



SMART HOME Powered by AI

Shreyash Srivastava
Class: VIII-C

What is Smart Home?

- A smart home refers to a convenient home setup where appliances and devices can be automatically controlled remotely from anywhere with an internet connection using a mobile or other networked device. Devices in a smart home are interconnected through the internet, allowing the user to control functions such as security access to the home, temperature, lighting, and a home theater remotely.



Key Points

- A smart home allows homeowners to control appliances, thermostats, lights, and other devices remotely using a smartphone or tablet through an internet connection.
- Smart homes can be set up through wireless or hardwired systems.
- Smart home technology provides homeowners with convenience and cost savings.
- Security risks and bugs continue to plague makers and users of smart home technology.



SMART CAMERA

SMART CAMERA

ARTIFICIAL INTELLIGENCE FOR VIDEO SURVEILLANCE

- Artificial intelligence for video surveillance utilizes computer software programs that analyze the audio and images from video surveillance cameras in order to recognize humans, vehicles, objects and events. Security contractors program is the software to define restricted areas within the camera's view and program for times of day for the property being protected by the camera surveillance. The artificial intelligence sends an alert if it detects a trespasser breaking the "rule" set that no person is allowed in that area during that time of day.
- The A.I. program functions by using machine vision. Machine vision is a series of algorithms, or mathematical procedures, which work like a flow-chart or series of questions to compare the object seen with hundreds of thousands of stored reference images of humans in different postures, angles, positions and movements.
- Using Smart Camera at my house will help me to classify who enters and there activity for safety and security.



SMART REFRIGERATORS

SMART REFRIGERATORS

INTERNET REFRIGERATOR

- A smart refrigerator, also known as internet refrigerator, is a refrigerator which is able to communicate with the internet. This kind of refrigerator is often equipped to determine itself whenever a food item needs to be replenished.
- Automatic detection requires a barcode or RFID on each item, or items can also be registered manually. A smart refrigerator allows a user to know which items are inside the refrigerator without opening it, by simply checking the display list on an LCD or other output device.
- Using a smart refrigerator will help me manage my food resources in my refrigerator and easy management rather than taking out time and cleaning my refrigerator.



SMART LIGHTS

SMART LIGHTS

LIGHTING TECHNOLOGY

- Smart lighting is a lighting technology designed for energy efficiency, convenience and security. This may include high efficiency fixtures and automated controls that make adjustments based on conditions such as occupancy or daylight availability.
- Smart lighting generally uses mesh networking, where each smart bulb wirelessly connects to its nearest neighbor. That network is controlled by a hub that plugs into your router, enabling your other networked devices - such as your phone or tablet - to communicate with your bulbs.
- Using smart lighting in my house will help me regulate lights of my house based on the mood like parties, or family meet.



SMART LOCKS

SMART LOCKS

SMART SECURITY DEVICE

- A smart lock is an electromechanical lock which is designed to perform locking and unlocking operations on a door when it receives such instructions from an authorized device using a wireless protocol and a cryptographic key to execute the authorization process.
- Smart locks have created a new home security experience with customization features and functionality designed to give you control over what happens to your home. They go way beyond the capabilities of ordinary locks.
- In my home Smart Locks will help me manage my security and in other houses breaking lock is easy but not possible here.



SMART Wi-Fi & NETWORK

SMART WI-FI & NETWORK

FAST WORKING TECHNOLOGY

- Smart networks are computing networks with intelligence built in such that identification and transfer is performed by the network itself through protocols that automatically identify what things are (deep learning technology), and validate, confirm, and route transactions (Blockchain technology) within the network.
- Using Smart Wi-Fi and Network technology will help me work fast on my devices and can easily manage and control my other home systems.

A close-up photograph of a small, round, light grey smart speaker with a white base, resting on a rustic wooden shelf. The speaker's top surface features four small, glowing blue indicator lights arranged in a horizontal line. In the background, a green plant is visible, and a white cable extends from the speaker towards the top right. The overall scene is softly lit, creating a warm and modern aesthetic.

SMART ASSISTANTS

SMART ASSISTANTS

VIRTUAL ASSISTANTS

- A smart assistant – also known as a virtual assistant – is a form of software installed in a smart device (such as a smart speaker or a smart phone) that can perform tasks or services, or answer questions. They're essentially the link between us and smart technology software and are essential for controlling smart plugs, smart thermostats and similar devices.
- Voice control allows you to interact with your smart assistant, without lifting a finger. Whether controlling wider smart technology or searching the cloud through the internet to find exactly the information you need, this handy feature makes daily life easier and more efficient.
- Using a Smart Assistant like Google Assistant, Apple Home Pod, Amazon's Alexa will help me manage my daily schedule,



SMART TV

SMART TV

CONNECTED TV

- A smart TV, also known as a connected TV, is a traditional television set with integrated Internet and interactive Web 2.0 features, which allows users to stream music and videos, browse the internet, and view photos. Smart TVs are a technological convergence of computers, televisions, and digital media players.
- A partial list of the biggest smart TV makers includes Hisense, LG, Panasonic, Philips, Samsung, Sharp, Sony, TCL, Toshiba and Vizio.
- Smart TV in my house can give me an amazing personalized experience having all streaming apps at a place and watch anything anytime.



SMART VACUUM CLEANERS

SMART VACUUM CLEANERS

ROOMBA

- A robotic vacuum cleaner, sometimes called a robovac or a Roomba as a generic trademark, is an autonomous robotic vacuum cleaner which has a limited vacuum floor cleaning system combined with sensors and robotic drives with programmable controllers and cleaning routines.
- Before cleaning rooms for the first time, they create a virtual map. Your robot vacuum cleaner will scan all of your rooms with its laser navigation system. Then, it vacuums out every single corner of your home using the map.
- Vacuum Cleaners in my house will help me to clean the house automatically without me utilizing my time in cleaning every space at house.

Thank You!

The image features the words "Thank You!" in a highly decorative, hand-drawn style. The letters are thick and outlined in black, with various internal patterns and colors. The word "Thank" is in the top row, and "You!" is in the bottom row. The letters are surrounded by several stylized flowers in blue, pink, and yellow. The background is white.