Problem Statement and Goals Software Engineering

Team 24, Cowgnition
Sylvia Kamel
Rosa Chen
Karim Elbasiouni
Claire Nielsen
Safwan Khan

Table 1: Revision History

Date	$\mathbf{Developer}(\mathbf{s})$	Change
	Name(s) Name(s)	Description of changes Description of changes
•••	•••	

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

- 1. Build a user interface (e.g. a dashboard) that displays attributes and behaviours of each cow in the group and displays aggregated information about the entire group of cows
- 2. The system takes in video feed from more than one device
- 3. The system allows videos from smart glasses to be an input
- 4. The system runs in an offline environment

4 Extras

[For CAS 741: State whether the project is a research project. This designation, with the approval (or request) of the instructor, can be modified over the course of the term. —SS]

[For SE Capstone: List your extras. Potential extras include usability testing, code walkthroughs, user documentation, formal proof, GenderMag personas, Design Thinking, etc. (The full list is on the course outline and in Lecture 02.) Normally the number of extras will be two. Approval of the extras will be part of the discussion with the instructor for approving the project. The extras, with the approval (or request) of the instructor, can be modified over the course of the term. —SS]

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?

Safwan

When we were writing points for each section in this deliverable, it felt like we were mostly on the same page and similarly viewed most aspects. As a result, this made it easier for us to write points and make progress towards completing this deliverable. Moreover, as we were discussing and writing points for each section in this deliverable, it helped me to continue increasing my understanding of the project, especially the core problem and the system's environment.

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

Safwan

My pain point was trying to just understand the system's hardware and software environment, particularly internet connectivity. This was resolved by asking meaningful follow up questions and verbally confirming my understanding.

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)?