# **Post-Mortem Report**

This document presents a detailed analysis of software requirement analysis activities conducted by Team 26. The first artifact we created during the analysis is a vision document. Following is the discussion in details:

1. Regarding tasks 3, 4 and task 5 (a, c), answer the following questions:
2. What was the advantage of this technique based on your experience in this assignment?

**Conflict Resolution: Avoid conflict resolution with tactics**

* Efficient and systematic approach to resolve conflicts
* Once the source, target and boundary conditions are evaluated it is easier to apply the various tactics and come up with the best one.

**Conflict Evaluation: Weighted Matrices**

* Provides an efficient way to choose the best option from a list of alternatives keeping the non-functional requirements as criteria.
* Provides options to give more weightage to important aspects.
* Better summarizes the data (NFR vs Option)

**Risk Identification: Risk Checklist**

* NFR taxonomy helped to narrow down the risk areas.
* Provides a streamlined approach to come up with the risks.
* Provides opportunity to analyze loopholes that may have missed otherwise.

**Risk Assessment: Qualitative Assessment**

* Better summarizes the risk consequence likelihood.
* Simple easy and low-cost way to measure the consequence

**Risk Control: Risk Reduction with tactics**

* Efficient and easier to elicit the counter measure using the tactics.
* Can be applied to most of the risks.
* Easier to comprehend.

1. What was the disadvantage of this technique based on your experience in this assignment?

**Conflict Resolution: Avoid conflict resolution with tactics**

* Some cases may not have the clear distinction of source, target, and boundary conditions and so applying the operators may not provide the best resolution.

**Conflict Evaluation: Weighted Matrices**

* Difficult to come up the with the best weight for the counter measures.
* Works better only if the data required are handy
* False or incorrect data can severely affect the output

**Risk Identification: Risk Checklist**

* Sufficient/expert knowledge of the domain is required.
* Time can be wasted by analysing a NFR which do not have any risk.

**Risk Assessment: Qualitative Assessment**

* Requires real time data and expert knowledge to determine the risk and consequence likelihood.
* Risk and consequence likelihood can differ based on various external factors like market segment, geographical location etc.

**Risk Control: Risk Reduction with tactics**

* Sufficient knowledge of the risk and consequence is required to apply the tactics effectively.
* In some cases, the tactic will reduce only some of the consequences and not all.

1. How efficient was the technique, i.e. how good results produced given the time it took to use?

**Conflict Resolution: Avoid conflict resolution with tactics**

* If the source, target and boundary conditions are identified, this technique can be efficient to come with a good resolution.

**Conflict Evaluation: Weighted Matrices**

* As it is a quantitative assessment, provided a quick and efficient way to choose the best option provided the data is valid.

**Risk Identification: Risk Checklist**

* Very efficient in narrowing down the search area.
* Easier to spot the risk when searched on the lines of a specific NFR.

**Risk Assessment: Qualitative Assessment**

* Easier to determine the consequence likelihood.
* As it is qualitative, provides a wide margin of error.

**Risk Control: Risk Reduction with tactics**

* Simple and easier technique to come with the counter measures in a short amount of time.
* Provides a systemic was to determine the counter measures.

1. In which situations would you use this technique in a future project? In which situations would you not use this technique in a future project?

**Conflict Resolution: Avoid conflict resolution with tactics**

* This technique can be used for small projects where the feature set is less and the features are well defined.
* This technique may not be suitable when there are large number of components and they all interact in different ways.

**Conflict Evaluation: Weighted Matrices**

* This technique works very well when there are accurate data available or all the stakeholders have sufficient domain knowledge to elicitate the weight.
* It is also good when a similar solution exists, and the knowledge can be reused.
* This technique can provide misleading results when the data is incorrect. Sufficient data may not be available for brand new projects, where the features are vague and most stakeholder don’t have sufficient domain knowledge.

**Risk Identification: Risk Checklist**

* Good point to start the search of risk. If the feature set it huge a random this technique can provide a good starting point.
* If there are more well-defined components in the project, component inspection would be a better choice than this technique

**Risk Assessment: Qualitative Assessment**

* Works well when there is sufficient data or previous knowledge is available to perform the assessment.
* May not work for new project where sufficient data or knowledge may not be available.

**Risk Control: Risk Reduction with tactics**

* Works well with most of the projects given the risks are concrete and well defined.
* May not work well for complex projects with lots of interconnected components. This technique may not sufficiently cover all the components in the system.

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. Be honest with the time spent, as this information will in no way be used for any grading. For more details related to commit history and logging of this delivery-2, please see Appendix A to Appendix E.

**Note: All time mentioned in the table is in minutes**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Task | Apoorv | Divya | Manik | Nikhil | Sakib |
| Identifying Defects and conflicts |  | 80 | 80 |  |  |
| Interaction Matrix |  | 60 | 40 |  |  |
| Conflict Resolution |  | 60 | 40 |  |  |
| Conflict Evaluation |  | 60 | 50 |  |  |
| Documenting Conflicts |  | 30 | 30 |  |  |
| Risk Identification |  | 30 | 80 |  |  |
| Risk Assessment and Control |  | 90 | 80 |  |  |
| Post Mortem report preparation |  | 60 | 80 |  |  |
| Requirement report preparation |  | 180 | 150 |  |  |
| Communication |  | 240 | 350 |  |  |
| Review |  | 60 | 120 |  |  |

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

1. **Which techniques worked well**

* Brainstorming among the team members.
* Splitting more coarse-grained tasks to smaller manageable tasks.
* Peer review

1. **Which techniques did not work?**

**4. How did you work together as a group in the project? What worked well, and what did not work during your interaction(s)? What would you do differently in the future?**

* **Collaboration**: Used GitHub and Google Docs together to collaborate and maintain versions. For drafting report and brainstorming we mainly used Google docs. For writing final report we used GitHub as it can be used to better track and log changes.
* **Communication**: Almost everyday Zoom meetings around 1-2 hours and WhatsApp group for offline group chat to know the working status of each other and avoiding the merge conflict on GitHub. We planned to move our meeting on Microsoft teams in future as free Zoom account has 40mins meeting constraints for each call, but we could not move because of technical problem (i.e., microphone) in Team Microsoft.
* **Reviews**: Reviews happened online during meeting with all the members. We also offline/individual reviews and discussed only the outcome/comments during the meetings.
* **Management**: Peer monitoring and contributing in pair helped to manage the tasks effectively as well as efficiently. Again, a time tracking tool named “Toggl” like delivery-1 is used to track time for zoom meetings and tasks. By using Google doc for drafting report and brainstorming each task and then writing final copy of this report help us efficiently to manage each task (i.e., task-1 to task-5) properly. We planned to use Kanban/SCRUM style agile management process for this delivery-2 but could not afford to manage everything due to time constraints.

**Appendix**

**Appendix A**

Delivery-2 draft report for brainstorming, discussion, peer review on Google drive: <https://docs.google.com/document/d/1G8VWDxqtq3j4BFMEu1XXoHW_oYdRIbL9/edit>

**Appendix B**

Final report for delivery-2 commit history on GitHub:

<https://github.com/sakibshuvo/SOEN-6481-SRS>