SSA 1

Planning

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Goal

• The goal is to make a clear planning and role division for the upcoming DBL course. This is done together with Dolf and we both made a part of the planning.

Programs that were used are Trello and Gannt Chart. Also Excel was used for some small planning features.

In this report I will try to guide you through some of the details.

Conclusion

• All the items of the planning have been made and are in Canvas. Also the rules & agreements have been added. Finally a small RPC list has also been added.

Problems

• Problems weren't present. However it was the first time the both of us worked with the software of Trello, so this was a small challenge to work with.

Follow up Steps

• No follow up steps for this SSA.

Work Division

- Dolf searched through the planning and looked at all the diverse deadlines and put them into the Gannt Chart.
- In the meantime I worked on the small plannings such as the role division and the agreements sheet.
- together we figured out how the Trello software works, where after I copied all the items into Trello that Dolf put into the Gannt Chart.

Time Division

- 2 hours meeting with Dolf to make a start at Trello
- 2 hours to finish Trello
- 1 hour for the RPC list
- 1 hour for this file and preps presentation

Overleaf Link

1 Role Division

The role division wasn't very much work. I took a look at the schedule of the course and put our names on the chart in alphabetical order. The schedule can also be found on Canvas.

Meeting	Date	Chairman	Minute Taker	Board Writer
1	5-Feb	Lars	Thomas	Dolf
2	9-Feb	Thomas	Dolf	Vito
3	12-Feb	Dolf	Vito	Mats
4	23-Feb	Vito	Mats	Joey
5	26-Feb	Mats	Joey	Mihai
6	2-Mar	Joey	Mihai	Alexandra
7	5-Mar	Mihai	Alexandra	Lars
8	9-Mar	Alexandra	Lars	Thomas
9	12-Mar	Lars	Thomas	Dolf
10	16-Mar	Thomas	Dolf	Vito
11	19-Mar	Dolf	Vito	Mats
12	23-Mar	Vito	Mats	Joey
13	26-Mar	Mats	Joey	Mihai
14	30-Mar	Joey	Mihai	Alexandra

Figure 1: Role division

2 Rules & Agreements

For the rules and Agreements we made some clear arrangements in the meeting. Actually most of the items speak for themselves. Please take a look at the list via the following link. Rules & agreements

3 Trello

For the Trello planning some more attention was needed. Dolf and I both didn't work before with the program so we figured out by ourselves how it worked.

It turned out to be a online to-do list, where you can adjust and move all the added items. If you make a good start with the program and use it properly and continual, it can work very good. When the program is used once in the two weeks it hasn't got any good use.

If you haven't added yourself to our Trello, use this link. For the Trello page, use this link.

3.1 How it looks

As you can see in the figure below, there are 6 columns. There are 5 columns with to-do items and the sixth one is the column for the items that are finished. Because you can't read the columns in the upper picture, there is one column magnified in figure 3.

All the columns stand for a different part of the project. So in the most left column (red) are the deadlines, the one beside is blue and has to do with research and planning. The other ones are modelling, experimenting and report work.

Every box has a matching deadline, so it is very clearly visible when something has to be finished.

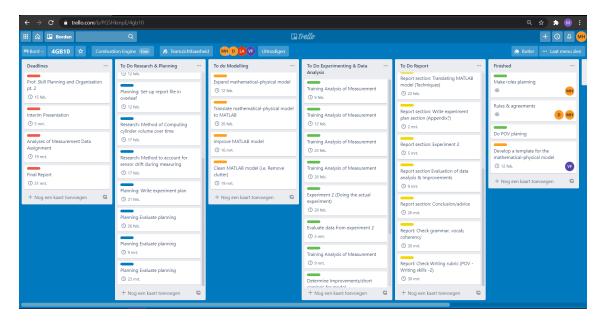


Figure 2: Trello site

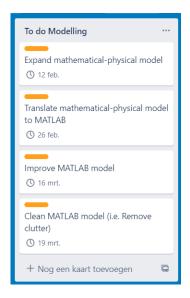


Figure 3: Trello Column

3.2 How to use

Working with Trello is very easy. You can claim the task you have, by assigning the task to yourself. When you have done this you can start working on it and finally drag the box with the assignment to the column 'finished'. In this way we keep a nice overview of all the things that are done and more importantly the things that still need to be done.

4 RPC List

All of us got the assignment to make a RPC list. When we all come up with different RPC's, the total will sum up to a nice amount and make a good list. I made my list together with Joey, even before the first meeting.

Requirements

- Minimum motor output efficiency of 35 percent
 - Because this is around the efficiency of the normal car engines.
- $\bullet~20\%$ less CO2 emissions
- Minimum of 15% ethanol (E15)
 - Because normal fuel is sold with E10, the challenge is to mix even more ethanol.

Preferences

- As environmentally friendly as possible
- Fuel should not affect the engine in a bad way
- Exhaust fumes do not smell bad

Constraints

• The fuel has to be a mixture consisting of only gasoline and ethanol.