# Validation Work Plan

Evaluation time planned and spent



Table Overview of amount of time planned and spent in weeks 4 to 8. We start with week 4 because then our Work Plan started and ended in week 8, because in week 9 the calculations were finished. Time spent is derived from the logbooks. Time planned is derived from the weekly tables of the Work Plan. Total work planned is derived from the Total work section of the Work Plan. Overworked is based on Time spent and Time planned. Planned difference is Time planned – Total work planned. Tasks in bold actually are phases.

Logbooks

Next time we keep logbooks we should stick to the task description in the Work Plan instead of making up a description that often differs per person and differs in detail to the Work Plan. This way it saves time to do the calculations, whereas now we had to come up with the task description consistent with the Work Plan for the descriptions in the logbook.

Another thing that could be improved is the way we keep the logbook. Instead of having a file where we can keep logbooks we should design the file as such that the calculations can be done way easier. It takes some more time in the beginning of the project but saves a lot of time at the end.

### Work Plan

The Work Plan lacked some tasks. For instance the FR phase lacked the whole process part documentation.

The weekly tables had 1 row per week that had a time duration of 30 minutes. This too is very inconvenient in calculating. We couldn’t figure out, on a quick enough notice, how to deal with this. Therefore these half hours are counted as whole hours. This is luckily a small part of the planning. Another thing that’s off with the tables is that it has a different amount of time planned than the scheme in the section Total work of the Work Plan. This is due to that we wanted to finish the Work Plan quickly.

#### Planned difference

The column labelled “Planned difference” shows per phase and in total how much time is falsely planned due to the reason given above. Because of this false planning we base the rest of the numbers on the actual planning, which is in the Timetables section of the Work Plan. We chose this as the actual planning because it’s the most detailed one.

### Numbers

#### Totals

##### Time planned

We set ourselves the goal to spend 500 hours on the project, from week 4 to week 8, collectively. We got this number from the information from our tutor that we have to think about spending 700 hours collectively on the project. We started the planning from week 4, so it should be less. We also decided that we wanted to be done before the exam weeks, week 9 and 10. Per week, the time planned is more than the indicated time divided by 8 weeks. This is because we thought that we spent too little time in those first 3 weeks. Why it says 510 in the table, however, is because there were some late changes. Some tasks were expected to take a few hours longer.

##### Overworking

As you can see in Table 1, underworked quite a bit. This may be partially explained by not being finished at the end of week 8. We will be spending some more time in weeks 9 and 10. Another reason might be that we work more efficient, but this is hard to show.

#### Phases

##### Work Plan (Simultaneously with Machine Design)

It seems that we underestimated the time needed to finish the Work Plan. This may as well explain why we rushed the weekly tables a bit.

##### Machine Design

We spent almost 25% more time on this. However the overworked time is just about 4 hours, which is small compared to the total length of the project.

##### Software Specification

We clearly overestimated the time needed for this phase. This is partially due to our tutor predicting that this phase will probably take the most time.