Deadline – 18th of December

# Project report

Template:

<https://studienet.via.dk/projects/Engineering__project_methodology/_layouts/15/WopiFrame.aspx?sourcedoc=/projects/Engineering__project_methodology/Education%20specific/Software/2019%20Semester%20and%20Bachelor%20Project%20Report%20Template%20-%20VIA%20Software%20Engineering%20Guidelines.docx&action=default>

A description of your system. A chance to present the results from all the phases.

The general length requirement for a Project Report is: Between 50,000 and 150,000 characters

(This count applies to the entire Project Report excluding appendices,. and includes spaces, as well as 800 characters per self-produced figure)

**Authorship**

During the project examination, students are evaluated individually. A list of sections and authors must therefore be included as an appendix. An appendix to the report must clearly state which student wrote which sections. This placement allows the examiners to judge the written parts without prejudice. It is acceptable to have more than one author on a section, but it is not acceptable to have all project group members on all sections.

**Cover (optional):** A report cover may be formatted as desired.

**Title page (required):** The design of the title page may be determined by the

project group. However, the title page must include the following elements:

− name and logo of the educational institution

− the title of the report

− the name of the study programme and semester

− the name(s) of the student(s)

− number of characters in the main text

− the name of the supervisor.

− date of completion

− a declaration with signature(s) of the student(s). Each student must sign a declaration of authorship in the project report stating “I hereby declare that my project group and I prepared this project report and that all sources of information have been duly acknowledged” or something similar. In addition, it is recommended to include photographs of the students (to aid the external examiner) and the logo of any company included in the project report.

**Preface (optional):** A preface may be included if additional comments on context of the report are needed. The relevance of including a preface depends on the type of project. The project group and the supervisor should discuss the need to include a preface.

**Table of contents (required):** The project report must include a table of contents

which outlines the structure of the report and how the information is organized.

**Abstract/Summary (required):** The summary is used for first-glance reading and includes everything from the introduction to the conclusion and may not include things that are not mentioned anywhere else in the report. The summary is the last page of the front matter and is best written upon completion of the report. The summary must be 1⁄2-1 page in length and include the purpose, methods, main findings, conclusions and recommendations.

**Introduction**

Why, what and how

* Background description (the case)
* OK to copy/paste from BD (self-cite)
* Also OK to rewrite/improve (self-cite)
* Do not mention your system/result
* Introduce your approach to system development
* Delimitations where relevant

**Analysis**

Requirements

Functional Requirements

Non-Functional Requirements

**Design**

* Class diagram
* Sequence diagram
* GUI screenshots
* Website image

**Implementation**

A couple of code snippets

* Maybe or previously discussed use case?
* Best to show “difficult” concepts?
* High priority feature?

**Test**

* Documentation of test
* Outline showing use case, test results and comments
* JUnit tests for one model class
* Make our own testing of use cases

**Results**

List what has been implemented/is working and what has not/is not working.

Refet to requirements or use cases

**Discussion**

Mention aspects that are working really well in your system/not working at all

Comment on why from a technical point of view

This is not the place to discuss any process-related issues or learning outcome

**Conclusion**

Draw on the introduction, requirements, analysis, design, implementation and testing sections when you write the conclusion

Outline the result/product you have made, weaknesses/strength of your system

**Project future**

**Sources of information**

**Appendices**

The purpose of your appendices is to provide extra information to the expert reader. List the appendices in order of mention.

* The case (project description)
* Use case descriptions
* Activity diagrams
* Class diagram
* And other relevant diagrams
* Javadoc
* Userguide

Remember that only the expert audience will read appendices and only if you make references!

Examples of appendices:

* Project description (done? Maybe update time schedule)
* User guide
* Source code - source documentation
* Diagrams
* Data sheets
* Etc.

# Process report

A description of what you have learned and how you have worked together as a group to make the project. A chance to show how you have managed your time and overcame cultural barriers.

**Header and Footer:** The page header of the main matter of the report must include the title of the report, while the page footer of the main matter of the report must include page numbers. Additional information in the header and footer may be included if desired.

**Cover:** A report cover is optional and may be formatted as desired.

**Title page:** The design of the title page may be determined by the project group. However, the title page must include the following elements:

* name and logo of the educational institution
* the title of the report
* the name of the study programme and semester
* the name(s) of the student(s)
* number of characters
* the name of the supervisor
* date

**Table of contents:** The process report must include a table of contents which outlines the structure of the report and how the information is organized.

**Preface: (optional)** A preface may be included if additional comments on context of the report are needed. The relevance of including a preface depends on the type of project. The project group and the supervisor should discuss the need to include a preface.

**Introduction.** Overall factual description of process and progress based upon factual data from e.g: Log book, minutes of meetings with the group, the supervisors and companies.

**Group description.** Introduction of the group members, cultural background and project experience prior to the project start.

**Project Initiation.** The groups reflections on the project initiation phase.

**Project Description.** The groups reflections on the project description phase.

**Project Execution.** The groups reflections on the project execution phase, including reflections over methods as well as project results.

**Personal Reflections.** Personal reflections for each member of the group regarding his or her experience with the project group work and with project organized studies and problem-based learning. As a guideline, the personal reflections must be approximately 1-3 pages for each student.

**Supervision.** The groups reflections on the supervision.

**Conclusions.** The Group Summary on what to do and not to do in group work, including a list of recommendations.

# Documentation

* Documentation of system
* Shows a description of the code (what methods do, what their parameters are, etc.)

Write description of all methods in code.

# Website

**Hand in the following to WISEflow in the final hand-in:**

PRIMARY FILE

* The project report and process report in PDF format as one file
* All group members’ names and student numbers on cover page

Do not hand in a blank file as primary document as this will lead to your upload being rejected.

APPENDICES

* The appendices in PDF format
* However, all source code in relevant format – not PDF
* Project Description
* All diagrams in .svg or PDF format
* Additionally, all Astah files
* User guide and installation guide

In one Zipped folder, not RAR or any other compressed format. Only Zip is accepted.

Exam

Two parts: Group presentation + group examination

* Presentation: Show your work as a group
* Examination: Demonstrate the skills you have gained

The uploaded reports must comply with the hand in criteria as stated in the Support Document: Formalities Criteria for upload of SEP1.

Grading criteria

100% of the grade is based on a total assessment of the written materials, oral presentation and individual performance at the examination.

Knowledge

The student will use the knowledge acquired in SDJ1, SSE1 and RWD1.

Skills

The student will achieve the skills to:

Explain the Waterfall method as a software development process

Derive requirements

Apply use case modelling and draw activity diagrams

Draw a domain model

Construct class diagram(s)

Draw a sequence diagram of one essential method

Implement a software system using object-oriented programming

Integrate Java-generated files into a webpage using JavaScript

Perform testing in relation to the derived requirements

Document system development and process using VIA Software Engineering’s Project Guidelines and report templates

Describe how to use your system in a user guide

Plan and deliver a coherent oral presentation of the project

Discuss the importance of work style and behaviour, team roles and culture