

# Software Requirements Specification for Software Engineering: subtitle describing software

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## Revision History

Date	Version	Notes
Date 1	1.0	Notes
Date 2	1.1	Notes

# 1 Project Drivers

## 1.1 Purpose of the Project

### 1.1.1 User Business

*Insert your content here.*

### 1.1.2 Goals of the Project

*Insert your content here.*

## 1.2 Stakeholders

### 1.2.1 Client

The client for this project is the supervisor, Luke Schuurman. He is a member of the MES and has first hand experience planning and hosting events with the MES. As the supervisor he will play a crucial role by ensuring the project aligns with objective of the MES and integrate the platform seamlessly with existing systems. He will also provide us with feedback and guidance throughout the project and will help define the project requirements in this document.

### 1.2.2 Customer

Refer to client

### 1.2.3 Other Stakeholders

Irrelevant

### 1.2.4 Hands-On Users of the Project

**MES Executives and Council Members:** They will be utilizing this system to create and manage events, configure forms and surveys, monitor event data and generate data analytics reports. They can be characterized as primarily undergraduate students who value their time greatly. They aim to reduce the time taken to do administrative tasks as well as provide a better experience during MES events. Their experience with systems like this

can range from Journeyman - Master as they can be experienced in event planning and student engagement. There may be a slight learning curve to utilizing the new technology but these users have experience performing these functions.

**McMaster Engineering Students:** They will be utilizing this app to register for events, purchase tickets, sign waivers, check in at venues, and complete feedback surveys. They want to enjoy their university experience and connect with other students, They are also very busy and value their time greatly so are looking for an intuitive and straightforward user experience. Their general experience with systems like this is Journeyman as they may have used similar systems for other use cases.

**Other Students and Event Attendees:** This group includes non-engineering students, alumni, and invited guests who participate in large-scale MES events such as the Fireball Formal and Graduation Formal, which extend beyond the core engineering community. It could also include students and guests from other universities as well as industry which attend the engineering conferences that the MES helps host. They are generally looking for an easy and seamless experience registering and attending these events. Their general experience with systems like this is Journeyman as they may have used similar systems for other use cases.

### 1.2.5 Personas

1. **Matthew Cruise (Engineering Student):** Matthew is a 20-year-old second-year Mechanical Engineering student at McMaster University. He lives in a shared house near campus with two close friends. He enjoys attending MES events like pub nights and the Fireball Formal as a way to balance his heavy academic workload with some enjoyment and entertainment. He usually hears about events through word-of-mouth or social media and would prefer an easy and effortless way to find and register for events. Matthew is generally tech savvy and is comfortable using online platforms but doesn't want to be bothered by too many notifications and forms. He has many ideas on how he can generally improve his university experience but doesn't believe he has an outlet to convey them. For Matthew his priority is convenience as he wants to enjoy himself but doesn't want to spend too much time or



effort doing so.

2. **Adam Clooney (MES Executive):** Adam Clooney is a 22-year-old final-year Civil Engineering student who currently serves as VP Social on the MES. He is responsible for coordinating large-scale events like Fireball Formal, working closely with other council members to handle logistics, advertising, and student engagement. Adam is outgoing and enjoys bringing people together, but often feels the strain of balancing his role with academic responsibilities. He is proficient with common digital tools such as Google Drive, spreadsheets, and design platforms for promotions, but he's not highly technical. Adam appreciates structure and tools that keep things organized because he dislikes wasting time fixing errors or repeating work. He is motivated by the sense of accomplishment that comes from hosting a successful event and wants tools that help him stay on top of details.
3. **Margot Watson (McMaster Student):** Margot Watson is a 21-year-old undergraduate student in Political Science at McMaster University. Although she is not part of the engineering faculty, she often attends large MES-hosted events such as the Fireball Formal and other socials because many of her friends are in engineering. Margot lives in an off-campus apartment with two roommates and enjoys being involved in student life across faculties. She has a relaxed attitude toward technology since she uses her phone daily for social media and messaging but she prefers things to be straightforward and intuitive. With money, she is cautious, balancing tuition and living expenses, but she's willing to spend on experiences with friends. She is motivated by spending time with her friends and having good experiences to have a fulfilling student life.

