Indriya2 Tutorial

https://indriya.comp.nus.edu.sg/

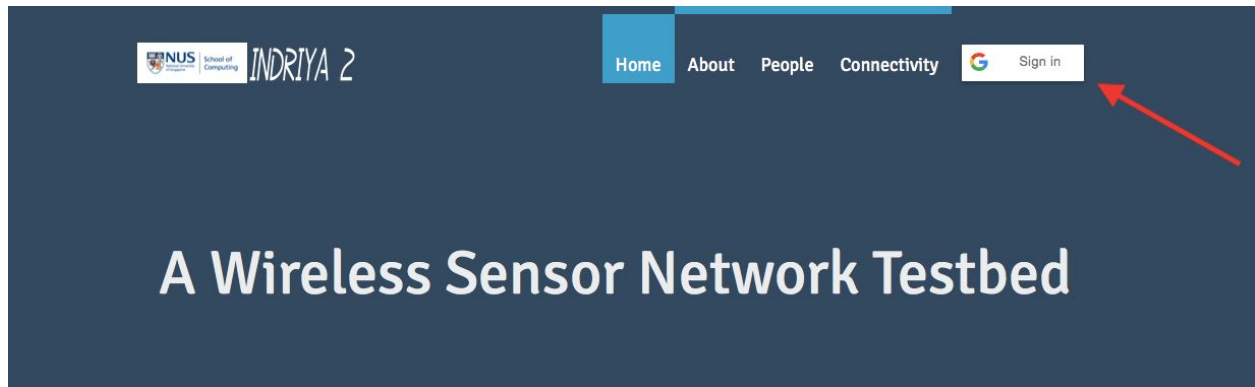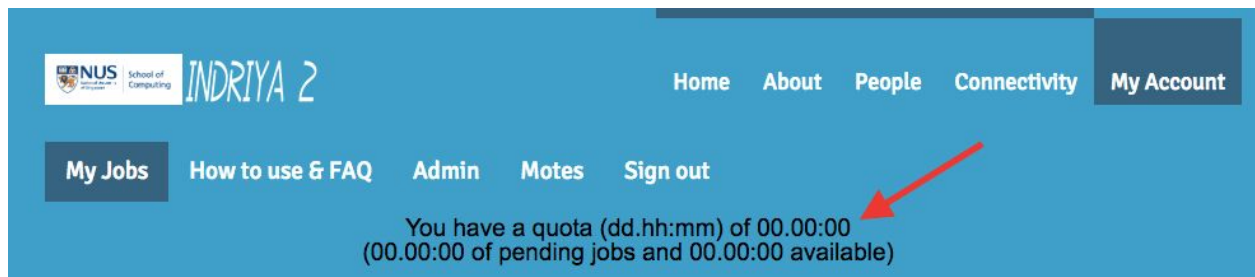## 1. User Account:

- Use your google account to sign in.

- After signing in, you will receive an email with your MQTT credentials. Note your MQTT credentials as you will use it later in Sec. 4.
- You may notice that your quota is currently 0, as your account is not activated yet.

- To activate your account, kindly reply to that email with the required details.
- Once your account is activated, you can see that your quota is upgraded to 30 minutes. This quota is renewable, once your running jobs are done the quota will be returned.
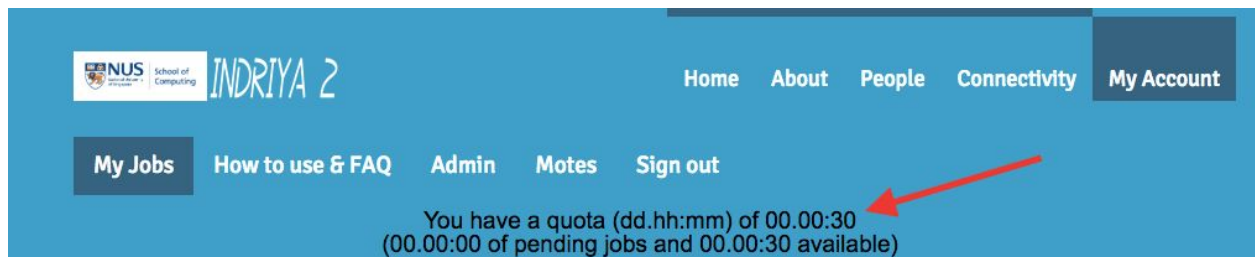
- Now, you can create and schedule jobs as described in Sec. 3 and Sec. 4, respectively.
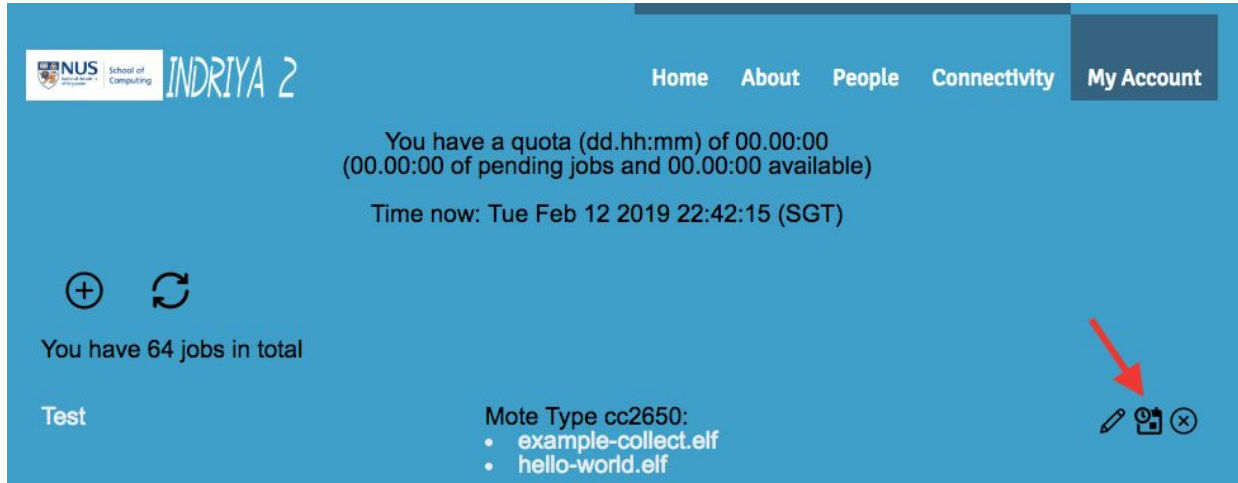
1. Job Creation:

