ARTIK 1

2017.05
Prepare for ARTIK
• ARTIK cloud developer page
  https://developer.artik.cloud/

• ARTIK cloud my page
  https://my.artik.cloud/

• Let’s explorer these sites in class.
Sign up account

Welcome to My ARTIK Cloud!

My ARTIK Cloud is a place where you can connect and manage all the devices you own.

ARTIK Cloud supports a wide range of devices
After connecting your devices, you can
- Control your devices with Rules
- Visualize and export device data.

SIGN IN Don’t have an account? SIGN UP

Sign Up to ARTIK Cloud

Full Name
Full name

Email
Email

Please choose a password that contains:
- at least one uppercase letter

Sign in with Samsung

Sign in with Google

Sign in with Naver
Register your devices

- Register your sensor devices

- SmartThings devices can be register as following webpage. https://www.artik.io/blog/2016/04/smartthings-meets-sami/

- You can make or define your own device. You-defined devices also can send any data or listen action.

- Your ARTIK cloud monitor your devices when they are registered on cloud.
ARTIK related terminology
• **Message**
  – Data in ARTIK system is stored in a message.
  – There are two message type. One carries only data, and the other carries actions.
  – Each message is identified by some metadata: device ID, user ID, application ID.
  – We can query data per device, per user, per application.

• **User**
  – User is defined on user creation. (Sign on)
  – An user can manage his/her devices and data from those devices.
  – User can assign the permission of his data to applications.
Terminology

• Device
  – Any source of data in ARTIK is called a device.
  – Devices can be sensors, applications, services, etc.
  – One user can own multiple devices.
  – Devices make data and send message to store that device into ARTIK cloud.
  – A device has its unique device ID, and also has device type (Category).
  – Your own device and device type can be created.
  – Each device type has its own manifest.

• Application
  – Concept of services.
  – An application can request data from user’s cloud. And can use it.
  – Of course application can send data to cloud.
Terminology

• **Manifest**
  – Manifest defines which data will be collected by a device.
  – It describe the structure of the data.
  – When a device send message as String form, manifest parse the string and store it on ARTIK cloud.

• **Action**
  – Action is a specific type of ARTIK message that sends a command to a device.
  – When a device receive action, that device analyze that action, and do something as it already defined.
What can ARTIK do?
Collecting and Storing data

User 1, device 1, 21:00, -data-
User 1, device 2, 20:00, -data-
User 1, device 1, 19:00, -data-
User 1, device 3, 18:00, -data-
User 1, device 3, 17:00, -data-
User 1, device 2, 15:00, -data-
User 1, device 1, 12:00, -data-
User 1, device 4, 11:00, -data-
Querying data

ARTIK cloud

REQUEST

MSG

PERMISSION

User 1

Device 1

Device 2

Device 3

Device 4

User 1, device 1, 21:00, -data-
User 1, device 2, 20:00, -data-
User 1, device 1, 19:00, -data-
User 1, device 3, 18:00, -data-
User 1, device 3, 17:00, -data-
User 1, device 2, 15:00, -data-
User 1, device 1, 12:00, -data-
User 1, device 4, 11:00, -data-
Sending action

- User 1, device 1, 21:00, -data-
- User 1, device 2, 20:00, -data-
- User 1, device 1, 19:00, -data-
- User 1, device 3, 18:00, -data-
- User 1, device 3, 17:00, -data-
- User 1, device 2, 15:00, -data-
- User 1, device 1, 12:00, -data-
- User 1, device 4, 11:00, -data-
Event driven data/action

User 1, device 1, 21:00, -data-
User 1, device 2, 20:00, -data-
User 1, device 1, 19:00, -data-
User 1, device 3, 18:00, -data-
User 1, device 3, 17:00, -data-
User 1, device 2, 15:00, -data-
User 1, device 1, 12:00, -data-
User 1, device 4, 11:00, -data-
APP is also a device

ARTIK cloud

User 1, device 1, 21:00, -data-
User 1, device 2, 20:00, -data-
User 1, device 1, 19:00, -data-
User 1, device 3, 18:00, -data-
User 1, device 3, 17:00, -data-
User 1, device 2, 15:00, -data-
User 1, device 1, 12:00, -data-
User 1, device 4, 11:00, -data-

User 1
Device 1
Device 2
Device 3
Device 4

App

Action

Msg

Msg
Overview

ARTIK cloud

- DATA
- REQUEST
- ACTION

Device 1
Device 2
Device 3
Device 4

App 1
App 2
App 3

Shared repository Management tool
If you are urgent...
• Making your own device and connect with your application
• https://developer.artik.cloud/documentation/tutorials/how-to/

Reference

• Tutorial for using ARTIK SDK (In Java)
• https://github.com/artikcloud/tutorial-java-sdksample
THANK YOU!!!