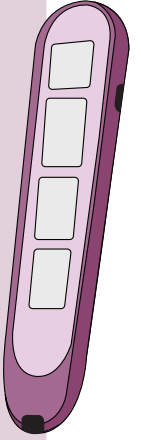


CONCEPT Smart Devices are electronic devices that operate autonomously or interact with other devices through wireless networks such as Bluetooth, WiFi, 5G, etc. These devices can make home appliances more convenient and interconnected, such as doorbells, customizable lights, voice-activated speakers, thermostats and even refrigerators. Smart devices can also connect people to each other and other devices on the go, such as smartphones, smart cars and smart watches.



BACKGROUND

IOT (THE INTERNET OF THINGS): Refers to a system of interrelated, internet-connected objects that can collect and transfer data over a wireless network without human intervention.

PERCEPTION/HARDWARE LAYER: The computing components of a smart device, which typically include a radio for transmitting signals to other devices. This layer contains sensors for gathering data about the environment. It senses location in the physical world and identifies other smart objects nearby.

NETWORK LAYER: This layer is responsible for connecting to other smart things, network devices, and servers. Its features are also used for transmitting and processing sensor data.

APPLICATION LAYER: This layer is responsible for delivering application-specific services to the user. It defines various applications in which the Internet of Things can be deployed, for example, smart homes, smart cities and smart health.

REAL WORLD CONNECTIONS

For students, new devices are helping to make studying more efficient. Take Scanmarker for example, which is a physical text-scanning pen that uploads wirelessly to another smart device such as a phone, tablet or computer and is translatable into 40 languages. There is also a function that allows for listening while scanning, so the student can absorb the information live, while documenting and editing simultaneously.