



Aalto University
School of Science

Studio 2 Project

CS-C2120, Programming studio 2

CS-C2105, Programming studio A

03.02.2021

News

- Round 17 opens today
 - Project pages open today
 - More instructions published next week
 - Project topic selection by Feb 11th
 - Own topic suggestions to Lauri Malmi by Feb 9th
 - UML-task grading continues
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Learning goals

- The first larger *personal* software project, which starts from scratch, i.e., requires planning and implementation.
 - Learn about designing software
 - Learn about implementing and testing software
 - Learn about documenting a project and software
 - Get some experience of project management, including time management.
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Schedule

- Choosing a topic, **DL Thursday 11.2**
 - Prepare project plan,
 - General part, DL 17.2
 - Technical part, DL 19.2
 - Plan demo, weeks 8 and 9
 - Light interim reporting in Git every two weeks
 - Possible checkpoint meetings with personal teaching assistant in March / April
 - Project submission DL 28.4
 - Project demos May
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Support

- Exercise groups continue in Zoom during Period 4 on Mondays (14-16) and Thursdays (12-14).
 - Zulip
 - Each topic has nominated assistant(s)
 - Follows and evaluates your project
 - You can discuss the project topic and its interpretation / requirements
 - Programming problems to be resolved in exercises and Zulip (not by email)
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Project general plan, DL. 17.2

- Personal information
- Project goals
 - Overall description of topic
 - User interface draft
 - Files and file formats plan

*The main goal of writing the general plan is to make it clear for yourself **What** your program should do, and how it will be used.*

Project technical plan, DL 19.2

- Technical plan
 - Program class structure
 - Example use cases
 - Specific algorithms
 - Data structures / collections used
- Project working plan
 - Schedule and milestones
 - Testing plan (system testing & unit testing)

*The main goal of writing the technical plan is to make it clear for yourself **How** your program would be implemented and how the project would proceed.*

Plan demos

- Weeks 8 and 9
 - 10-15 minutes informal personal meeting with the assistant (*compulsory*)
 - To get advice and feedback from the assistant
 - No need to prepare any presentation, just answer to assistant's questions
 - Meeting time reservations via Doodle from 19.2 onwards (possibly earlier)
 - Links will appear in A+ / project plan page
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Project document

- Personal information
- Overall description
- User's guide
- Program structure
- Specific algorithms
- Data structures
- Files and file formats
- Testing report
- Known bugs and weaknesses
- Best and weakest points
- Reflection on project progress
- Final self-evaluation
- References

Interim reporting

- Every 2 weeks a brief informal report to the assistant
 - Written in progress report file in Git.
 - What progress has happened, if anything?
 - How the project proceeds compared with initial plan for these 2 weeks?
 - Checkpoint meetings with the assistant in late March / April
 - Assistant invites for a zoom meeting, if needed
 - You can also invite a meeting with the assistant
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Final submission and demo

- Submission includes
 - Project document
 - Source code
 - Assistant will review the submission before the demo session.
 - Demo is a 15-30 minutes session with the assistant, where you:
 - demonstrate the program,
 - answer assistant's questions about your source code and document, and
 - get any additional feedback from the assistant.
 - Final grades are published only after demos.
 - Assistant can request revision of the project and provide extension for submitting it (=> grade is lower)
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Project topics

- 20+ different topics available from several themes:
 - Games
 - Graphics
 - Simulations
 - Statistics
 - Simple text data bases
 - Applications
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Project topics cont.

- Most topics have different levels
 - Easy (grades 1-3)
 - Moderate (grades 2-4)
 - Challenging (grades 3-5)
 - Moderate / demanding require graphical user interface
 - Some topics require using concurrent threads
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Own topic

- Suggestions to Lauri Malmi by email by Feb 9th
 - At most 1 page description
 - Should not be old topic used in this course
 - Should have complex enough problem domain for class structure design
 - Should not be too trivial (but not too challenging either)
- Acceptance message and possible refinements to topic will be sent back to you by Feb 10th,
 - Only after this you can select "own topic" from A+ project topic selection assignment.

Friday session this week

- Presentation and Q&A on topics