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Computer Networks Laboratory

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Section: A

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**Digital Hospital with Smart Health Care**

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Abstract

The internet of things, or **IoT**, is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

Our digital hospital is also a IoT based project where any one can monitor the patient room sitting on the monitor room. There is also a fire sprinkler which puts out fire. There is a motion detector by which any motion or any one entering or leaving person or anything will be detected with it and the person sitting on the monitor room can see throughout the webcam which is also in the patient room. Also one can see the total monitoring system from anywhere.

Acknowledgement

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Chapter 1

# Characteristics & Features of the Devices:

FIRE MONITOR:

Registration Server Compatible.

Detects flames by checking for a property and finding if the "IR" property value is in the range the detector considers a fire and outputs a digital signal.

MCU:

Smart Things are physical objects that can connect to the Registration Server or Home Gateway through a network interface.

Components are physical objects that connect to microcontroller (MCU-PT) or single boarded computers (SBC-PT).

FIRE SPRINKLER:

Registration server compatible.

Raises the water level.

MOTION DETECTOR:

Registration server compatible.

Detects motion from mouse movement.

Automatically deactivates after 5 seconds without any mouse movement.

WEBCAM:

Registration Server Compatible.

On/Off.

Video Recording.

ROUTER:

To interconnect the networks.

CENTER SERVER:

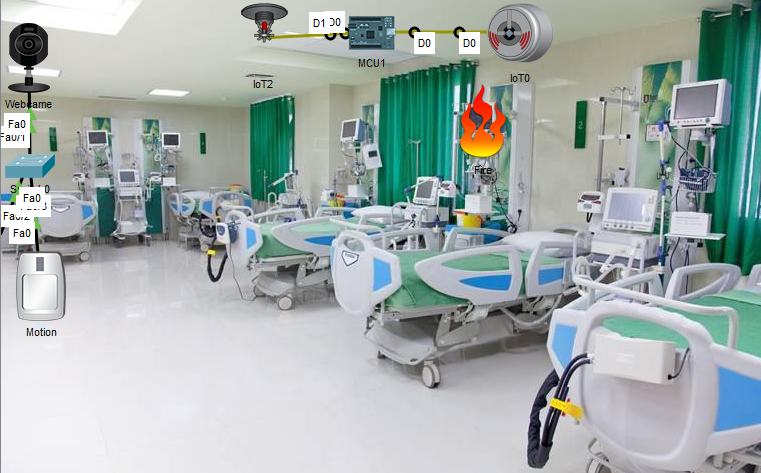
Used to connect the cellular system to the router.

PC:

Connect the default gateway to access smart object.



**Figure 1:Hospital**



**Figure 3: Monitoring Room**

**Figure 2: Patient Room**

Chapter 2

# 2.1 Conclusion

Ours digital hospital & patent monitoring system will help many of us. Today’s world is totally depending on Internet Of Things though which sitting in our home we can control our overall system.

# 2.2 Future Goal

We want to develop the fully hospital based system. We want to control each and every device in the hospital by sitting in our home or anywhere in the world.