

Team GR Contract

General Info

- Team Name: GR
- Team Member: Gabriel Rodriguez-Padilla (rodrigg2@mail.uc.edu)
- External Advisor: Peter Kroeger (peter14mail@gmail.com)

Proposed Meeting Schedule

Every Friday at 1PM, my external advisor and I will meet via Teams to review any new or updated documentation. This will allow me to get a second opinion from my advisor where I can make any recommended improvements. We will also cover any new code committed to the project repository to monitor project progress and ensure the codebase's quality. Additionally, some in-person meetings may be scheduled to review some of the project's hardware advancements. These in-person meetings will likely occur on a day when I have class on-campus.

Project Focus

The focus of this project will be about creating an IoT data aggregation solution. The main goal behind developing such a solution is to showcase how data pipelines made in-house can be more affordable and extensible than other similar solutions on the market. In this case, the pipeline will collect temperature and humidity data throughout multiple (potentially simulated) facilities through the usage of microcontrollers such as the ESP32. This data is then aggregated and stored in a central, company-wide database. The data from the database can then be queried and downloaded for analysis using a headless API. Such a project would allow me to showcase most of the skills I have learned from my co-ops and internships thus far and would be a great conclusion to my undergrad experience.