SRS Review Notes and Comments

APCA-1: Team Pedestrian Safety System

November 26, 2012

Reviewer 1

* Confusing between Disable sensor, disabling system, and shutdown system
  + Go into more detail about the difference between the three
* 1.1
  + For the audience, we should include future developers
  + Need to clarify if sensor and brakes are subsystems or not
* 1.2
  + Issue with travel time
  + Some parts discussed are out of the scope of the project
    - Should they be included?
  + The terms “Imminent” and “Potential” are synonymous
    - Choose one
* 1.3
  + Abbreviations BBW and BA are not consistent
    - Choose one or the other
  + PCA abbreviation is not defined
  + Safety controller is used before its referenced
* 2.1.1
  + Question about if the “BBW then applies to all four brakes”
    - If it does not, changes need to be made throughout document
* 2.1.2
  + Elaborate more about the output the driver sees or hears
    - Nothing is mentioned about the sound alerts
* 2.1.3
  + Convert to meters
* 2.1.4
  + Discussion about waypoints and destination may be out of the scope of the project
    - Does it need to be mentioned?
* 2.1.5
  + More issues with information being out of the scope
* 2.1.7
  + Check 2.1.1
    - Go into a little more detail about the user interface and what will be on there
      * Audio output to the user
* 2.4
  + Legal constraints
    - Is there any other besides the brake lights?
* 2.5
  + Assumptions and scenarios are too specific
    - Be more vague and able to talk about different inputs
    - Can the sensors detect up to 40 meters?
* 2.6
  + Add more detail about what it may be able to do in the future
    - Can the sensors only detect up to 15 pedestrians?
    - Look at Section 1.2 for future features
* 3
  + Are the other subsystems necessary to explain?
    - Are they out of the scope?
  + Sound alert is not mentioned in the specifications
    - Is it necessary?
  + #11
    - How can the car slow down if the system has shut down?
* 4
  + Diagrams
    - Use more description and notation
    - Especially class diagram
      * Explain aggregation, inheritance, and abstract classes
    - Match label and variable names of systems and functions between diagrams
    - Since applyBrakes() is implemented, should there be a releaseBrakes()?
    - Is the *print()* function necessary to include
      * Only used for development purposes
    - Explain what “Opt” means in the sequence diagrams
* 4.1
  + Use Case
    - Use the term “User” instead of “Driver”
    - More questions about the subsystems
* 4.2
  + Class diagram should be figure 4.2.1 not 4.1.1
  + Everything with star is too technical
  + May want to add the technical terms to the definitions section
  + Notation is very c++ based
    - Be more general
    - Generic across all programming languages
* 4.4.1
  + State diagram
    - Add another state diagram
      * Shut down system
    - Make sure all the lines are labeled
    - Use the term “User” instead of “Vehicle”
    - Would be easier to follow if the states are grouped to disable
    - Used brake by wire instead of BBW
    - More naming issues
      * Be consistent
* 4.4.3
  + There needs to be a releaseBrakes() or doneBraking state
* 5
  + More consistency issues with abbreviations
  + Wording issue with the word “Imminent”
    - See Section 1.2
* 5.1
  + Include the version number of the latest flash plugin
* 5.2
  + Talk about the range of inputs that a user of the prototype can enter
  + Include units of the parameters talked about
* 6
  + Do NOT use Wikipedia as a source

Reviewer 2

* 2.1
  + Give a complete description of this section
* 3
  + Change the wording to “notify the driver and disable the system”
  + Do not go as in depth with the subsystems
    - Another issue about the scope of the project
  + Make sure the work tense is consistent

Professor’s General Comments

* Avoid saying “This document will do…”
* All sections/subsections need to have some introductory sentence saying what will be there
  + Not just straight to bullets
  + What will the reader see
* 90% of cases, when using “which”, you need to use “that”
* “If” clause, “then” clause
* Avoid using words like “very”, “all”, “any”
* All figures must have a figure label
  + Label is put beneath the figure
  + Figure 1.1.1: Caption
  + Before the figure, say “This figures will show you…”
  + Capitalize “Figure”, “Table”, “Section”
* Label of table put above the table
  + Table 1.1.1: Caption
* All events of state diagram should be operations on class diagram and messages on sequence diagrams
* Beginning of each subsection of UML diagrams
  + Explain diagram and give notation description
* Notation between abbreviations and names of classes?????