# RISK MANAGEMENT PLAN

**Project Title:** Artibot                                   **Date Prepared:** 27.09.18

**Methods and Approaches:**

Risk Analysis

**Tools and Techniques:**

- Risk Analysis Matrix
- Characteristics: Probability, Severity and Impact.
  - The Impact describes the level of risk and is calculated in the matrix by Probability * Severity.

**Risk Categories:**

- Human factors
- Business
- Technology

| # | Risk | Description | P | S | I | Mitigation | Action to take |
|---|------|-------------|---|---|---|------------|----------------|
| 01 | Computer crashing | Likelihood of any computer we use crashing | 1 | 5 | 5 | Work on more than a single computer | Computer needs to be repaired immediately, and we need to continue to work on another computer |
| 02 | Testing environment | No environment to perform the testing | 3 | 4 | 12 | Apply room as early as possible | Rent a commercial rental room |
| 03 | Data loss | If the project documents gets deleted or corrupted | 1 | 5 | 5 | Backup of all documentation in either Google Drive, Local hard drive, etc. | All documentation must be rewritten as fast as possible |
| 04 | Absence | Absence of a team member | 5 | 2 | 10 | Make sure that we are not too dependent of a team member | Notify the other team members and divide the tasks |
| 05 | Lack of knowledge | Team member lacks technical knowledge to implement a system | 4 | 2 | 8 | Make a plan on which materials we need to learn beforehand | Ask other students/teachers and start learning the insufficient knowledge from the internet |
| 06 | Global standard | The car provided by the school might not follow the global standard | 3 | 4 | 12 | Buy components that is following the same certain standard | Buy interface to adapt to the predefined standard |
| 07 | Poor requirements | Stakeholder or system requirements might change | 3 | 3 | 9 | Apply Scrum methodology to be agile | Refine the product backlog and add the new requirements |
| 08 | Computer compatibility | Software do not support the computer you use | 2 | 3 | 6 | Read the system requirements of the software | Find a new computer that supports the software |
| 09 | Budget | The project's cost exceeding the budget given by the investors | 4 | 2 | 8 | Create a good budget plan and make sufficient research of components | Negotiate for a higher budget |
| 10 | Group dynamic | Disagreement within the group regarding project and poor working environment | 5 | 4 | 20 | Have a transparent environment and active communication | Scrum master call an additional meeting to resolve issue |

Table 1: Lists of risks

P. = Probability,   S. = Severity,   I. = Impact

| Impact | Risk |
|--------|------|
| 1 - 3 | Minor risk |
| 4 - 7 | Low risk |
| 8 - 12 | Moderate risk |
| 13 - 18 | High risk |
| 19 - 25 | Extremely high risk |

Table 2: Risk categories

| | | | Probability | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| Severity | 5 | 5 | 10 | 15 | 20 | 25 |
| | 4 | 4 | 8 | 12 | 16 | 20 |
| | 3 | 3 | 6 | 9 | 12 | 15 |
| | 2 | 2 | 4 | 6 | 8 | 10 |
| | 1 | 1 | 2 | 3 | 4 | 5 |

Table 3: Risk matrix