. Move the car. When car position is near to the lamp then it glows

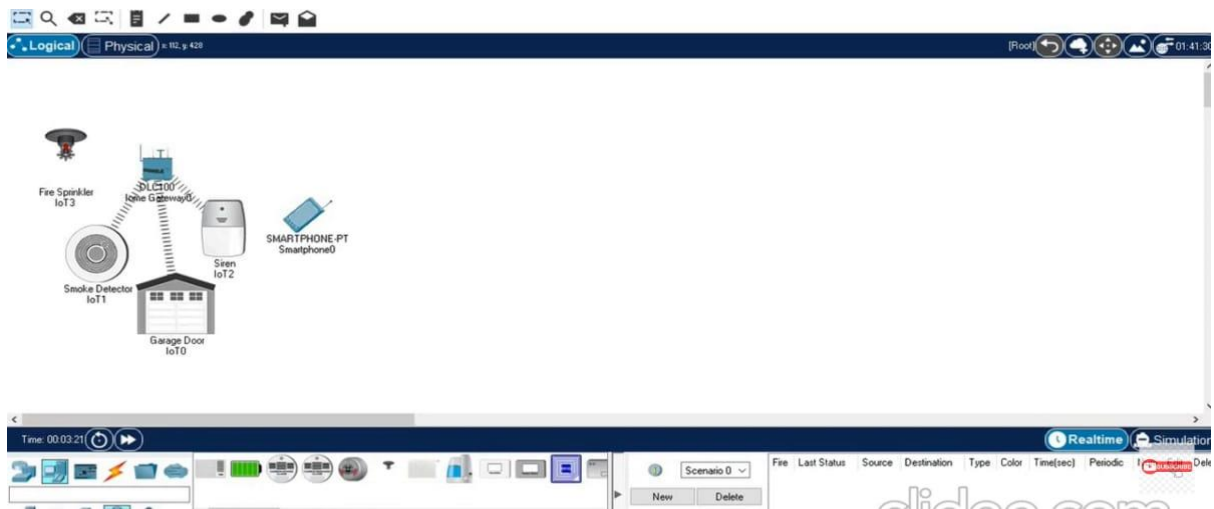


9. After leaving the lamp it will turn off.

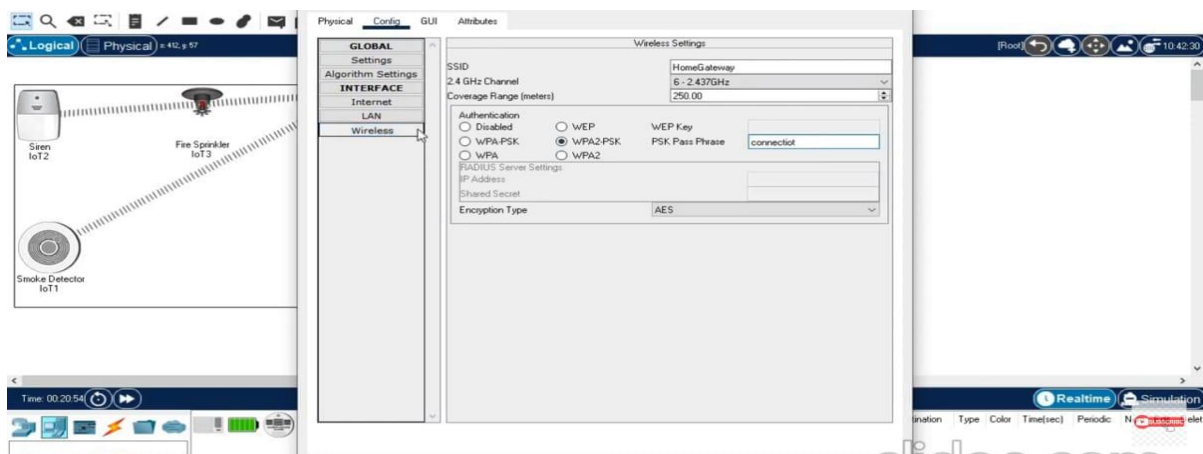


3.Fire monitoring:

