IT University of Copenhagen **Date:** October 10th  
**Course:** Software Engineering **Supervisor:** Renata  
**Group:** 16 **Version:** 3  
**Document nr:** 7 **Tollgate:** 1  
**Responsible:** Victoria **Status:** Ready for TG1

Portfolio document 7

Risk Analysis

A cartoon of a house on a cliff

Description automatically generated

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| --- | --- | --- | --- |
| Version | Change | Author | Date |
| 0 | First draft of risk analysis | Everyone | 14.09 |
| 1 | Added ChangeLog | Peter | 22.09 |
| 2 | * Moved project/product risk into its own column ‘type’ * Changed column with categories to be named ‘category’ instead of ‘type’ (old name). * Removed risks with low severity * Added a risk ‘The time needed to produce the software is underestimated’ * Expanded on some of the mitigating actions | Victoria | 27.09 |
| 3 | Reviewed. Notes and questions removed. | Cecilie | 28.09 |
| 4 | * Converted fonts and sizes to fit document convention * Updated risk analysis with percentages | Victoria | 10.10 |
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Risk analysis

Percentages are used to express, probability, impact, and severity. The estimation is based on the context of the project, being a university project with a fixed timeframe and focus, personal experience, and research articles. Since we are not going to program in this project, risk in relation to this is also not severe.

For probability and impact, the following threshold for low, mid, and high is applied:

Low: 0-30%

Mid: 40-60%

High: 70-100%

Severity is considered, low, mid, high on other parameters and is calculated: Risk exposure = probability\*impact.

Low: 0-10%

Mid: over 10-30%

High: over 30%

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| --- | --- | --- | --- | --- | --- | --- |
| Risk: | Probability  *(Likelihood)* | Impact / Effect | Severity / Exposure  *Rating based on impact and probability* | Type  *Which risk type:*  *Project /*  *Product* | Category  *Which Category: /*  *Estimation*  */Organizational*  */People*  */Requirements/*  *Technology/Tools* | Mitigating Action |
| Losing a team member | 50% | 80% | 40% | Project | Everyone | Communicate with team to get help. Consult supervisor as last resort. |
| Not able to get the proper data (Research) | 50% | 80% | 40% | Product | Technology | Research and/or contact domain specialists. Look into similar fields of how they e.g., handle data and trust. |
| Someone deletes all the documents | 10% | 100% | 10% | Project | People | Weekly back-up of Teams files |
| Project schedule is not clearly defined | 20% | 60% | 12% | Project | Estimation | Communicate with Project Team about any unknowns. Using Trello as a planner tool. |
| Project design is incomplete | 20% | 80% | 16% | Project | Estimation | Checkups with TA |
| Software can’t be integrated | 50% | 80% | 40% | Product | Technology | Looking for alternative solutions. |
| Sickness of group member | 90% | 50% | 45% | Project | People | Communicate to group in case of sickness. The sick person can participate online. If they are too sick to participate, the group will make decisions on behalf of the group. Tasks can be delegated so every member can contribute. |
| Missing deadlines | 40% | 70% | 28% | Project | Estimation | Someone in the group is responsible for keeping an eye on the deadlines.  Trello board helps the whole team to see when something is due. |
| Motivation loss | 60% | 70% | 42% | Project | People | Similar as “Losing a team member”, Communicate with team when feeling motivation loss. Teambuilding activities if needed. |
| Competitor is better | 50% | 80% | 40% | Product | Technology | Figure out a way to make our product better. Try to come up with a new unique idea. |
| The customer does not want to give access to their infrastructure | 80% | 100% | 80% | Product | Requirements | Address the issues raised by our customers. |
| Product fails to meet customer’s requirements | 50% | 80% | 40% | Product | Requirements | Pivot when finding signs of missing requirements. Meet customer to adjust requirements. |
| Better development tools required | 40% | 70% | 28% | Project | Tools | Buy the tools. Apply for funding if not enough money. |
| The time needed to produce the software is underestimated | 40% | 70% | 28% | Project | Estimation | Clear communication to customer. Re-strategize in the team on a new plan. |