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
Intends to send more information over the weekend; can allocate more tasks to students

Emily:
- Reminds everyone to make sure they use the When2Meet link provided in the email sent by Drew to list their availability
- 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
- 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:
- Continue overseeing tasks as project lead
- Receive work from Nathan
- Work on setting up Teams

Emily:
- Continue to work with pushing data to Thingsboard
  - Loop readings
  - Create different dashboards on Thingsboard
- Switch to professional (Maker) version of Thingsboard
  - Can start trial; after that it’s ~$10/month
- Work on setting up Teams

Sky:
- Help Emily with the above
- Assist with hardware

Nate:
- Can pop in during lunch breaks
- Can give tasks to Drew

Zaryn
- Finalizing work from first phase
- Will work to integrate self back into project

Hector:
- Oversee Wi-Fi connectivity for Arduinos
- IT work
- See that help desk tickets are submitted
- Work with IT to obtain an IUP email for the IoT group
  - Must have permission to create Microsoft Teams

Meghan, Zach
- Brush up on data analytics, the IoT project, Thingsboard documentation
○ Feel free to reach out with any questions
○ 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