

Examination of DAT096 Embedded System Design Project VT 2021

revision 1.6 2021-01-17

| Version | Date | Who | What changes? |
|---------|------------|-----|--|
| 1.6 | 2021-01-17 | LP | Checked for 2021. Some slight updates to wording. Added comment about individual logbooks that are not part of the assesement. |
| 1.5 | 2020-01-16 | LP | Checked for 2020. Updated text about individual logbooks which are not to be kept in Canvas. |
| 1.4 | 2019-01-19 | LP | Checked for 2019. Added the individual ethics assignment moved from DAT110 to DAT096. Updated for Canvas. Updated some wordings. |
| 1.3 | 2018-01-05 | LP | Checked for 2018. Added contribution report. Changed some related wordings. |
| 1.2 | 2017-01-16 | LP | Checked for 2017. Inserted Trello instead of Pivotal tracker. |
| 1.1 | 2016-01-16 | LP | Changed those things that have to do with using Scrum instead of LIPS. |
| 1.0 | 2015-10-18 | LP | Some small touches and a new version number |

1 Examination

In the course DAT096 each student is to be given an individual grade. The individual grade is based on the team base grade. For a grade to be awarded all requirements for passing must be fulfilled.

1.1 Requirements for passing

To pass the course teams must submit acceptable reports and other deliverables on time, and, if required, revise their reports before the corresponding revision deadline. For required submissions see section **Deadlines for all submissions are given in the course-PM** (which is nowadays found under Syllabus in Canvas). The team is also required to keep notes from its scrum meetings, team meetings and of its meetings with the team support person. The team must keep records of any design decisions taken by the team, (preferably in the team logbook) which cannot be seen in Trello (or other system used to implement the Scrum product and sprint backlogs).

Additionally, it is possible for a student to individually fail the course by not taking part in the team effort. Course staff monitor team and individual efforts and will ask follow-up questions when necessary.

Students who for personal reasons (such as travel) are absent during part of the work must negotiate division of labor with the rest of the team **in advance**. Planned absence in excess of two weeks during the study periods will not be accepted regardless of team opinion.

All students are required to keep a **personal logbook**, as part of the team logbook, detailing the work carried out each day and the time it took¹. This logbook must be updated **at least** once per week (Sunday evening) and be detailed enough to make it possible to judge student effort. The update for the week should be done no later than Sunday night. (Example: ``Monday: VHDL debugging, 2h; lecture, 2h; team meeting, 1h"). This logbook should include the sum of hours the student has spent on the course for each week, including lectures and other common activities.

Also note that a period of individual research or reading should result in (written or oral) communication for the benefit of the other group members. Thus, it is not enough to write "Read the literature" without communicating additional information about the conclusions drawn from the reading to the team. Use the "comment" column for additional explanation.

These logbook entries also serve as a basis for the **contribution report**, which the team must submit at the end of the course. It is therefore important that the individual logbook entries are detailed enough for this purpose. The contribution report should have one section per team member. Suitable headings to use are "General contributions to the project", "Specific responsibilities/tasks", and "Specific contributions to reports and documentation".

Note: Failure to keep a personal logbook according to the requirements above is tantamount to not taking part in team effort and is therefore grounds for failing the course.

Each student also has to complete an individual ethics task, which is graded pass/fail.

¹ For 2021 the logbooks are not located inside Canvas, rather a template that can be used in Office365 or google docs is provided.

1.2 Team assessment for base grade

The team is assessed on these three parts:

| Part | Assessed based on | Weight (total number of points) | Who assesses? |
|----------------------------------|--|---------------------------------|--|
| Final version of academic report | HISS criteria (available in Canvas) Additional specification for the academic report details | 4 (0-40 points) | Examiner |
| Final product | Code, design database or other artifact Test protocols Other technical documentation Oral presentations (product parts) | 3 (0-30 points) | Examiner |
| Process | Scrum meetings (except daily scrums) through participation or documentation Trello information Team logbook (common part) Team support person and product owner assessment of team's process from additional team contacts Oral presentations (process parts, if any) Contribution report (that it has been submitted, not its content) | 3 (0-30 points) | Team support person supported by product owner |

Note: The project reflection deadline is too late for it to be considered in the assessment.

Note regarding process part of assessment: The process does not need to be great from the start for a high weight in this part. We especially assess the willingness and ability to improve the process during the course.

Each part will be assessed on a scale of 1-10 and then these numbers will be multiplied with the weight given in the table above. Thus, the maximum number of points is 100. This number of points is translated to the base grade for the team using the table below:

| Translation table from team points to team base grade | | | | | | | | | | |
|---|------|---------|---------|---------|---------|---------|---------|----------|---------|----------|
| Point limit | p<40 | 40≤p<60 | | | 60≤p<80 | | | 80≤p<100 | | |
| Grade | U | 3 | | | 4 | | | 5 | | |
| Point limit | | 40≤p<47 | 47≤p<54 | 54≤p<60 | 60≤p<67 | 67≤p<74 | 74≤p<80 | 80≤p<87 | 87≤p<94 | 94≤p≤100 |
| Extra | | - | none | + | - | none | + | - | none | + |

Note: to pass the team must complete all submissions and other parts satisfactorily according to section 1.1.

1.3 Individual grade

The team base grade is the foundation for the individual grade. The individual grade is set by redistributing the team base grade based on extent and quality of each team member's contribution to the team process, effort and result. As a consequence of this approach, there could be quite large variations in the individual grades within one team, but the mean grade within the team should in most cases be close to the team base grade.

Each student is to present either at the half-time presentation or at the final presentation.

| Part | Examined based on | Result | Who assesses? |
|---|---|-----------------------------------|---------------------|
| Oral presentation | Assessment of oral delivery | Redistribution of team base grade | Examiner/teacher |
| Individual contributions to group effort and result | Individual entries in team logbook* Contribution report Team support person contacts with team Final individual team-member assessment | | Team support person |

*Note that the individual logbooks added 2021 for the benefit of Becky's research are not part of the assessment.