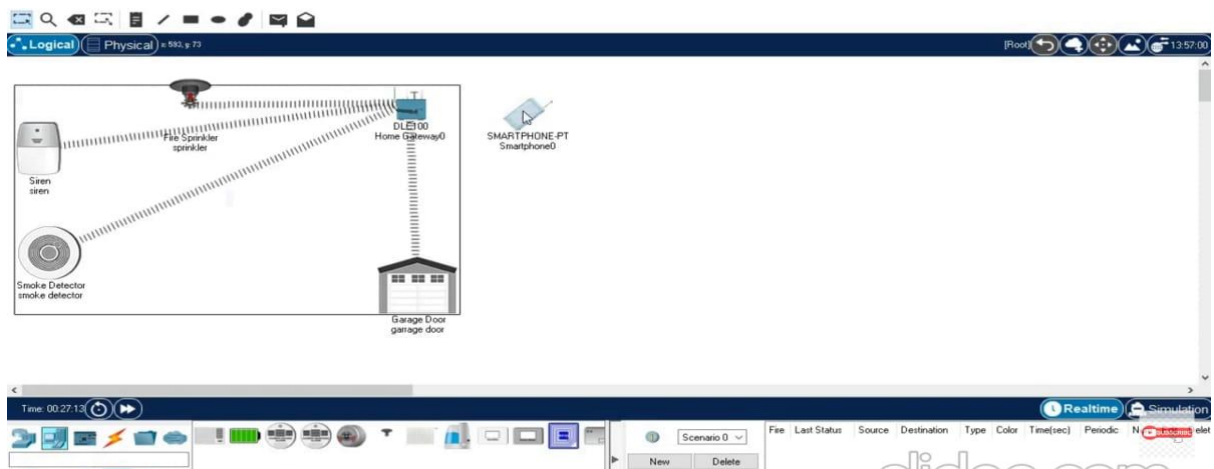
1.Consider Required Components.



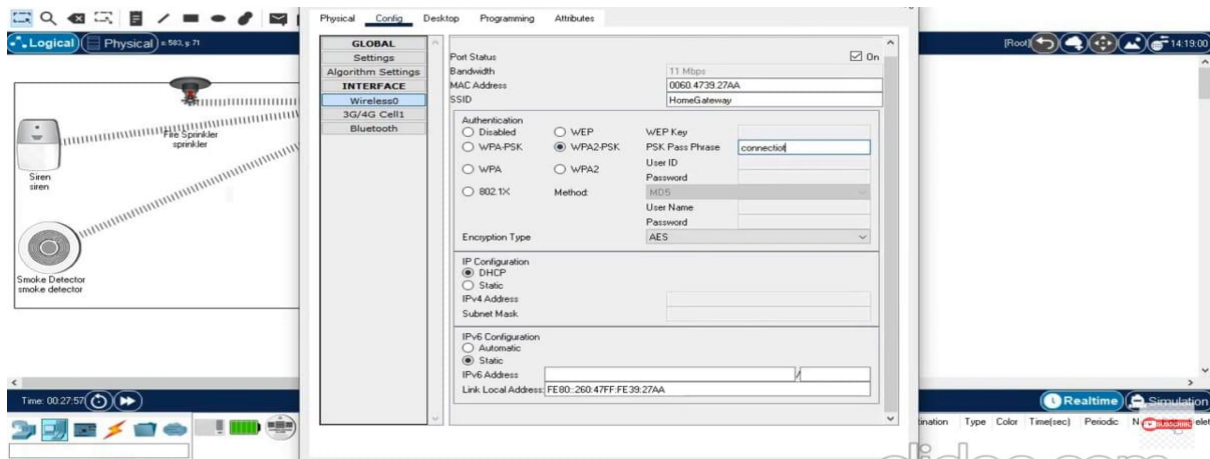
2.Give Wireless Connection And Check IP Address.



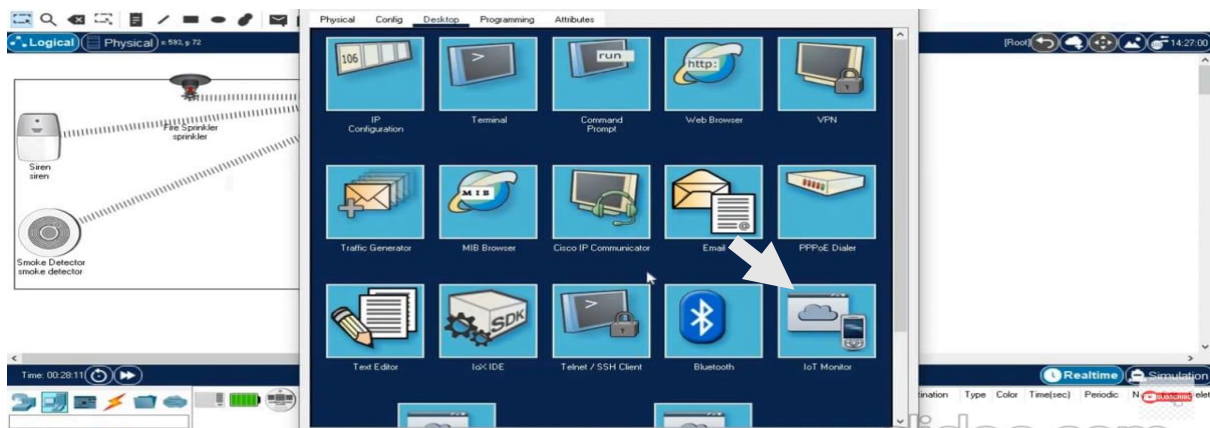
3.Change The Device Names.



