

Internship in Japan 2019

Program Report

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Preparation Before Arriving Japan

1. Japan Visa Information - We take two months in doing this research. So, we gonna do a Japan Visa for living in Japan.
2. Medical Checkup - Shibaura has a form to checkup your health before you arrived Japan.
3. Travel Insurance - To make more confidence in traveling.
4. Currency Exchanging - I have exchanged THB to JPY for spending in Japan.
5. Air Ticket - We buy a ticket from Airasia X airline, Flight XJ602 and some add-on (luggage loading 15 KG.)

Arriving Japan

In 31st May 2019. We went to Japan by flight no. XJ602 of Airasia X Airline at 4.00 a.m., Don Mueang airport and arrived Narita airport, Tokyo, Japan in 13.00 a.m. (Timezone+9) in a same day. We took a Skyliner-38 Train to Nippori Station and changed to Yamanote line to go to Shinjuku to checked-in to a shared house. After we checked-in, we went to Nishiarai Daishi by the Yamanote line from Shinjuku to Akihabara and change to a Hibiya line to Nishiarai Station. We arrived to shared house at 9 p.m.



Accommodation

We lived in Sakura House Nishiarai Daishi that far from Shibaura Institute of Technology Toyosu campus. We can reduce our expenses because our shared house was near the supermarket that the price was very cheap and we did a PASMO (IC Card) for spending in more store, but the main was to took the train from Nishiarai to Toyosu that was very far from both.

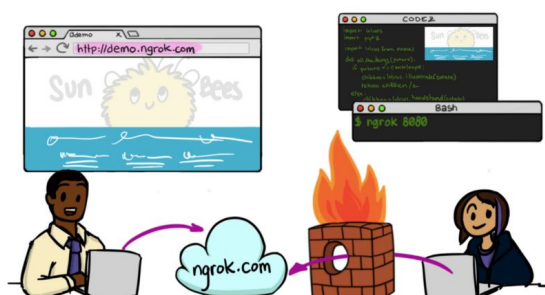
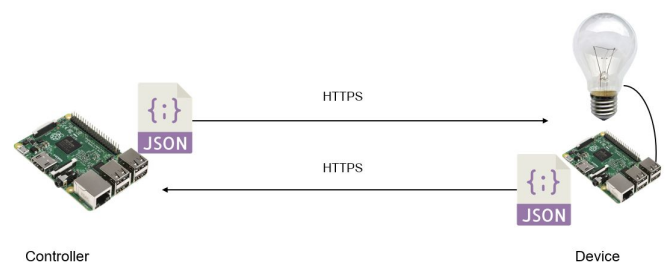


Experience on Distributed Software System Lab.

We met Prof. Hiroaki Fukuda and our research is to control the device inside a house in anywhere and anytime on earth via internet. But the main problem is we cannot access the private network from outside that is public network because NAT firewall will not let you come inside because it doesn't know you.

In this research we use 2 Raspberry Pi 3 to connect together by one is a controller and the other is a device that we will control. But the problem that we said on top, you cannot connect device via public network.

Connect to device



So, we use NGROK to communicate them with the easy idea "If you cannot go inside, the inside must go outside and communicate"

```

turnOnDevice() {
  axios
    .post(ngrokconfig.path+"/send/sendMessage", {
      url: ngrokconfig.url+":8080?action=",
      action: "on"
    })
    .then(response => (this.openInfo = response.data));
  this.img_path = "/Lightbulb_on.png";
},
turnOffDevice() {
  axios.post(ngrokconfig.path+"/send/sendMessage", {
    url: ngrokconfig.url+":8080?action=",
    action: "off"
  }).then(response => (this.turnoffInfo = response.data));
  this.img_path = "/Lightbulb_off.png";
},
disconnectDevice() {
  this.turnOffDevice();
  axios
    .post(ngrokconfig.path+"/find/disconnect", {
      url: ngrokconfig.url+":8080/connect"
    })
    .then(response => (this.disconnectInfo = response.data));
  alert("Your device has been disconnected.");
  this.info = null;
}

```

NGROK help us to send some data of two side and send to the destination and we build a simple web application and mobile application to be a data sender that is a command to interact with the device like "turn on or turn off"

Cultural Awareness and Adaptability



We learn some Japanese Culture from our laboratory friends and they welcome us with friendly and kind. They and professor had welcome party for us.

and the soft skill that I have received is to work with a team cause in a project has many part to do if we don't help together. Absolutely we can't success the project.

