CAE Research Project Meeting Minutes

8/26/2022

- Participants
  - Dr. Waleed Farag (PI)
  - Dr. Soundararajan Ezekiel (Co-PI)
  - Dr. Xinwen Wu
  - Dr. Jino Ramsen
  - Emily Himes
  - Hector Linarez
  - Meghan Schlipp
  - Nathan Metzger
  - Sky Semone
  - Zach Keyser
  - Zaryn Good

- Meeting started at 6:30 pm
- Unanimously approved minutes for meeting on August 19th, 2022

Main Points

- Data will be downloaded via CSV file
- Current goal: connect all sensors to Thingsboard
- Then use collected data for algorithms from phase one
- If data can be successfully visualized via Thingsboard, all that's left to do in this part is interfacing the other sensors
- Dr. Ezekiel
  - Has appointed Drew as project lead and Emily as sub lead
  - Sent email about AC repair in 305; work order has been submitted
  - Wi-Fi issue will be resolved by Hector's work with IT department
  - Requests that there always be at least one student in 305 most of the time; requests access to a list of students' hours and when they'll be able to be reached in 305
- Dr. Wu
  - Encourages project progress, suggests having a meeting from 305 to display what work's been done (hardware, Thingsboard, etc.); it would be good to report this progress to the sponsor agency
    - Sometime next week?
- Hector:
  - Confirms that Arduinos can be connected to Wi-Fi
  - Confirms that hard drive can be provide, however help desk ticket must be submitted by faculty member
  - SSD card can be bought new, as well
- Dr. Ramsen:
  - Currently working of list for second phase
    - Extension of components

- o Intends to send more information over the weekend; can allocate more tasks to students
- Emily:
  - o Reminds everyone to make sure they use the [When2Meet link](#) provided in the email sent by Drew to list their availability
  - o Requests creation of an IUP email address for IoT
    - Can be used to sign up for Thingsboard
    - Can have permission to create Microsoft Teams, which would greatly help with organization and communication
  - o Update on pushing data to Thingsboard:
    - RGB sensor produces readings
    - Arduino can connect to Wi-Fi
    - Was able to get a start on connecting sensor to Thingsboard, will need to work on representing data and creating dashboards

Tasks:

- Drew:
  - o Continue overseeing tasks as project lead
  - o Receive work from Nathan
  - o Work on setting up Teams
- Emily:
  - o Continue to work with pushing data to Thingsboard
    - Loop readings
    - Create different dashboards on Thingsboard
  - o Switch to professional (Maker) version of Thingsboard
    - Can start trial; after that it's ~$10/month
  - o Work on setting up Teams
- Sky:
  - o Help Emily with the above
  - o Assist with hardware
- Nate:
  - o Can pop in during lunch breaks
  - o Can give tasks to Drew
- Zaryn
  - o Finalizing work from first phase
  - o Will work to integrate self back into project
- Hector:
  - o Oversee Wi-Fi connectivity for Arduinos
  - o IT work
  - o See that help desk tickets are submitted
  - o Work with IT to obtain an IUP email for the IoT group
    - Must have permission to create Microsoft Teams
- Meghan, Zach
  - o Brush up on data analytics, [the IoT project,](#) [Thingsboard documentation](#)

- o Feel free to reach out with any questions
- o Await docs and more onboarding information as they're created

Adjournment at 7:10

Next meeting will be held on Friday, September 2, at 6:00 pm via Dr. Farag Zoom room