Generic Asset Creation:

Table Column Names listed below:

Asset_Name,

Asset_Type,

Use_Type,

Industrial_Type,

Industrial_Data_source,

Connection_Type,

Tracking_Device_Type,

Sensor_Type,

Sub_Category_Sensor_Type,

Sensor_Data_Type

Main Category (Web application types)

- Wearables....
- Health. ...
- Traffic monitoring. ...
- Fleet management. ...
- Agriculture. ...
- Hospitality....
- Smart grid and energy saving. ...
- Water supply.
- Maintenance management.

1, Type of Asset:

- Security
- Activity Trackers
- Industrial Security and Safety
- Augmented Reality Glasses
- Motion Detection

2, Types of IoT(What type of Industries)

- Consumer IoT Primarily for everyday use. Eg: home appliances, voice assistance, and light fixtures.
- Commercial IoT Primarily used in the <u>healthcare</u> and transport industries. Eg: smart pacemakers and monitoring systems.
- Military Things (IoMT) Primarily used for the application of IoT technologies in the military field. Eg: surveillance robots and human-wearable biometrics for combat.
- Industrial Internet of Things (IIoT) Primarily used with industrial applications, such as in the manufacturing and energy sectors. Eg: Digital control systems, smart agriculture and industrial big data.
- **Infrastructure IoT** Primarily used for connectivity in smart cities. Eg: infrastructure sensors and management systems.

Types of Industries

- Healthcare.
- Manufacturing.
- Agriculture.
- Energy.
- Smart homes.
- Transportation.

Types of Industrial Data Source

- Industrial Control Systems
- Business Applications
- Wearables
- Sensors & Devices
- Location

Connection Types

- Low Power Wide Area Networks (LPWANs)
- Cellular (3G/4G/5G)
- Protocols
- Bluetooth and BLE
- Wi-Fi
- Radio Frequency Identification (RFID)

3, Tracking Devices (multi-select option)

- Bluetooth Low Energy transmitters.
- GPS tracking tags.
- Energy sensor trackers.
- Smart locks.
- CCTV systems.
- Automatic lighting controls.
- monoxide detectors.
- IT security solutions.

4, Sensor Type

1. Temperature Sensors

- Thermocouples:
- Resistor temperature detectors (RTD):
- IC (Semiconductor):
- Infrared sensors:

2. Humidity Sensors

- 3. Pressure Sensors
- 4. Proximity Sensors
 - Inductive Sensors:
 - Capacitive Sensors:
 - Photoelectric Sensors:
 - Ultrasonic Sensors

5. Level Sensors

- Point level sensors:
- Continuous level Sensor

6. Accelerometers

- Hall-effect accelerometers:
- Capacitive accelerometers:
- Piezoelectric accelerometers:

7. Gyroscope

- Rotary (classical) gyroscopes
- Vibrating Structure Gyroscope
- Optical Gyroscopes
- MEMS(micro-electro-mechanical systems) Gyroscopes

8. Gas Sensors

- Carbon dioxide sensor
- Breathalyzer
- Carbon monoxide detector
- Catalytic bead sensor
- Hydrogen sensor
- Air pollution sensor
- Nitrogen oxide sensor
- Oxygen sensor
- Ozone monitor
- Electrochemical gas sensor
- Gas detector
- Hygrometer

9. Infrared Sensors

10. Optical Sensors

- Photodetector:
- Fiber Optics:
- Pyrometer:
- Proximity & Infrared:

11, water quality Sensors

Chlorine Residual Sensor:

- Total Organic Carbon Sensor:
- Turbidity Sensor:
- Conductivity Sensor:
- pH Sensor:
- Oxygen-Reduction Potential Sensor

12, Chemical Sensor

- Chemical field-effect transistor
- Chemiresistor
- Electrochemical gas sensor
- Fluorescent chloride sensor
- Hydrogen sulfide sensor
- Nondispersive infrared sensor
- pH glass electrode
- Potentiometric sensor
- Zinc oxide nanorod sensor

13, Smoke sensor

- Optical smoke sensor (Photoelectric):
- Ionization smoke sensor:

14, IR sensors

15, Image sensors

- CCD (charge-coupled device), and
- CMOS (complementary metal-oxide semiconductor) imagers.

16, Motion detection sensors

- Passive Infrared (PIR):
- Ultrasonic:
- Microwave:

5, Types of IoT Sensor Data

- Status data
- Location data
- Automation data
- Actionable data