The Internet of things

Assessment 2

WHAT IS THE INTERNET OF THINGS

The internet of things, or IoT, is a network of interrelated devices that connect and exchange data with other IoT devices and the cloud. IoT devices are typically embedded with technology such as sensors and software and can include mechanical and digital machines and consumer objects.

Increasingly, organizations in a variety of industries are using IoT to operate more efficiently, deliver enhanced customer service, improve decision-making and increase the value of the business.

With IoT, data is transferable over a network without requiring human-to-human or human-to-computer interactions.

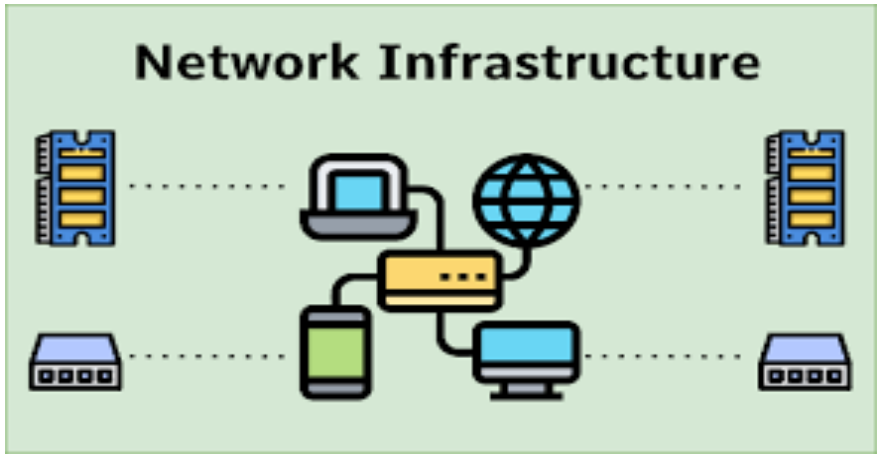
A thing in the internet of things can be a person with a heart monitor implant, a farm animal with a biochip transponder, an automobile that has built-in sensors to alert the driver when tire pressure is low, or any other natural or man-made object that can be assigned an Internet Protocol address and is able to transfer data over a network.

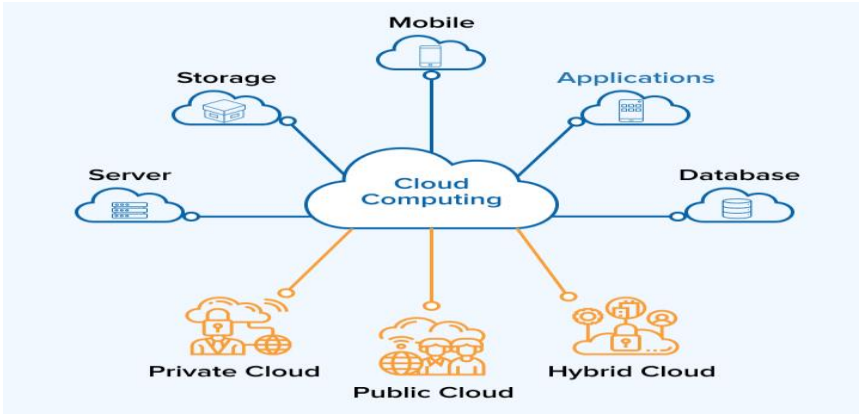
WHAT IS THE HISTORY OF IoT?

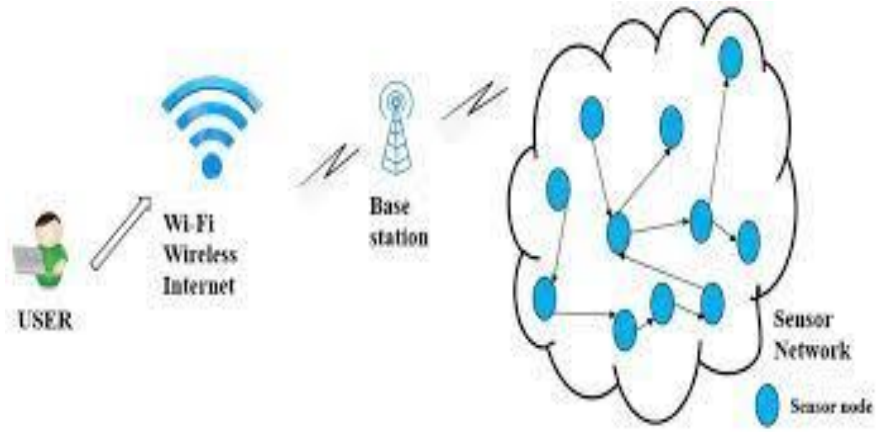
The Internet of Things was named as a concept in 1999 by Kevin Ashton. Ashton began exploring the idea while working for manufacturing giant Procter & Gamble as a brand manager for Oil of Olay. He recognized a disconnect between the inventory systems at retailers and the actual inventory on the shelf. Because store employees and managers were scanning the barcodes of products to sell them, they assumed there was some sort of back-end tracking that would let them know when products were out of stock. However, this wasn't the case until Ashton pioneered radio frequency ID (RFID) technology on cosmetics. By empowering the shelf and register to talk to the products and inventory system, Ashton closed the gap between inventory tracking and supply chain management.

Though Ashton coined the term "Internet of Things," he later amended that the name "Internet for Things" might have been a better description.

WHAT TECHNOLOGIES ENABLE IoT?







Wireless sensor network, Clouding computing, network protocol and infrastructure, imbedded electronic and hardware systems

WHAT IS ITS IMPACT?

The internet itself has changed the world as we know it and keeps changing it as we speak. It has interconnected the world into a global village.
Things that were once out of reach are now only a few clicks away. People that were once impossible to reach out to can now connect anywhere and anytime.
It has changed the way we network, conduct business, work, socialize, make plans, and even the way we dress, eat and sleep!
There is no doubt that the world would not be what it is today without the invention of the internet. One of the things that the internet has brought to life is the Internet of Things.

WHAT IS ITS IMPACT GOING TO BE IN THE FUTURE?

The Internet of Things is a fast growing industry that can be divided into several categories: consumer, commercial, and industrial. When we think of IoT as a consumer, we may think of a refrigerator telling us when we're out of milk, but that's not what makes IoT revolutionary. Instead, the fridge should be able to collect energy usage and generate data from all across the grid, then utilize this data to figure out how to best distribute energy resources to optimize overall energy consumption, benefiting both consumers and the utility companies. Let's take a look at four aspects directly related to the future of IoT.