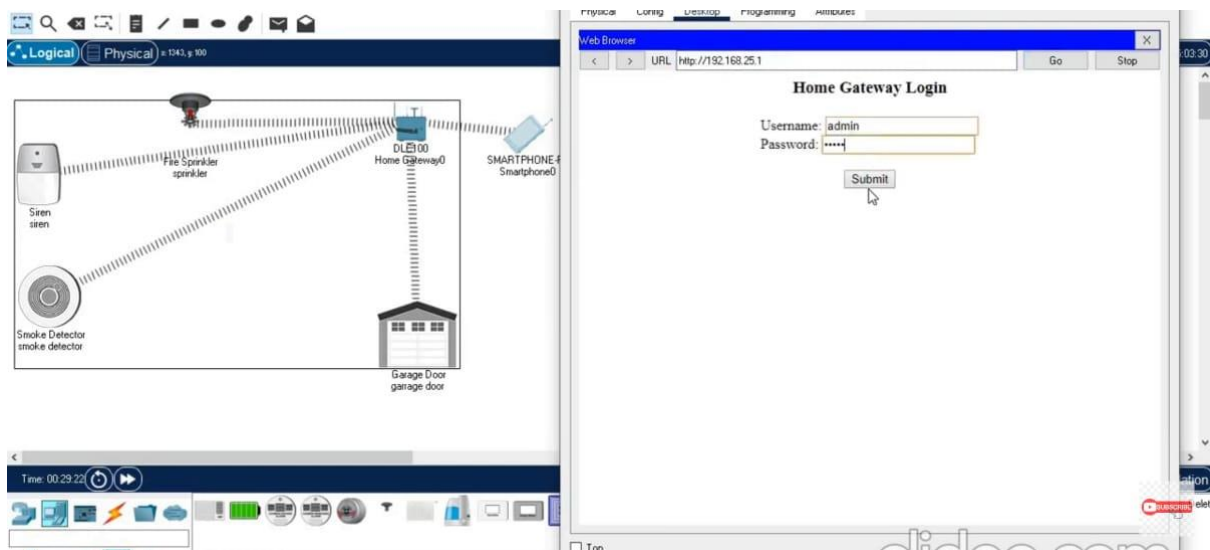
4. Connect Smart Phone To Home Gateway.



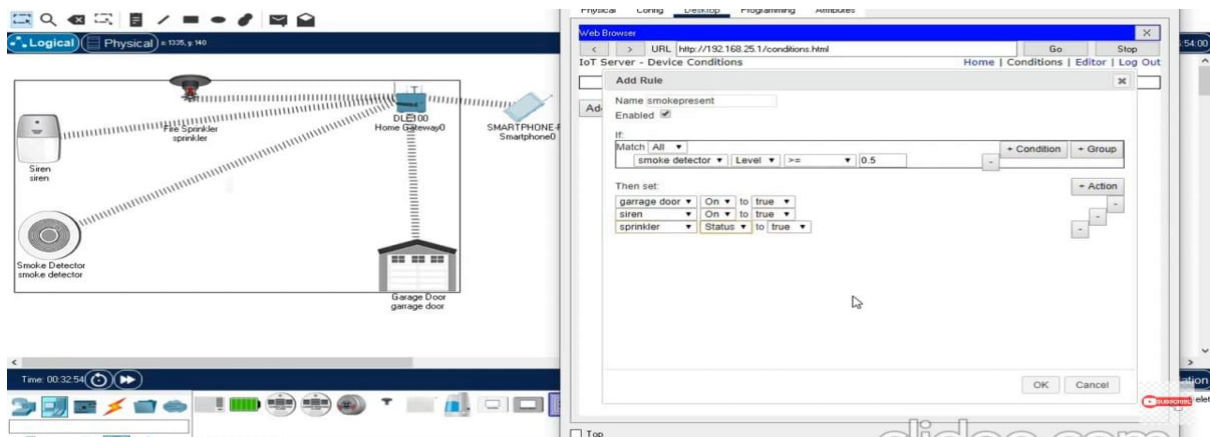
5. Go To Iot Monitor.



