

SE 491 – sdmay20-06

ENGINE DATA ANALYTICS TOOL

Week 10/11/19 Report

10/5/19 – 10/11/19

Client: Collins Aerospace

Faculty Advisor: Lofti, Ben-Othmane

Team Members:

Zak Frisvold - Team Leader

Thomas Haddy - UI/UX Engineer

Ryan Radomski - QA Tester

Will Sartin - Meeting Runner

John Powen - Scrum Master

Weekly Summary

We have received example data to look at and use for our data parser. We are still working out how we want to parse it and what our analyzer will look like. We also discussed having remote meetings instead of renting out a room, since it has been difficult to get a consistent room.

Past Week Accomplishments

- Discussed the pro's vs con's of programming languages. - Everyone
 - Researched which language is going to be best or what they want
- Met with Client and received example data - Everyone
- Created a schedule that will allow everyone to complete tasks towards the project. - Everyone

Pending Issues.

- Get out NDA, IP Forms.
- Get complete formalized document on the requirements from the clients

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Zak Frisvold	After receiving a sample datasets from Collins, I began looking into and developing a parsing algorithm for these files.	6	30

Thomas Haddy	After receiving the requirements from Collins, I researched how to parse the ARINC 429 data set. I found a paper called "ARINC 429 Bus Interface". This will help make sense of what each bit means from the 32 bit value.	6	31
Ryan Radomski	Delved into ARINC 429 cursory information. Later, developed prototype parse and collected data specific to the engine data inputs. Discovered a meta format specific to our input.	7	32
Will Sartin	Reading up on ARINC 429, the standard they use for data transfer in avionics, and working on implementing data structures to hold the data.	5	29
John Powen	Reviewed the information received from collins. Started preliminary work for the program.	5	29

Upcoming Plans for next Week

- Receive data and make initial steps for groundwork of the project.
- Create stories and tickets.
- Research (general research into framework options, parsing ARINC 429, other items that need more information so the group can progress).

Summary of Weekly Meeting with Sponsor

We were shown data recorded from a C-130, and they discussed how they want it to have a better aesthetic. They gave us some sample data, as well as a document going over some information on it. Collins expressed that they want an efficient parsing and analysis of the file.