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Review Issues List

FR-I-6: Be more specific on how the cruise control will increase in speed from an acceleration input.

FR-I-7: The wording is confusing on what it means to turn off the set speed, but the cruise control system will stay on

SN-1: How is the sensor interacting with the CC system in a technical context? (what is handling the sensor updates?)

SN-2: When will/ how often the system log the time and data?

SN-4: What and how will an “approval request” look like?

EMS-1: Should the EMS be updating the speed every second? Or every time there is a change?

FR-O-1: Where in the vehicle will “visual feedback” be given? The dashboard, on the wheel, etc.

FR-O-1: Where will the logged data be saved? What are the protocols with the data once the cruise control has been shut off?

FR-O-4: Will there be visual feedback in the situation that an automatic shutdown has been activated?

SR-8,9: How will the 99.99% availability for the software and hardware be ensured?

SR-11: What are the protocols?

NF-R-1: How will reliability “without delay [for] 99.99%” of the time be ensured?

NF-A-1: How will the “99.99% availability” be ensured?

NF-S-1: Up to what kind of physical damage will the system be able to endure until it is shut down? If the EMS itself suffers damage, how will it communicate its defects to the cruise control?

UML Use Case 1:

- Should have a “Turn off cruise control” bubble that branches off the driver because it is mentioned in step 9 of the UML Use Case 1.

UML Use Case 2 :

6. Speed is continuously reported? Or speed is reported whenever there is a change in it? (ALSO used in #11 of UML Use Case 3 and #14 of 4.. Could be correct)

UML Activity Diagram

- Should be combining the two different UML Activity Diagram into one diagram
- Lacking in detail

CRC Index Cards

(7 errors) - Classes cannot be function names

--- (possible solution - change names)

Class-based Modelling does not show any relationship between the classes.

Review Report

During our report, we found that there were some minor errors in the wording of the requirements and some issues with how some of these requirements will be implemented in code and in the hardware. None of these errors, however, present any severe issues to our software and hardware, so we can move forward with our implementation once these errors are addressed.

Some key issues we need to address are our CRC Index Cards and our Class-based modeling. The classes for our index cards have to have a name change. But our class-based modeling needs to have a more drastic change; we need to show how the relationships flow between all of the classes.

In general, many of our diagrams may require more details for a more streamlined coding process.

We held our team review over a two-hour session with our team, led by our team leader. We found through this team meeting that we just need to address some minor details with specifications and details in our document, and there are no other major issues that need to be addressed.

Review Metrics

Total Errors Found

$$Err_{tot} = Err_{minor} + Err_{Major}$$

$$Err_{tot} = 18 + 8$$

$$Err_{tot} = 26 \text{ errors in total}$$

Error Density

$$Err_{tot} \div WPS = 26/29 = 0.90 \text{ errors per page}$$