# Milestone 1 - Group 6

## Table of Tasks

| Task ID | Description | Complexity | Justification |
|---|---|---|---|
| T1 | Planning the work<br>Set up a Kanban Board in GitHub, plan how to handle the developing, merging and communication in the group | Easy. | File created: 4 folders containing 2 or 3 files. This increases with time. Folder was: meeting folder, milestone folder, document folder, literature folder |
| T2 | Understanding how to use Doxygen | Medium | No file created.<br>We had difficult time to understand the tool in the beginning |
| T3 | Meetings efter Individual Milestone 1<br>Get a common view of the system, talk about what we have understood about the system by using Doxygen and other Reverse Engineering tools.<br>Several meetings were needed. | Medium/Hard | 1 folder created containing diagrams of the system for each individual (5 files)<br>We had pretty much the same understanding of the overview of the system. Hard to understand the details. |
| T4 | Investigate how CMake work<br>Locate where CMake is in the code, learn Bash script language.<br>Not concluded | Medium. | Medium. No so much background in Cmake |
| T5 | Start implementing CMake Tasks.<br>Write CI config to test that the runtime CMake minimum version is in fact supported (and also all later stable CMake versions, in addition to the latest release candidate if existing). | Hard. | 1 new file in: smce-gd/ci<br><br>Lines of code: 78 |

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| T6 | Investigate how FrameBuffer work and how we could implement some conversion functions | Hard. Understand in deep code functioning in c++ | Hard, Understand in deep code functioning in c++<br>No documentation provided for pixel format. Try to guess by looking at other part of the code |
| T7 | Start developing the rgb conversion functions.<br>The library buffer is always RGB888<br>implement write rgb565<br>implement read rbg565<br>write unit tests<br>Review the code | Medium | 4 functions created and test code<br><br>In:<br>libSMCE/src/SMCE/BoardView.cpp<br>libSMCE/include/BoardView.hpp<br>libSMCE/test/BoardView.cpp<br><br>Line of code: > 300 |
| T8 | Implement a way for environments to describe where the vehicle should be spawned.<br>Investigate how the camera is positioned, the vehicle itself should also be placed where the environment wants it | Hard | The syntax of the .gd and .tscn file are hard to understand. We need to read a lot of tutorials.And the front-end files are highly coupled. To add a variable requires multiple corresponding files to be modified together, but the file layout of the front-end files is very difficult to find.<br><br>Line of code:12<br>Changes in smce-gd:<br>Api.json<br>ControlPane.gd<br>ControlPane.tscn<br>UartConsole.gd |
| T9 | Start developing spawned vehicles. Not finished yet. | Hard | Added file<br>In: smce-gd /project/src/ |
| T10 | Code deduplication.<br>Check in Sonar Cloud where the duplication is and try to solve it. Merged to our dev branch | Easy. | Lines of code: 55<br>In:<br>libSMCE/src/SMCE/BoardView.cpp |

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| T11 | Presentation preparation<br>Prepare slides, dig deep into the understanding of the system and how we actually have understood the code and the architectural abstractions. | Easy. | 2 files:  slides, notes |

## Contribution Table

| Name | Task Id | Contribution % |
|---|---|---|
| Elena Marzi Tornblad | T1<br>T2<br>T3<br>T6<br>T7<br>T10<br>T11 | 20%<br>20%<br>20%<br>33%<br>100%<br>100%<br>20% |
| Wei Guo | T1<br>T2<br>T3<br>T8<br>T9<br>T11 | 20%<br>20%<br>20%<br>50%<br>50%<br>20% |
| Clementine Jensen | T1<br>T2<br>T3<br>T4<br>T5<br>T6<br>T11 | 20%<br>20%<br>20%<br>50%<br>50%<br>33%<br>20% |
| Wenjie Jiang | T1<br>T2<br>T3<br>T8<br>T9<br>T11 | 20%<br>20%<br>20%<br>50%<br>50%<br>20% |
| Erik Tran | T1 | 20% |

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|---|---|---|
| | T2<br>T3<br>T4<br>T5<br>T6<br>T11 | 20%<br>20%<br>50%<br>50%<br>33%<br>20% |