Submission Guidelines for Mid-term, deadline 20.3.2022

Preparation

Book a meeting time with your assistant. You can see who your assistant is from the pdf file shared in Moodle (under Group Assignment section). Each assistant has their own Doodle poll link. Click the link for your assistant and select **one** suitable meeting time. **The whole group is expected to attend, so coordinate within your group to find a suitable time.** The meetings will be held between 22.3.-25.3. on campus (or Zoom if so agreed with your assistant), and the **deadline for booking a time is 17.3**..

Submission

There will be **two** different items that **both need to be submitted:**

1) Design document
2) Code for the prototype version

Both the document and code will be submitted into the group's GitLab repository. You **must mark relevant commits** with an appropriate tag. Use the tag "midterm_submission", for example. You can add tags either in GitLab by navigating to the commit you want to mark, and from "Options" choosing "Tag", or via the command line. This link shows the basics of command line tagging.

Design document

There is no ready-made template for the document, each group is given free hands to prepare the document. **The design document must describe how the group has designed/planned the implementation of the final application.** This means that all components/classes, interfaces, etc. that you would think of needing to implement all functional requirements must be presented. Also give some verbal description on the decision-making process – why/how did you select the solutions that you did (the chosen structure, libraries, technologies, etc.).

We particularly expect the following:

- High level description
    - By this we mean a description of the whole application. What components/modules/classes are there, what dependencies or other relationships are there between them, what libraries or third party components are used and where and why.
    - It is recommended to draw some kind of diagram to help visualize the big picture. A class diagram is very well suited.

- Boundaries and interfaces (internal)
    - How information flows between components, what interfaces are there in the application, who demands an interface and who supplies it.
- Describing components and responsibilities:
    - What is the purpose of each component and what responsibilities does it have (on a general level)?
    - The internal structure and functions of a component (on a more detailed level).
- **Self-evaluation (make a separate section for this in the document)**
    - By the mid-term submission you should have already designed a complete application, but only likely implemented a part of it. In the self-evaluation section you are supposed to evaluate how well the design you have made has supported implementation, and how well you would imagine it will support implementing the remaining functionalities.
    - Describe: How well have you been able to stick to your original design, how well have you been able to implement features based on your original plan, how does your design correspond to quality, and what changes are you anticipating you need to make to be able to implement the remaining features.
    - **If you have already made changes to the design (structure) you had documented for the prototype phase, document carefully all these changes!**
- Reasonings for design solutions/decisions can be presented along each separate item or you can make a separate section for reasonings, collecting the principles that guided your design on a higher level. You should be able to present your decision-making process in a way that you can answer to the assistant when they ask ”Why did you decide to do it like this?”.

Code

There are no minimal requirements for what should be implemented in the mid-term phase, but you should have about 30% done. This is not a strict demand, but if you are significantly behind, it likely indicates big problems getting the assignment done in time for the final submission. You should by now know how to fetch data from the APIs, and you should have some concrete features implemented that you can demo to the assistant.

The most emphasis in mid-term submission is given to the self-evaluation and discussion with the assistant based on it. Making the self-evaluation becomes easier the more features you have been able to implement based on your design.

Submitting to the repository: Include a clear README file, detailing the environment required to run the application, and which files are executed for which purposes. The README must be submitted to the GitLab repository for the assistant. The instructions must be detailed enough that the assistant can load all necessary libraries and build and run the application on their own computer.

Demos

In the meetings with the teacher's assistant each group prepares to present their implementation. Each member of the group must be prepared to speak and tell about their role in writing the code, and at least one group member must be prepared to present a demo of the application.

In the meeting the group will present the document, demo their application and discuss their design choices. Remember thus to have all documentation and a demo ready at hand when joining the meeting.