- Click on the encircled plus sign ⊕ to add a new job.
- Enter the "**Job name**" and select the "**Mote Type**". We have two types:
  - For TelosB: select the **.sky** file(s) generated during compilation of your TelosB program(s). Then click "**Next**".
  - For SensorTag: select the **.elf** file(s) generated during compilation of your SensorTag program(s). Then click "**Next**".
- Select the binary file and the mote(s) (based on Mote id) on the testbed which you want to run your program. You can select all. Then click "**Add Association**". You need to associate all the uploaded file(s) to the mote(s).

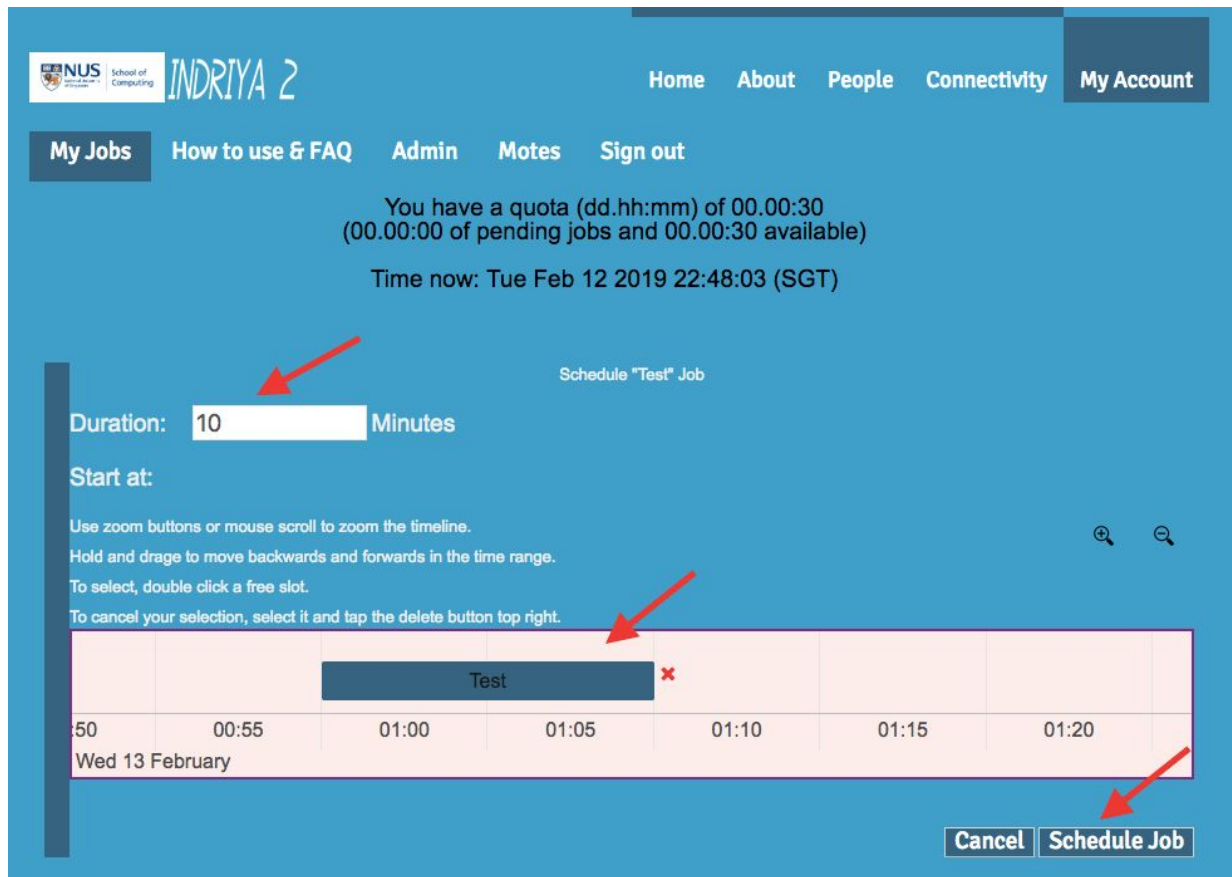- You can add the job by clicking the "**Add Job**" button.

2. Job Scheduling:

- You can now schedule the job to run on the testbed by clicking the schedule button next to the desired job.

- Choose the duration, minimum 10mins, and time to schedule the job. The click on "**Schedule Job**".

3. Job Results:

- Real-time: during the experiment, you can subscribe to the MQTT server, using the command "**mosquitto_sub -h indriya.comp.nus.edu.sg -t '#' -u email -P password -p 8080 --catfile cacert.pem**", to retrieve the data generated by the Indriya2's motes' serial output. Note that the password is returned to you after your first email login (MQTT credentials). You can fine the "**cacert.pem**" file attached on the email sent from the testbed once signed in.
- Offline: at the end of the experiment, you click on "**Download**" to download the zip file that contains all the data generated during your experiment.