

## The EID SuperProject

Project 4, 5, and 6 make up the Semester SuperProject for EID.

- Project 4 is a design exercise for the SuperProject (100 points) (due 11/6)
- Project 5 is an interim report on the SuperProject construction (50 points) (due 11/20)
- Project 6 is the final SuperProject delivery (100 points plus bonus for project quality) (due 12/11)

## Project 6 – SuperProject Delivery and Demo

### Deliverables

Project Assessment Report (as a PDF included in the Repo)

Your project assessment report PDF will include the following items:

- Title of Project
- Names of Team Members
- Final System/Architecture Diagram and Statement
- Project Deviation Statement
- Third-party Code Used Statement
- Project Observations Statement

#### Final System/Architecture Diagram and Statement

This should be a version of your Project 4 architecture diagram or a new system diagram that shows what elements talk to what, and what communication protocols are in use. The diagram and/or the accompanying text statement should give a full picture of what the system does at the time of submission

#### Project Deviation Statement

This is a text and/or bullet item element of the report that details how the delivery has changed from what was designed in Projects 4 or 5. It should highlight any missing features, any added features, or any features that don't work as originally intended. If your system exactly matches your system described in Project 4, this may be a brief entry.

#### Third-party Code Used Statement

This is a bullet item list of all third-party tools, tutorials, libraries, or other code that you are using to develop your project that you and your team did not write. The list should include a URL or other citation that tells where the item came from. Standard Python or Node.JS libraries need not be called out unless they are of particular interest to the structure of the system.

#### Project Observations Statement

This should be a bullet item list of at least three issues (you can write more) that went better than expected, worse than expected, or differently than expected as your team developed the project.

### Project Code Submission (as a URL for a GitHub Repo)

All code developed, including any AWS elements such as Lambda code or other configuration that can be captured, should be gathered into your GitHub repository.

The code should be yours and your team's work.

- Cite any sources for any Code from the Web; should include the URL of the resource you took it from
- You may not directly use code from other teams, although they may give you advice or suggestions
- If someone (students or class staff) helps you on part of your code, give credits in comments and the README and identify which code was provided
- Even though this is a prototype, I'd like to see well-structured Python and Node.JS code
- The project must run natively on an RPi3 development system (or alternate identified platform)
- The code must be well commented
  - A typical comment template can be copied (forked) from example.py in my GitHub repo at <https://github.com/brmj9/eid-fall2018>
  - Comment/Docstring header for each file identifying the author and file description
  - Comments/Docstrings at any functions or classes including description, input, output
  - Comments for purpose of data structures or complex transactions (usually this is a why and not a how)

Turn in a GitHub repo link (one submission per team) containing your project with

- Any code files needed to run the project (not including standard libraries)
- A README.md (markdown text file) including:
  - Title (i.e. EID Project 6)
  - Names of the developers/students on your team
  - A section called **Notes and Installation Instructions**
    - Provide any special instructions to the graders for assessing your code
- Remember to include your team's Project Assessment Report

### Grading

Project assessment report (40 points)

- Title of Project and Names of Team Members (required)
- Final System/Architecture Diagram and Statement (10 points)
- Project Deviation Statement (10 points)
- Third-party Code Used Statement (10 points)
- Project Observations Statement (10 points)

Well commented and structured code (40 points)

- Review of all Python, Node.JS, HTML, and AWS elements in the repo
- Review of repo README

System Demonstration (20 points plus bonus of 5, 10, 20 points for effort and execution)

- Demonstrate code and system elements to Bruce or SAs
- Bonus worthy projects will be identified during demonstrations – 2 projects will get 5 points, 2 will get 10 points, 1 will get 20 points – based on demonstrated effort and execution and decision of class staff

- Project is due Wednesday 12/11 at start of class
- 15% Grade penalty if turned in late (accepted only until Friday 12/13, then 0 points awarded)
- Students are responsible for attending a demo slot prior to the final exam, or demonstration grade will be 0