Connected Home - Telemetry
Measuring and collecting data from smart home devices

1. The devices connect to AWS IoT Core, directly via MQTT from FreeRTOS or via AWS IoT Greengrass.

2a. An IoT topic Rule can be configured in AWS IoT Core to pick up meaningful data and save it in Amazon DynamoDB.

2b. Another IoT topic Rule can be configured in AWS IoT Core to trigger AWS IoT Events for certain data, like temperature etc.

2c. Or, directly from AWS IoT Greengrass, data can be ingested in AWS IoT Analytics.

3a. Client applications can make an API call to retrieve data via Amazon API Gateway.

3b. AWS IoT Events can trigger Amazon SNS actions in case certain changes occur in the data (e.g. Temperature > 25 degrees).

3c. Data from AWS IoT Analytics can be imported into Amazon QuickSight, for visualization and further insights.

4a. Amazon API Gateway invokes an AWS Lambda function with logic to retrieve data requested by the client applications from Amazon DynamoDB.

4b. Amazon SNS triggers an email notification for client applications.

4c. Client applications can visualize the data in Amazon QuickSight.