

SERVERLESS IOT DATA PROCESSING

- Home automation can lead to significant energy savings by optimizing lighting, heating, and cooling systems based on occupancy and environmental conditions.
- IoT can be used to monitor air quality, humidity, and temperature to create a healthier living environment, especially for individuals with respiratory conditions.
- Integration with smoke detectors, carbon monoxide detectors, and water leak sensors for early detection of potential hazards.

- **Serverless IoT Dashboard:** Create a serverless web-based dashboard that allows users to monitor and control IoT devices in real-time. Use serverless functions to process incoming data and display it in an intuitive and responsive interface.
- **Automated Data Cleanup:** Develop serverless functions to clean and preprocess incoming IoT data, handling missing values, outliers, and data format conversions to ensure data quality.
- **Serverless IoT Analytics:** Build serverless functions for basic analytics tasks, such as calculating averages, sums, or trends from IoT sensor data. This can provide users with insights into their IoT devices' performance.
- **Alerts and Notifications:** Implement serverless functions to send notifications or alerts when specific conditions are met, such as temperature thresholds in industrial IoT or security breaches in home automation.

```
if motion sensed by the sensor then
    Turned ON appliance
Else
    Keep sensing
end if
if MQ5 gas value greater than or equals to 1050 then
    Start Alarm

else
    Keep sensing

end if
if electromagnetic door sensor Lost the line of sight connection for sec then
    Start Alarm

else
    Keep checking

end if
if temperature less than or equals to 24°C then
    Turned OFF Fan

else
    if temperature greater than 24°C then
        Turned ON Fan

    end if
end if
```