Problem Statement and Goals Software Engineering

Team #6, Six Sense Omar Alam Sathurshan Arulmohan Nirmal Chaudhari Kalp Shah Jay Sharma

Table 1: Revision History

Date	Developer(s)	Change
	Name(s) Name(s)	Description of changes Description of changes
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1 Problem Statement

 $[\mbox{You should check your problem statement with the problem statement checklist.} --SS]$

[You can change the section headings, as long as you include the required information. —SS]

1.1 Problem

1.2 Inputs and Outputs

[Characterize the problem in terms of "high level" inputs and outputs. Use abstraction so that you can avoid details. —SS]

1.3 Stakeholders

1.4 Environment

[Hardware and Software Environment —SS]

- 2 Goals
- 3 Stretch Goals
- 4 Extras
 - 1. Price + Hardware Selection Report
 - 2. Usability Report

Appendix — Reflection

[Not required for CAS 741—SS]

The purpose of reflection questions is to give you a chance to assess your own learning and that of your group as a whole, and to find ways to improve in the future. Reflection is an important part of the learning process. Reflection is also an essential component of a successful software development process.

Reflections are most interesting and useful when they're honest, even if the stories they tell are imperfect. You will be marked based on your depth of thought and analysis, and not based on the content of the reflections themselves. Thus, for full marks we encourage you to answer openly and honestly and to avoid simply writing "what you think the evaluator wants to hear."

Please answer the following questions. Some questions can be answered on the team level, but where appropriate, each team member should write their own response:

1. What went well while writing this deliverable?

Omar Alam: I think all members of our team were proactive and genuinely interested in the project presented which made it easier to delegate and expect high quality work.

Kalp Shah: I think we all had a good understanding of the project after discussing it in detail during the write up for the development plan. Due to this, everyone was able to quickly contribute to the problem statement and goals without much difficulty.

2. What pain points did you experience during this deliverable, and how did you resolve them?

Omar Alam: Since the project idea incorporates glasses with displays that are visible to the user, we had to do a significant amount of research to figure out if it was feasible in the time that we have. We resolved this by developing a contingency plan that would allow us to still allow us to develop the core algorithms without the display glasses.

Kalp Shah: I think we did end up spending a lot of time exploring the scope and feasibility of the project while writing the development plan which caused us to spend less time writing the problem statement and goals. We ended up writing it all on the day before the deadline which was not a problem (as mentioned above - we already knew what to write), but cause a bit of stress.

3. How did you and your team adjust the scope of your goals to ensure they are suitable for a Capstone project (not overly ambitious but also of appropriate complexity for a senior design project)?

Omar Alam: My team and I spent a significant amount of time researching the feasibility of the project. Since the team does not have much experience with signal processing, we decided to consult with Dr.

Mohrenschildt to get his opinion on the project. He provided us with valuable feedback on how to constraint our project goals to ensure that we can complete the project in the time we have.

Kalp Shah: A lot of what we did for defining the scope of the goals was done through research and consulting with Dr. Mohrenschildt and Dr. Smith. Dr. Mohrenschildt helped us better understand the expected time and resource costs of the project since he has experience with similar work and confirmed with us that our scope is neither too simple nor too ambitious for a Capstone project.