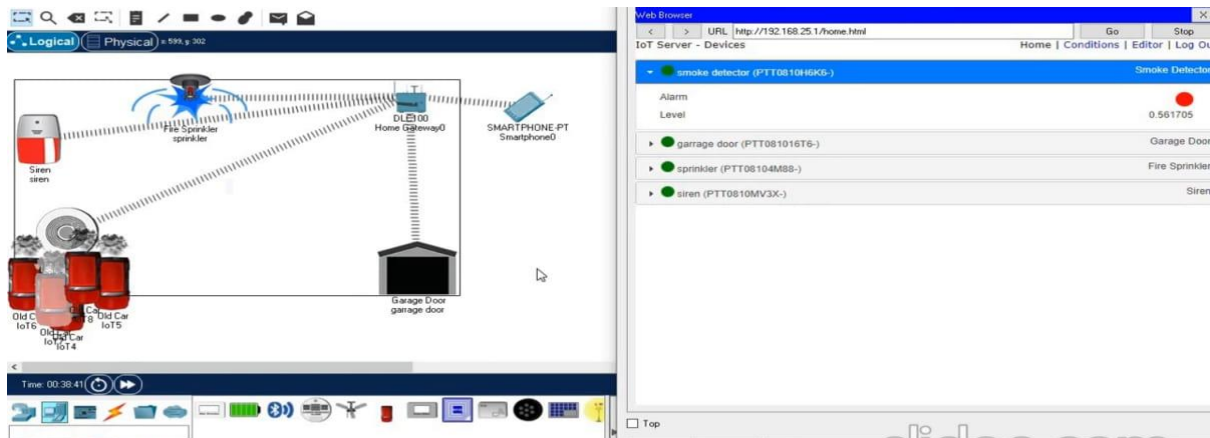
6. Login.



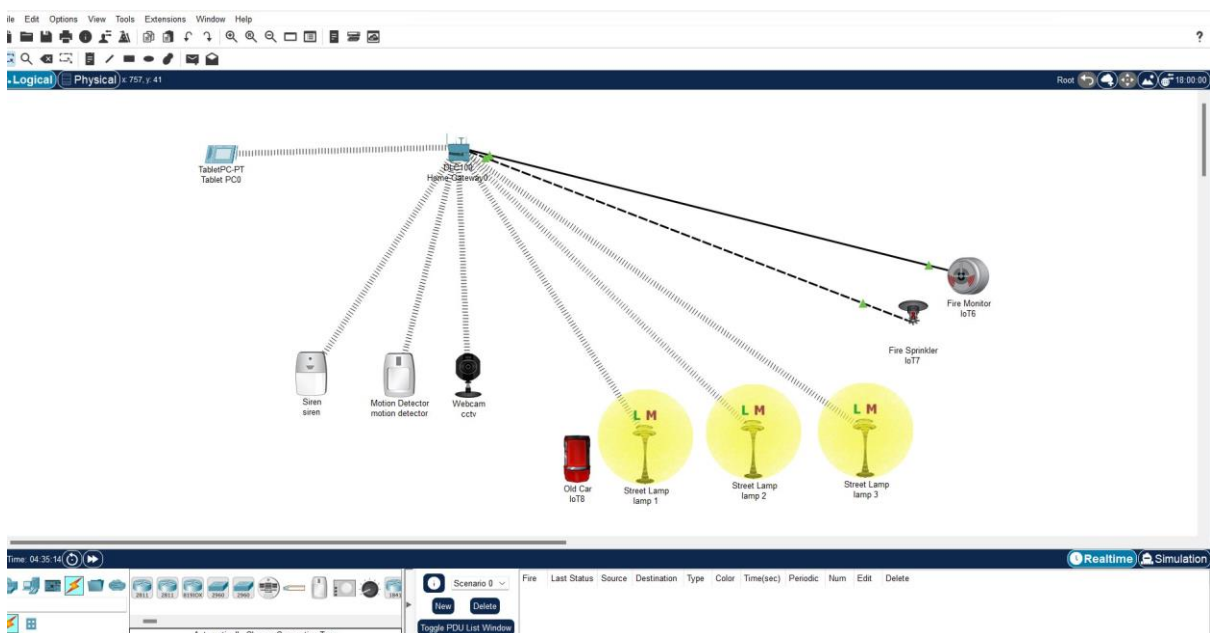
7. Give The Conditions.



8. Observe Fire Detector.



➤ SMART CITY USING CISCO PACKET TRACER



Conclusion:

By implementing this intelligent urban environment in Cisco Packet Tracer, we demonstrate the potential of technology to enhance city monitoring and safety. The integration of smart surveillance, intelligent street lighting, and fire monitoring systems offers comprehensive coverage and real-time insights for efficient urban management.