Seamless Engineering Milestone 0:

Team number: Seamless Engineering Group 06

# Risk Analysis: SWOT Analysis

The SWOT analysis evaluates selected characteristics as strength or weakness. Characteristics, trends and developments in the market or environment of the company are evaluated as opportunity, potential or chance (Opportunity) or as threat, danger or risk (Threat) - depending on whether the positive opportunities or the negative threats predominate. Fill out the following template.

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| --- | --- |
| Strengths | Weaknesses |
| * Stable light conditions available for the camera, due to indoor working area, so that shall result in better image processing.   + The product is modular, so every step is simple to work upon and even the troubleshooting can be easy. * Good, known hardware with precise documentation and working libraries available. * We have all digital working platforms, so it is not required for the team to meet for every specific task or at a particular place. | * There are many mechanical movements and hand-overs in the entire system, and mishandling of the cube at any point may lead to failure of the entire task, and we cannot add redundancy to this in particular. * The transition from simulations to physical hardware is a very late step in the project and there can be possible hidden pitfalls that would not be affordable at that stage. |
| Opportunities | Threats |
| * There is available knowledge of the product because it was already built once. Furthermore, tutors and experts could lend us their support as well. Everything considered, even critical issues would be quick to solve. * We have plenty groups working on a common platform, so some basic bugs and their fixes will be readily feasible from them as well. | * We are entirely dependent on the common GitLab folder for all codes and simulations. In case of an offset in anything, which we couldn’t notice beforehand, we may experience downtime, and the project may not be executed well within the mentioned deadline. * Considering simulations to be ideal, moving on to the hardware running as smooth as the simulations can be critical. * There is only limited access to the workshop and hardware lab, as everyone uses the same for their respective project development. There might not be enough time for thorough testing and troubleshooting. |