### 1.2.6 Priorities Assigned to Users

*Insert your content here.*

### 1.2.7 User Participation

*Insert your content here.*

### **1.2.8 Maintenance Users and Service Technicians**

*Insert your content here.*

## **2 Project Constraints**

### **2.1 Mandated Constraints**

#### **2.1.1 Solution Constraints**

*Insert your content here.*

#### **2.1.2 Implementation Environment of the Current System**

*Insert your content here.*

#### **2.1.3 Partner or Collaborative Applications**

*Insert your content here.*

#### **2.1.4 Off-the-Shelf Software**

*Insert your content here.*

#### **2.1.5 Anticipated Workplace Environment**

*Insert your content here.*

#### **2.1.6 Schedule Constraints**

*Insert your content here.*

#### **2.1.7 Budget Constraints**

*Insert your content here.*

#### **2.1.8 Enterprise Constraints**

*Insert your content here.*

## **2.2 Naming Conventions and Terminology**

- **MES:** McMaster Engineering Society

### **2.2.1 Glossary of All Terms, Including Acronyms, Used by Stakeholders involved in the Project**

*Insert your content here.*

## **2.3 Relevant Facts And Assumptions**

### **2.3.1 Relevant Facts**

*Insert your content here.*

### **2.3.2 Business Rules**

*Insert your content here.*

### **2.3.3 Assumptions**

*Insert your content here.*

## **3 Functional Requirements**

### **3.1 The Scope of the Work**

#### **3.1.1 The Current Situation**

*Insert your content here.*

#### **3.1.2 The Context of the Work**

*Insert your content here.*

#### **3.1.3 Work Partitioning**

*Insert your content here.*

### **3.1.4 Specifying a Business Use Case (BUC)**

*Insert your content here.*

## **3.2 Business Data Model and Data Dictionary**

### **3.2.1 Business Data Model**

*Insert your content here.*

### **3.2.2 Data Dictionary**

*Insert your content here.*

## **3.3 The Scope of the Product**

### **3.3.1 Product Boundary**

*Insert your content here.*

### **3.3.2 Product Use Case Table**

*Insert your content here.*

### **3.3.3 Individual Product Use Cases (PUC's)**

*Insert your content here.*

## **3.4 Functional Requirements**

### **3.4.1 Functional Requirements**

*Insert your content here.*

# **4 Non-Functional Requirements**

## **4.1 Look and Feel Requirements**

### **4.1.1 Appearance Requirements**

*Insert your content here.*

#### **4.1.2 Style Requirements**

*Insert your content here.*

### **4.2 Usability and Humanity Requirements**

#### **4.2.1 Ease of Use Requirements**

*Insert your content here.*

#### **4.2.2 Personalization and Internationalization Requirements**

*Insert your content here.*

#### **4.2.3 Learning Requirements**

*Insert your content here.*

#### **4.2.4 Understandability and Politeness Requirements**

*Insert your content here.*

#### **4.2.5 Accessibility Requirements**

*Insert your content here.*

### **4.3 Performance Requirements**

#### **4.3.1 Speed and Latency Requirements**

*Insert your content here.*

#### **4.3.2 Safety-Critical Requirements**

*Insert your content here.*

#### **4.3.3 Precision or Accuracy Requirements**

*Insert your content here.*

#### **4.3.4 Robustness or Fault-Tolerance Requirements**

*Insert your content here.*

#### **4.3.5 Capacity Requirements**

*Insert your content here.*

#### **4.3.6 Scalability or Extensibility Requirements**

*Insert your content here.*

#### **4.3.7 Longevity Requirements**

*Insert your content here.*

### **4.4 Operational and Environmental Requirements**

#### **4.4.1 Expected Physical Environment**

*Insert your content here.*

#### **4.4.2 Wider Environment Requirements**

*Insert your content here.*

#### **4.4.3 Requirements for Interfacing with Adjacent Systems**

*Insert your content here.*

#### **4.4.4 Productization Requirements**

*Insert your content here.*

#### **4.4.5 Release Requirements**

*Insert your content here.*

## **4.5 Maintainability and Support Requirements**

### **4.5.1 Maintenance Requirements**

*Insert your content here.*

### **4.5.2 Supportability Requirements**

*Insert your content here.*

### **4.5.3 Adaptability Requirements**

*Insert your content here.*

## **4.6 Security Requirements**

### **4.6.1 Access Requirements**

*Insert your content here.*

### **4.6.2 Integrity Requirements**

*Insert your content here.*

### **4.6.3 Privacy Requirements**

*Insert your content here.*

### **4.6.4 Audit Requirements**

*Insert your content here.*

### **4.6.5 Immunity Requirements**

*Insert your content here.*

## **4.7 Cultural Requirements**

### **4.7.1 Cultural Requirements**

*Insert your content here.*

## **4.8 Compliance Requirements**

### **4.8.1 Legal Requirements**

*Insert your content here.*

### **4.8.2 Standards Compliance Requirements**

*Insert your content here.*

## **5 Project Issues**

### **5.1 Open Issues**

*Insert your content here.*

### **5.2 Off-the-Shelf Solutions**

#### **5.2.1 Ready-Made Products**

*Insert your content here.*

#### **5.2.2 Reusable Components**

*Insert your content here.*

#### **5.2.3 Products That Can Be Copied**

*Insert your content here.*

### **5.3 New Problems**

#### **5.3.1 Effects on the Current Environment**

*Insert your content here.*

#### **5.3.2 Effects on the Installed Systems**

*Insert your content here.*



### **5.3.3 Potential User Problems**

*Insert your content here.*

### **5.3.4 Limitations in the Anticipated Implementation Environment That May Inhibit the New Product**

*Insert your content here.*

### **5.3.5 Follow-Up Problems**

*Insert your content here.*

## **5.4 Tasks**

### **5.4.1 Project Planning**

*Insert your content here.*

### **5.4.2 Planning of the Development Phases**

*Insert your content here.*

## **5.5 Migration to the New Product**

### **5.5.1 Requirements for Migration to the New Product**

*Insert your content here.*

### **5.5.2 Data That Has to be Modified or Translated for the New System**

*Insert your content here.*

## **5.6 Costs**

*Insert your content here.*

## **5.7 User Documentation and Training**

### **5.7.1 User Documentation Requirements**

*Insert your content here.*

### **5.7.2 Training Requirements**

*Insert your content here.*

## **5.8 Waiting Room**

*Insert your content here.*

## **5.9 Ideas for Solution**

*Insert your content here.*

## Appendix — Reflection

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 many of your requirements were inspired by speaking to your client(s) or their proxies (e.g. your peers, stakeholders, potential users)?
4. Which of the courses you have taken, or are currently taking, will help your team to be successful with your capstone project.
5. What knowledge and skills will the team collectively need to acquire to successfully complete this capstone project? Examples of possible knowledge to acquire include domain specific knowledge from the domain of your application, or software engineering knowledge, mechatronics knowledge or computer science knowledge. Skills may be related to technology, or writing, or presentation, or team management, etc. You should look to identify at least one item for each team member.
6. For each of the knowledge areas and skills identified in the previous question, what are at least two approaches to acquiring the knowledge or mastering the skill? Of the identified approaches, which will each team member pursue, and why did they make this choice?