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Aim: Create a small dashboard application to be deployed on cloud. Different publisher devices can publish their info and interested application can subscribe.

Theory

① IOT platform

- The IOT platform are suites of components these help to setup and manage the internet connected devices.
- A person can remotely collect data, monitor and manage all internet connected devices from a single system
- There are a bunch of IT platforms available online but building an IOT solution for a company is all depend on IOT platform host and support quality.

② IOT cloud Platforms

1. Kaa IOT platform
2. Site where : Open platform for IOT
3. Thing Speak : An open IOT platform with MATLAB analysis.
4. Device Hive : IOT made Easy.
5. Zetta : API - first IOT Platform

③ Kaa - Features

1. Manage unlimited no of connected devices
2. Perform A/B service testing
3. Collect and analyze sensor data
4. Perform real time device monitoring
5. Create could service for smart phone
6. Set up cross device interpoerability.

④ Site where Features

1. HBase for non-relational data store
2. Run any no of IOT app on single site
3. Default Data base storage in Mongo DB
4. grafna to visualize Site where data
5. Connect device with MQTT, AMQP, Stomp and other protocol.
6. Integrate third party integretion framework such as Mule Any Point

⑤ Thing Spoak Features

1. Collect data in private channels
2. Share data with public channel
3. RESTful and MQTT APIS
4. Event Scheduling
5. App integration
6. Worldwide community

⑥ Devicehive Features

1. Directly integrate with Alexa
2. Visulization dashboard of your choice
3. Connect any device via REST API, WebSockets or MQTT
4. It comes with Apache Spark and spark Straming support
5. It allows running batch analytics and machine learning on top of your device data.

⑦ Zetta Features

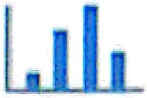
1. Built around Nodejs, REST, WebSocket and Flow based "reactive programming"
2. Supports wide range of bacher boards
3. Zetta allow you to assemble, smartphone apps and cloud apps.

⑧ Things Speak Apps

Analytics

MATLAB Analysis

Explore and transform data.



MATLAB Visualizations

Visualize data in MATLAB plots.

Plugins

Display data in gauges, charts, or custom plugins.

Actions

ThingTweet

Connect a device to Twitter® and send alerts.

TweetControl

Listen to the Twitterverse and react in real time.

TimeControl

Automatically perform actions at predetermined times with ThingSpeak apps.

React

React when channel data meets certain conditions.

TalkBack

Queue up commands for your device.

ThingHTTP

Simplify device communication with web services and APIs.

Conclusion

Thus we have designed small application using thingSpeak