

# Concordia University

## Department of Computer Science and Software Engineering

### SOEN 6481: Software Systems Requirements Specification

Instructor: Dr. Rodrigo Morales  
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Team 18

Post-Mortem Analysis V2  
Smart Home + System

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GitHub Repository: <https://github.com/M-Alidadi/Team18>

## Post Mortem Analysis - Revision 2

### 1. Regarding tasks 3, 4 and task 5 (a, c), answer the following questions:

#### 1.1 What was the advantage of this technique based on your experience in this assignment?

##### Task 3 :

##### **Avoid boundary conditions:**

Beneficial in solving low level or weak conflicts where the conflict can be resolved making sure the boundary condition never occurs. Also, saves time for other strong conflicts.

##### **Identify the source/target of conflict and specialize it:**

Tasks/responsibilities are clearly delegated to their respective owners to avoid confusion of any kind.

##### **Weaken conflicting statement:**

Identifies any special privileges that should be given to users involved that were missed during requirements elicitation. Actually deals with the conflict by providing a permanent solution unlike avoiding it.

##### **Restore conflicting statements:**

All the initial requirements remain true. They are not modified and hence all the stakeholders are satisfied.

##### Task 4:

##### **Weighted Matrix:**

The major non functional requirements are taken into consideration while analysing the different options available. Hence we comply with the agreed non functional requirements agreed during requirements elicitation.

##### Task 5:

##### **Elicitation Techniques: Brainstorming**

The entire team could participate and present their ideas. This helped in identifying various risks involved in the system in a very short period of time.

#### 1.2 What was the disadvantage of this technique based on your experience in this assignment?

##### Task 3 :

##### **Avoid boundary conditions:**

This technique is more like avoiding the conflict rather than actually finding a solution for it. There is a high chance that the conflict may arise again and require rework at a later stage in Requirements Engineering or Software Engineering.

##### **Identify the source/target of conflict and specialize it:**

Requires a lot of time in studying and understanding the people and roles and responsibilities involved. Some stakeholders might not agree with modifications in requirements.

**Weaken conflicting statement:**

The special privileges need to be approved by stakeholders. Might need extra meetings and discussions for finalizing them. Some stakeholders might agree with modifications in the requirements.

**Restore conflicting statements:**

Users might have to perform some tasks redundantly.

**Task 4:****Weighted Matrix:**

- The scoring may be biased and depends on the perceptions of the analyst who assigns scores.
- There is not particular guidance to differentiate high medium and low risks. Each person can have a different approach to differentiate risk to the above mentioned categories.
- As per human psychology most of the people tend to score around mid value when in confusion or do not have a strong understanding or strong opinion. Hence the scores might not be completely reliable.

**Task 5:****Elicitation Techniques: Brainstorming**

Requires a facilitator to regulate and manage the brainstorming session to avoid wastage of time.

**1.3 How efficient was the technique, i.e. how good requirements did it help uncover given the time it took to use?**

**Task 3:** The requirements were refined in the process of resolving the conflicts. Got a deeper understanding of the roles and responsibilities and the people involved. Multiple alternative solutions could be gathered in a short span of time.

**Task 4:** This technique helped in quantitative analysis of the conflicts and their solutions. The process was quite easier yet helped in identifying the cost effective solution. We tried our best to keep the weights and scores unbiased by taking the average of all the values suggested by the team members.

**Task 5:**

**Risk Identification** - Multiple examples and edge cases were identified in the process. Generated a greater sense of risk and its management.

**Risk Control**- We performed risk reduction tactics and came up with different ways the risk could be controlled. This helped in identifying the consequences and their severity and also their mitigation mechanisms. Then we performed Risk Reduction Leverage to find the cost effective solution.

**1.4 In which situations would you use this technique in a future project?****Task 3 :****Avoid boundary conditions:**

When the context of conflict is not of much importance and the stakeholders involved are not the major stakeholders who cannot provide complete requirements then we can use this technique.

**Identify the source/target of conflict and specialize it:**

When the roles and responsibilities of stakeholders are clearly known and understood.

When we have enough time to study the people involved.

**Weaken conflicting statement:**

When we have enough time to study people involved so that we can determine special privileges and whom they should be given.

**Restore conflicting statements:**

When we need a quick solution to the problem.

