Laboratory 1 – weeks 1 and 2

Initial setup – Working in teams

- Form your team
- Choose a name for the team
- Choose a team leader
    - Responsible for creating tasks
    - Responsible for dividing work evenly
    - Has a general overview on the whole project - diagrams, implementation, tasks, progress
- List your team - name, members, leader - send me by email

Team working and source control:

- Trello or Github issues for project management
- Github for version control
- Create accounts for all team members
- The team leader will create the board/repository and give necessary access to everyon e
- Make sure give me access to Trello & Github
    - Github (username bajcsiadel/VictorMotogna)
    - Trello (username bajcsiadel/victor_motogna)
- A good intro to Git can be found here

Assignment:

- Go through the applications descriptions (Conference Management System/Academic Information Management System)
- Decide which problem you will tackle
- Choose app type & technology stack (this should be defined by Lab 2)
    - Web or mobile or desktop
    - Backend/Frontend language & framework
    - Database & ORM of choice

Laboratory 2 – weeks 3 and 4

Assignment:

- Write down the requirements document (using the application description)
- Started work on use cases & general flows; present them at this lab
- Start thinking of structure of work: which diagrams you need first, when will you start the actual implementation, who will work on what
- Make sure you have the tools setup - diagram tool (either StarUML or an account for draw.io), Git accounts and access for team members, Trello board and access for team members
- An initial project on Github with the selected technology stack. At least a "Hello World" in the selected frameworks would be enough
- At least 3 initial diagrams - you can choose which ones, but I would recommend use case diagram, architecture diagram & database diagram; having these will make implementations easier

Please make sure the diagrams are added to the git repository. Also, the documents for uses cases & flows should also be added. Consider using Markdown so they are nicely rendered on Github, but that is a bonus.

Laboratory 3 – weeks 5 and 6

Assignment:

- Continue working on/finishing the diagrams started before
- Start implementation; you decide your own order of the tasks & features
- A general idea of the UI should be defined, so frontend work is planned and less chaotic
- A connection to the database should be defined and ideally also the ORM models

Laboratories 4-6 – weeks 7 through 12

Assignment:

- All diagrams (use case, flow, architecture, database, class) should be added to the Git repository
- Work on the implementation of the functional & non-functional requirements; each laboratory should have progress, as it will be noted and influence the final grade
- Bonusses:
    - Writing tests is a big bonus and all teams should try to have at least a few tests
    - Code generation (like done at the seminar) is a bonus; it is not required, but having it will help the grade

Laboratory 7 – weeks 13 and 14

Assignment:

- Each team will present their project, diagrams, documents (anyone from the team can chip into the presentation, not only the team leader)
- Grading will be done with the whole team, depending on contribution, team leader input & each lab's grading