SE 491 – sdmay20-06 ENGINE DATA ANALYTICS TOOL Week 2/27/20 Report

2/14/20 - 2/27/20

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 lvcharts library. Front end is still making progress in interactive elements of the UI.

Past Week Accomplishments

- Parser has been refined and cleaned to be shipped to a closer stage to production.
- Moved Front-end design to MVVM pattern.

Pending Issues

• Getting more data for simulations (ARINC, MIL-STD-1553, etc). - Carried from last week, waiting on Collins Team

Individual Contributions

| Team Member | Contribution | Weekly Hours | Total Hours |
|--------------|--|--------------|-------------|
| Zak Frisvold | Worked on creating liveChart graphs and began implementing a graph with real data | 8 | 32 |
| Thomas Haddy | Created more screensketches and views for the front-end. Small changes made to the | 8 | 28 |

| | workflow and layout of the application. | | |
|---------------|--|-----|----|
| Ryan Radomski | Worked on finding a formal grammar to further parse the XML ARINC-429 specification into a machine readable copy suitable for building parsers. | 8 | 28 |
| Will Sartin | Refactoring work primarily on backend C# parser. Met with Ryan and John to explain a problem involving transposing the ARINC data. Refactored C# data structure to meet with new ideas of representation. Implemented tests, and working with a compression of the data structure for a simple Data Access Object (design pattern) for the front end | 7-9 | 35 |
| John Powen | Developed MainView, TrendAnalysisView, and made move to use MVVM pattern inside of application. | 8 | 40 |

Upcoming Plans for next Week

- Test lvcharts with real data from the data parser (integration).
- Responsive MainView.
- Responsive Export File pop-up.

Summary of Weekly Meeting with Sponsor

Met with client on 2/20/20 only, Collins Team could not meet the week before due to prior commitments. We discussed more of our application UI, port of data parser to C#, and some design ideas that they had. Design ideas have been incorporated into screen sketches in our screen sketches folder.