

Hazard Analysis Software Engineering

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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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[You are free to modify this template. —SS]

1 Introduction

[You can include your definition of what a hazard is here. —SS] This document will contain the Hazard Analysis for EventHub. EventHub is a platform which provides the McMaster Engineering Society with the functionality to create and manage events, surveys and perform other administrative functions. It will allow both admins and users to interact with platform and register for events and complete surveys. For this Hazard Analysis we will be defining hazard as a potential risk situation which can result in or contribute to a mishap. The purpose of this document is to identify potential hazards and develop requirements and measure to help prevent or mitigate the risk posed by these hazards.

2 Scope and Purpose of Hazard Analysis

The purpose of this Hazard Analysis is to identify and mitigate potential hazards that could negatively impact the EventHub platforms. This includes both technical hazards relating to the design of the system as well as user interaction hazards.

3 System Boundaries and Components

[Dividing the system into components will help you brainstorm the hazards. You shouldn't do a full design of the components, just get a feel for the major ones. For projects that involve hardware, the components will typically include each individual piece of hardware. If your software will have a database, or an important library, these are also potential components. —SS]

4 Critical Assumptions

- Users will have stable Internet Access: We are assuming that the user will remain connected to the internet as it will be required for using our application.
- Users will use the system as intended: We are assuming that users will be not attempting to use the system maliciously and focus on the relevant use cases for this platform.

5 Failure Mode and Effect Analysis

[Include your FMEA table here. This is the most important part of this document. —SS] [The safety requirements in the table do not have to have the prefix

SR. The most important thing is to show traceability to your SRS. You might trace to requirements you have already written, or you might need to add new requirements. —SS] [If no safety requirement can be devised, other mitigation strategies can be entered in the table, including strategies involving providing additional documentation, and/or test cases. —SS]

6 Safety and Security Requirements

[Newly discovered requirements. These should also be added to the SRS. (A rationale design process how and why to fake it.) —SS]

7 Roadmap

[Which safety requirements will be implemented as part of the capstone timeline? Which requirements will be implemented in the future? —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. Which of your listed risks had your team thought of before this deliverable, and which did you think of while doing this deliverable? For the latter ones (ones you thought of while doing the Hazard Analysis), how did they come about?
4. Other than the risk of physical harm (some projects may not have any appreciable risks of this form), list at least 2 other types of risk in software products. Why are they important to consider?