

SE 491 – sdmay20-06

ENGINE DATA ANALYTICS TOOL

Week 2/27/20 Report

2/28/20 – 3/12/20

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 each accomplished our individual tasks and tickets for the two weeks. We are moving into integration phase where we are working to map the data from the file to our Ivcharts library. Front end is still making progress in interactive elements of the UI.

Past Week Accomplishments

- Parser is exporting specific data elements from the given ARINC_429 csv file.
- GUI development has moved forward to an interactive main screen.

Pending Issues

- Getting more data for simulations (ARINC, MIL-STD-1553, etc). - Carried from last week, waiting on Collins Team
- Prepping for GUI demo with clients post spring break.
- Need an oracle from Collins Aerospace to verify that the data we are generating is create.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Zak Frisvold	Implemented liveChart to use data from parsed .cds file and present the engine torque in a graph.	8	44

Thomas Haddy	Created the Export View and gave basic functionality for the buttons. Made changes for the TrendAnalysisView to make the UI/UX look cleaner and easier to navigate.	10	38
Ryan Radomski	Created more XML artifacts for ARINC-429 parsing specification. Worked on transforming these artifacts into C# parsing code.	8	36
Will Sartin	Implemented the deciphering of specific data elements from the ARINC_429 given data. This will be so that Zach can display certain data via a graph, or on exporting for other visualization. Worked with Ryan on restructuring the backend to become modular by specifying a better interface.	9-9	53
John Powen	Developing popup design and interfacing for the application. Continued work on developing MVVM interaction in the application.	8	56

Upcoming Plans for next Week

- Test Ivcharts with real data from the data parser (integration).
- Responsive Views, interaction throughout the application.
- Responsive Export File pop-up.

Summary of Weekly Meeting with Sponsor

We shared documents they requested to better explain our interface. We also have made steps towards producing the specific deliverables requested. Client said they are going to share their deciphered data to ensure that we are correctly parsing the files, and assured us that that they will give us some bigger files for some stress testing.