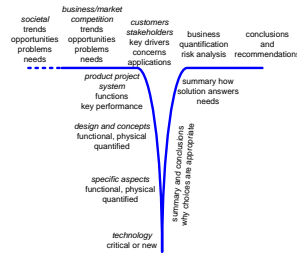


# SEMA Homework Assignment

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## Abstract

This document described the homework assignment for the SEMA course. The homework is made and delivered incrementally, so that the teacher can provide feedback during the assignment.

### Distribution

This article or presentation is written as part of the Gaudí project. The Gaudí project philosophy is to improve by obtaining frequent feedback. Frequent feedback is pursued by an open creation process. This document is published as intermediate or nearly mature version to get feedback. Further distribution is allowed as long as the document remains complete and unchanged.

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## 1 Homework assignment delivery

The team composition for the assignment is the same as the team composition during the course. The assignment is performed in teams, except for an individual report at the end. Contact the teacher for a more individual assignment, if that is needed for practical reasons such as traveling. The timing steps are indicative and not mandatory.

Send at least twice intermediate results, as presentation, to the teacher. For all emails with the teacher follow the conventions below.

email subject: [SEMA] team<team name><version number>

attachment filename: team<team name><version number>.<ext>

Make sure that you discuss the content of this work every week with relevant stakeholders within the company.

Grading is based on the final presentation submitted by the team and based on the individual report.

## 2 Group assignment

Submit each step to the teacher, and process feedback in the next step

Step 1. weeks 1..3

- Consolidate work of course in 20 slide presentation as baseline.
- Search for answers to the main questions, biggest uncertainties and unknowns, validate main assumptions.
- Elaborate most relevant models.
- Discuss your work with other stakeholders to collect more facts and figures and for early validation

Step 2. weeks 4..6

- Transform the presentation into a T-shape presentation
- Identify gaps in the "T"
- Make simple models to eliminate the gaps

Step 3 weeks 7..9

- Identify required changes in models made so far, due to increased insight;
- Change one of the models accordingly.
- Evolve the T-shape presentation (max 20 slides); the target audience of this presentation is your management.
- Present to company management
- Identify next models to be made, measurements to be done, or fact finding to take place.
- Update the presentation with feedback from management and a list of future work.

Figure 1: Group Assignment

The steps described in Figure 1 are recommended, not mandatory. These steps guide you through one more iteration. This last iteration takes place outside the

class room enabling you to collect some “real” data, and to talk with some stakeholders. After this iteration the last steps are to identify what should be done in next iterations, and to process the feedback on this iteration.

Submit at one third and two third of the assignment. Process the feedback from the teacher in the next step. Submit the updated presentation as the final team deliverable.

### 3 Individual assignment

Write an individual reflection report after finishing the group assignment, answering the following questions:

What are the main gaps in the current proposal and presentation? What 3 gaps will you address first, and why?

In retrospect, formulate a problem statement that triggered the outcoming presentation and underlying modeling effort.

What would you do differently if you would have to prepare this presentation again?

How and what are you going to apply elements of this course in practice?

Be specific and use examples.

preferred size 2 A4s, max 4 A4s.

Figure 2: Individual Assignment

Figure 2 shows the individual assignment. Mail the individual report to the teacher, with subject and filename: [SEMA]report <your name>

## References

- [1] Gerrit Muller. The system architecture homepage. <http://www.gaudisite.nl/index.html>, 1999.

## History

**Version: 0.3, date: 22 April 2021 changed by: Gerrit Muller**

- updated individual reflection assignment

**Version: 0.2, date: 19 September 2019 changed by: Gerrit Muller**

- updated individual reflection assignment

**Version: 0.1, date: November 27, 2017 changed by: Gerrit Muller**

- added WiseFlow to the homework instructions
- changed status to draft

**Version: 0, date: July 28, 2014 changed by: Gerrit Muller**

- Created by refactoring SEMAcourse