

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
  - o Go into more detail about the difference between the three
- 1.1
  - o For the audience, we should include future developers
  - o Need to clarify if sensor and brakes are subsystems or not
- 1.2
  - o Issue with travel time
  - o Some parts discussed are out of the scope of the project
    - Should they be included?
  - o The terms “Imminent” and “Potential” are synonymous
    - Choose one
- 1.3
  - o Abbreviations BBW and BA are not consistent
    - Choose one or the other
  - o PCA abbreviation is not defined
  - o Safety controller is used before its referenced
- 2.1.1
  - o 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
  - o Elaborate more about the output the driver sees or hears
    - Nothing is mentioned about the sound alerts
- 2.1.3
  - o Convert to meters
- 2.1.4
  - o Discussion about waypoints and destination may be out of the scope of the project
    - Does it need to be mentioned?
- 2.1.5
  - o More issues with information being out of the scope
- 2.1.7
  - o 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
  - o Legal constraints
    - Is there any other besides the brake lights?
- 2.5
  - o 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????