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IBM (Nalaiya Thiran) Project Ideas 2022

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1. Smart Cradle System

The whole concept behind creating the smart cradle is to enable parents to check up on their infants and monitor their activities from afar (remote locations).

This is one of the interesting IoT project ideas. The IoT-based smart cradle system includes a cry detecting mechanism and live-video surveillance along with a user interface (for mobile or web). The cradle is equipped with multiple sensors that can check and monitor the humidity and temperature of the bed. On the other hand, the surveillance camera attached to the cradle will continue to send footage of the infant to the parents.

The data generated by the sensors is stored in the cloud. Additionally, the system includes a health algorithm that feeds on the sensor data to continually check the health condition of the infant and alert the parents if it senses anything unusual in the baby's health stats.

2. Smart Gas Leakage Detector Bot

Gas pipes are an indispensable component of both homes and industrial companies. Any leakage in gas pipes can lead to fire accidents and also contaminate the air with pollutants, thereby causing a disastrous effect in the air and the soil. This IoT-based project is explicitly built to combat the issue of gas leakage.

And this is the perfect idea for your next IoT project!

This tiny bot includes a gas sensor that can detect any gas leaks in a building. All you have to do is insert the bot into a pipe, and it will monitor the condition of the pipe as it moves forward. This is one of the important and best IoT projects. In case the bot detects any gas leak in the pipeline, it will transmit the location of the leakage in the pipe via an interface GPS sensor over the IoT network. The bot uses IOTgecko to receive and display any gas leakage alert and its location over the IoT network.

3. **Streetlight Monitoring System**

Streetlights are a significant source of energy consumption. Often, streetlights continue to remain on even when there's no one in the street. With the help of this IoT-based streetlight monitoring system, we can efficiently monitor and optimize the energy consumption of streetlights.

In this IoT-based project, street lights are fitted with LDR sensors that can monitor the movement of humans or vehicles in the street. If the sensor can catch any movement in the street, it signals the microcontroller, which then turns on the street light. Similarly, if there's movement in the street, the microcontroller switches the lights off. This way, a substantial amount of energy can be saved. This is one of the best IoT projects for safety.

Not just that, the smart light system also allows users to monitor the estimated power consumption based on the current intensity of a streetlight. It is incorporated with a load sensing functionality that can detect any fault in the lights. If the system detects an error, it automatically flags a particular light as faulty and sends the data over to the IoT monitoring system so that it can be fixed promptly.

4. **Smart Anti-Theft System**

Security is one of the primary choices for homes, businesses, and corporations. Having a robust security system helps to keep unwanted intruders at bay. The IoT-based anti-theft system is the perfect solution for safeguarding homes as well as industrial enterprises.

This IoT-based security system is programmed to monitor the entire floor of the building for tracking any kind of unusual movement. When turned on, a single movement could trigger an alarm, thereby alerting the owners of the property about unwanted visitors. It works something like this – whenever you vacate a house or a building, the Piezo sensor is turned on for tracking any movement in and around the property. This is one of the best IoT projects to practice.

So if an intruder were to enter the property, the sensor would send the data to the microcontroller, which then converts it into a signal for the camera to snap a picture of the intruder. This picture is then automatically sent to the users on their smartphone. Mentioning **IoT projects** can help your resume look much more interesting than others.