Problem Statement and Goals
Software Engineering

Team #12, Streamliners
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Table 1: Revision History

Date	Developer(s)	Change
Date1	Name(s)	Description of changes
Date2	Name(s)	Description of changes
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1 Problem Statement

[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

The McMaster Engineering Society (MES) organizes large-scale events such as Fireball Formal, Graduation Formal, and Pub Nights, often drawing several hundred attendees. Currently, registration, ticketing, waiver collection, and check-in processes are fragmented across multiple platforms (Google Forms, spreadsheets, Discord, Instagram, etc.). This lack of centralization increases the administrative burden on student organizers and creates a confusing, inconsistent experience for attendees.

Students struggle to:

- Access clear, consolidated event information.

- Register efficiently for events and related logistics (tables, buses).
- Receive timely updates or reminders.

Organizers struggle to:

- Manage ticket sales, waitlists, and attendee data in one place.
- Track accessibility/dietary requirements effectively.
- Minimize repetitive manual effort across multiple tools.

The absence of a centralized system reduces event memorability, increases missed opportunities, and wastes volunteer time that could be spent on event quality rather than administration.

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

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