**Task 4:****Weighted Matrix:**

When we have enough time to observe the importance of non functional requirements and their importance with regard to each feature involved. The analyst assigning scores is well aware of the business objectives and rules and regulations of the company so that scoring aligns with them.

**Task 5:****Elicitation Techniques: Brainstorming**

This technique is helpful when all the stakeholders are willing to participate and pitch in their perspectives. Particularly helpful when using Agile methodology in identifying risks related to a particular sprint at a time.

**1.5 In which situations would you not use this technique in a future project?****Task 3 :****Avoid boundary conditions:**

When the context of conflict is not of much importance and the stakeholders involved are not the major stakeholders who cannot provide complete requirements then we can use this technique.

**Identify the source/target of conflict and specialize it:**

When there are multiple roles involved in the conflict it might become cumbersome to clearly understand them and differentiate them.

**Weaken conflicting statement:**

If a large part of stakeholders do not agree with the special privileges then the relationship with them gets affected.

**Task 4:****Weighted Matrix:**

If the analyst team for scoring does not have diversity then scores do not reflect actual figures.

**Task 5:****Elicitation Techniques: Brainstorming**

Not helpful when stakeholders have conflicting views.

**2. Summarize how much time was spent (in total and by each group member) on the steps/activities involved as well as for the delivery as a whole.**

<b>Team Member</b>	<b>Activity</b>	<b>Time Spent</b>
Tushar Jain	<ul style="list-style-type: none"> <li>→ Overview &amp; Delegating Tasks</li> <li>→ Formatting Requirements evaluation and risk analysis &amp; Post-Mortem Report</li> <li>→ ProofReading Requirements evaluation and risk analysis &amp; PostMortem Report</li> <li>→ Task 1 (Section 1)</li> <li>→ Task 2</li> <li>→ Task 3 (Conflicts 1,2 &amp; 3)</li> <li>→ Task 4</li> <li>→ Task 5 (a, b, c)</li> <li>→ Post Mortem Activity Summary (Section 2)</li> </ul>	<ul style="list-style-type: none"> <li>➤ 4 hours</li> <li>➤ 2.5 hours</li> <li>➤ 3 hours</li> <li>➤ 2.5 hours</li> <li>➤ 1.5 hours</li> <li>➤ 1.5 hour</li> <li>➤ 2 hours</li> <li>➤ 3 hours</li> <li>➤ 2 hours</li> </ul>
Mohammad Alidadi	<ul style="list-style-type: none"> <li>→ Scheduling Tasks</li> <li>→ ProofReading Requirements evaluation and risk analysis Report</li> <li>→ Task 1 (Section 2)</li> <li>→ Task 2</li> <li>→ Task 3 (Conflicts 1,2 &amp; 3)</li> <li>→ Task 4</li> <li>→ Task 5 ( a , b, d)</li> <li>→ Glossary of terms</li> </ul>	<ul style="list-style-type: none"> <li>➤ 2 hours</li> <li>➤ 2.5 hours</li> <li>➤ 2.5 hours</li> <li>➤ 1.5 hours</li> <li>➤ 2 hours</li> <li>➤ 1.5 hours</li> <li>➤ 3.5 hours</li> <li>➤ 3 hours</li> </ul>
Neelofer Shama	<ul style="list-style-type: none"> <li>→ Research for Reports</li> <li>→ ProofReading Requirements evaluation and risk analysis Report</li> <li>→ Task 1 (Section 5)</li> <li>→ Task 2</li> <li>→ Task 3 (Conflict 3)</li> <li>→ Task 4</li> <li>→ Task 5 ( a , c, d)</li> <li>→ PostMortem Questionnaire (Section 1)</li> </ul>	<ul style="list-style-type: none"> <li>➤ 4 hours</li> <li>➤ 2 hours</li> <li>➤ 2 hours</li> <li>➤ 2.5 hours</li> <li>➤ 1.5 hours</li> <li>➤ 2 hours</li> <li>➤ 5 hours</li> <li>➤ 2.5 hours</li> </ul>
Qing Li	<ul style="list-style-type: none"> <li>→ Research and References</li> <li>→ ProofReading PostMortem Report</li> <li>→ Task 1 (Section 4)</li> <li>→ Task 2</li> <li>→ Task 3 (Conflicts 3 &amp; 4)</li> <li>→ Task 4</li> <li>→ Task 5 ( b , c, d)</li> <li>→ PostMortem Questionnaire (Section 4)</li> <li>→ Delta Document</li> </ul>	<ul style="list-style-type: none"> <li>➤ 2 hours</li> <li>➤ 1.5 hours</li> <li>➤ 2.5 hours</li> <li>➤ 2 hours</li> <li>➤ 2.5 hours</li> <li>➤ 1.5 hours</li> <li>➤ 5.5 hours</li> <li>➤ 1 hour</li> <li>➤ 2 hours</li> </ul>
Neda Kalantari	<ul style="list-style-type: none"> <li>→ Scheduling Meetings</li> <li>→ ProofReading PostMortem Report</li> <li>→ Task 1 (Section 3)</li> <li>→ Task 2</li> <li>→ Task 3 (Conflicts 2)</li> <li>→ Task 4</li> <li>→ Task 5 ( a , b, d)</li> <li>→ PostMortem Questionnaire (Section 3)</li> </ul>	<ul style="list-style-type: none"> <li>➤ 3 hours</li> <li>➤ 1.5 Hours</li> <li>➤ 2 hours</li> <li>➤ 2 hours</li> <li>➤ 1 hour</li> <li>➤ 2 hours</li> <li>➤ 5 hours</li> <li>➤ 2 hours</li> </ul>
<b>Total Time Spent (Collectively)</b>		<b>79.5 Hours</b>

