



01/29/2024

This Semester has been going pretty slowly, between my health and general motivation for the team. I think this is in large part due to a lack of understanding regarding Systems Modelling.

Re-Model Stakeholder Needs.

While Stakeholder needs may be "raw", they need to be analyzed and refined in other cells of the Problem domain model.

So I've been looking at how to attribute the sources to the Stakeholder needs, and it looks like we really are only using source [2] and [4] from the confluence.

After a discussion with the team, modifying the Stakeholder needs is out of scope. We need to push forward in our modelling effort and FMEA Analysis.

02/07/2024

Attempted functional analysis for
created mission use case

Conceptual Subsystems:

Using the system context diagram,
you can identify the High Level Functions
Object Flows for the system.

From MASC V2...

We receive a lot and provide a lot
~~in the form of signals~~
which the BDD and IBD interpret as packages



02/07/2024

OK, essentially we determined that the nature of the Conceptual Subsystems Diagram is to demonstrate the Satisfactory Allocation of Subsystems to address Functions that were identified via the Use Cases. The approach we took to accomplish this involved creating a BDD such as in Katherine's Methodology, to better identify things we would propose in our solution. This is a less correct way of accomplishing the task, but allows for design flexibility. A more "Lean" approach would involve doing the Subsystem Communications to create Subsystems as they are needed, more functional

02/13/2024

Meeting with Katherine

Today we met with Katherine to go over our model, and she really liked it!

Aside from some comments on our organization, she helped us learn how to establish model traceability between stakeholder needs, use cases, functions, and initial requirements.

From our discussion we developed quite a to-do list

- 1.) Ensure structure is complete at the component level
- 2.) Complete activity diagrams at the component level
- 3.) Ensure all the appropriate plugins are installed
- 4.) Make sure a safety and test planning analysis package exists in the model
- 5.) System-level component FMEA tables



02/14/2024 ♥

Today we had a working session to start making off the items Kathleen identified in the last meeting.

To do this we split into two groups. Walter and Clay started creating diagrams as categorization matrices to map stakeholder needs to different use cases and functions derived from the functional analysis. However, Luke and I started working on moving the functional analysis down to the component level. This mostly involved clarifying the data flow into-and-out-of the functions; and locating where allocated to the subsystems.

* Interesting, this process actually helped us realize we did not have an Environmental Control and Life Support Subsystem*

02/15/2024

I missed the FMEA and Review meeting today with Kathleen due to illness.