## 1 Rubric and instruction for graders

**Assessment sheet PDM project**

Your work needs to meet the following requirements in order to be marked:

| Requirement | Ok? |
|---|---|
| Report: maximum 4 pages in provided template | Y/N |
| Presentation: stays within the allotted time | Y/N |
| Code: is provided | Y/N |

*Table 1: Knockout criteria*

Your work will be assessed using the following rubrics:

| Levels (points) / Criteria | Insufficient (3) | Sufficient (6) | Good (8) | Excellent (10) |
|---|---|---|---|---|
| **Presentation: Model and planning S2** | Several elements missing or incorrect | Model or planning method introduced | Both correct | … and well motivated |
| **Presentation: Results S3** | Inconclusive results | Results are presented | … and properly described/justified | … and satisfactory results shown (in a video) |
| **Presentation: Discussion S4** | Several elements missing or incorrect | Minimal discussion on performance | Correct discussion on performance | … and shortcomings |

*Table 2: Rubric of presentation for project PDM. The relevant sections are specified with SX, with X the number as in the deliverables (see description of the project).*

| Levels (points) / Criteria | **Insufficient (3)** | **Sufficient (6)** | **Good (8)** | **Excellent (10)** |
|---|---|---|---|---|
| **Report: Introduction S1** | Several elements missing or incorrect | Contains a description of the work and reference to materials employed | … and a valid justification of the chosen methods | … and a detailed comparison with respect to state of the art |
| **Report: Model S2A** | Several elements missing or incorrect | Minor errors in the formulation | Mathematical formulation is correct | Mathematical formulation is correct and variables are individually explained |
| **Report: Work-/Configuration-space S2B** | Wrong spaces described | Minor errors in the formulation | Mathematical formulation is correct and variables are individually explained | … and good description |
| **Report: Planning S4** | Several elements missing or incorrect | Minor errors in formulation | Algorithm and description are correct and variables are explained | … and correctly adapted to the robot model |
| **Report: Results S5** | The performance is not shown or the evaluation is not sufficient | The performance of the planner is verified in simulation and evidence is provided | … descriptions are clear and relevant | … evaluated in multiple scenarios and performance statistics are given |
| **Report: Discussion S6A** | Several elements missing or incorrect | Theoretical and practical discussions with minor shortcomings | … are all correct and justified | … and are complete (the main theoretical and practical aspects are discussed) |
| **Report: Future works S6B** | Improvements not discussed or wrong justification | Improvements are discussed and valid, with minor shortcomings | … are correct | … and justified |

*Table 3: Rubric of report for project PDM. The relevant sections are specified with SX, with X the number as in the deliverables (see description of the project).*

| Levels (points) / Criteria | 0 | + 0.5 | + 1 | - 0.5 | - 1 |
|---|---|---|---|---|---|
| **Originality** | Basic extension of exercises/lecture | Some element of novelty/difficulty wrt lecture and/or exercises | Complex project with several elements of novelty/difficulty | | |
| **Implementation** | Existing code used with very minor improvements | Methods implemented, partially relying on existing code | Difficult methods implemented | | Only existing code is used and the sources are not described in the introduction |
| **Late submission** | Submitted on-time | | | Late submission 0.5 x number of days | |
| **Number of pages** | Page limit OK | | | Additional pages 0.5 x extra page | |
| **Code** | | | Code is provided with read me and runs out of the box following the instructions | | |

*Table 4: Bonus and negative points*

Your assignment grade will be decided as follows:

[Group grade] = sum([Part grade]/10 x [Percentage part]) + bonus, (maximum 100%)

where the percentage of each part is specified in the assignment description.

[Individual grade] = [Individual performance factor] x [Group grade] (maximum 100%)

where [Individual performance factor] = 1 unless otherwise specified by the group members at the end of the course.

The final grade is then: [Individual grade]/10, rounded at one decimal point.