**Analysis:** From the table we can propose the following conclusions :

1. All the tasks were completed well before the deadline.
2. Every member was assigned adequate tasks.
3. The team completed every task with utmost dedication and well before time and did more than what was asked.

### **3. In addition to the material seen in class, what other techniques did you apply for completing this delivery?**

- BrainStorming
- Checklist
- Scenarios

#### **3.1 Which techniques worked well?**

**BrainStorming:** This technique helped our group members to share different ideas and according to these ideas we identified the risks which impact project objectives

#### **3.2 Which techniques did not work?**

**Checklist:** We tried to use this technique for identifying the risks but unfortunately the questions in the checklist are too specific or too general and we could not find a balance between them.

### **4. How did you work together as a group in the project?**

The group worked really well during this phase of delivery:

1. The group worked together by participating in virtual meetings and used online messaging services like Slack and Whatsapp.
2. The meetings were used efficiently to discuss the project and divide responsibilities between team members while ensuring that everyone had similar workload.
3. In addition, team members were encouraged to mention any section of the project that they had difficulty with which allowed others to provide assistance.
4. Many tools were used during the course of the project. Some of them are:
  - a. Zoom - which was used to hold online meetings.
  - b. Whatsapp - which was used to coordinate meeting times and group activities allowing all team members to stay up to date with the status of the project.
  - c. Google Docs - which was used to compose the reports, which made it easy for group members to work on different sections of the report simultaneously. When all sections were completed, team members reviewed the work of others and provided feedback.
  - d. Github - which was used as a control system to track changes in the files and major deliveries.
  - e. Slack - which was used for virtual communication with the team members as well as the stakeholders.

#### **4.1 What worked well, and what did not work during your interaction(s)?**

Various techniques were used during our interactions but some of them worked well while some did not do well.

❖ Some of the techniques that helped the team achieve the goals faster are listed as follows:

1. We worked in pairs as well as individually depending on the task to increase productivity.
2. We maintained the number of meetings but kept them short and efficient.
3. During Zoom meetings we divided the workload according to the need of task among team members.
4. Extensive research was also done to provide us with extensive background on the topic.
5. We used Google drive folder management for our documents of task 1-6.
6. We recorded our virtual meetings in case of reviewing and catching up with team members when someone is unavailable for our virtual meetings due to time differences.

❖ The techniques that were not helpful are listed as follows:

1. We tried dealing with different ideas as they were presented instead of documenting them which sometimes caused confusion.
2. Any modifications needed were discussed in virtual meetings without documenting which resulted in confusion and lack of coordination.

#### **4.2 What would you do differently in the future?**

1. We can grade each other's participation and contributions throughout the different phases of the project.
2. Summarize our discussions and especially our decisions and send them to online discussion so that we can refer back to them in the future. This includes a list of who has agreed to do what.
3. We can complete a checklist regularly in order to monitor and improve how effectively our group is working.
4. We will make sure that we design our question with more care and essentially get the answers that we are looking for.
5. We will schedule our virtual meetings regularly based on the time when everyone is available under different time differences.