Reflection Assignment

Approaching the end of the course this reflection assignment invites you to look back at how things went and what we learned. This is generally a good practice after any project that you do.

For this assignment you will be assessed on the insight that you present for the questions. You will no longer be assessed on the quality of your project. You should therefore be free to be critical of your own project, without this resulting in any bad grades. As with previous assignments the emphasis should be on **giving reasoning and argumentation** for your answers. You can imagine a “why?” with every question. I recommend looking back at your proposal, repository and poster to freshen your memory. **Make sure that you really try to extract some insight which relates to your project. Generic statements that could apply to any project will not give you any points.**

This assignment is individual. You should not be doing it together with your group members. It is designed so that you should not need to discuss things with group members.

This assignment accounts for 20% of your final grade, and should be at least a 5.0 to be able to pass the course. Please submit a PDF that gives itemized answers to the following questions. There is no page limit, but I expect you’ll need around 3-5 pages.

1. **Personal Learning Outcome (1 point)**

What was the learning outcome you had set for yourself in the proposal? To what extent did you achieve this? Are you satisfied with this outcome? What factors affected your ability to achieve your learning outcome?

2. **Proposal alignment with the project (1 point)**

Look back on your proposed project and compare it to the project that you ended up doing. Did you deviate from the proposal? What caused these changes? Were your changes beneficial or detrimental to the outcome of your project?

3. **Limitations of your project (1 point)**

What does your project not do as well as you’d want? Is your model too slow? Does it not work well enough outside your dataset? Did you fail to account for some problems in your data that might be affecting the performance now?

4. **Quality of group work (2 points)**

Please first explain what your group’s strategy was for working in teams. How/when did you meet? How did you do code review & version control? Then reflect on whether this worked well. Were you able to stick to the strategy? Was the strategy suitable to your needs? Would you use a different approach in future projects?

5. **Quality of code (1 point)**

How do you feel about the code that you have at the end of your project? Is it readable? Will you still be able to understand it in the future? Are there certain classes/functions/structures that are messy, or very elegant? Please give a specific example of something you are (un)happy about.

6. **Improvements to work process (1 point)**

For your next Machine Learning project (perhaps your BSc thesis), what would you change about your approach compared to here? Would you want to work more structured or allow for more exploration? Will you spend more/less time on certain steps? Why did you not already do those things in this project? What better outcome will you have by improving your process?

7. **Usage of relevant tools (1 point)**

Which (software) tools did you use during your project, and were they helpful? Think debugger, IDE, Github, pre-commit scripts, DVC, copilot, tensorboard, etc. What tools did you not use, but think could've been useful? *How did the tools you did (not) use affect your project?*

8. **Achieved / improved skill level. To what extent are you now better at doing certain tasks in an ML project? (1 point)**

What skills did you get better at by doing this project? How comfortable are you now with specific tools, approaches or problems? What helped you in developing your skills?

9. **Desirable skills for the future. What would you still like to learn in order to be able to deliver good Machine Learning projects in Industry or Academia? (1 point)**

Are there any skills that you did not yet acquire, but that you do think would be valuable? Perhaps working with Docker, Cloud deployment, task delegation, collaboration, business understanding or scientific research skills? Why do you think you still need these skills? What could you do to learn them?