

MP2 WORK AS SKILL BUILDING PROCESS

Objectives

Except for the BI learning objective, the work on this project aims at developing skills for group work in solving programming tasks.

First, the subject matter is new and difficult for most of you. The teaching language is not the same as the one you are used to learn in and the domain terminology is much more abstract than the one you are familiar with.

We believe, the challenges can easier be overcome if they are shared in a team. Therefore, we try to **encourage analytical and constructive communication between you in the group and with your instructors**, for effective and efficient resolving of those challenges.

Second, it is obvious that many of you use intensively external assistance from Internet resources, AI-based, at most. It can be of great help, and we certainly do not deny using it. The ambition is that you **learn to be the driving force in the collaboration and pair programming with the GenAI chatbots**.

Therefore, we are providing a specially designed and developed AI tool, called AI Moderator, which is supposed to ‘join’ your group and act as an intelligent assistant and a contributor to the human collaboration and programming.

The AI Moderator should not solve the task for you, writing code, or taking the lead, but help in structuring the work process, providing feedback, and pointing out the errors.

Third, we make this kind of experience in programming for the first time at Cphbusiness, so a success is our expectation, but not guaranteed. We hope you gain as much as possible from such a form of group work, while **having fun and productive time together**.

During the work on the project, as well as at the end of it you are welcome to share your opinion and assessment of the usefulness of AI as a programming partner.

Recommendations

- Each group member should have active participation in preparing a piece of the solution – no members should be left aside!
- One group member takes the responsibility to collect the modules and ensure the final product is in Github at the time of delivery. Same member can submit the link in Moodle before the deadline. A different student should take this role with next project.
- Exchange of human-to-human messages is encouraged. If the Moderator interferes too much in those, it can be ignored.
- Everyone may address the Moderator with questions, while the whole group will benefit from the answers. The questions can be asked in either writing or speaking to the microphone.
- The instructors, Dora and Chris, can be addressed at any time for a dialogue and help.

- The communication channel will be open until the project development deadline, so it can be used asynchronously (meaning another participant may answer to you later in time, remotely in space).
- If the AI Moderator breaks down for any reason, please, inform Dora by mail (tdi@cphbusiness.dk)

What Can AI Moderator

The AI Moderator is a virtual chatbot, which can

- **Guide the dialogue** - suggest task order, ask clarifying questions, ensure all team members contribute, and similar
- **Help with structure** - it can propose a plan for how to structure your work but not do the work
- **Provide feedback** - if you ask, it can check the code, point out at errors in it, and comment potential issues, but will not write code instead of you
- **Log the dialogue** - it can generate, save, and mail to your address a summary and/or a transcript of the conversation, which you can use later.

Suggested Workflow

1. Individually, read the task.
2. In the group, plan the work process across the time until the submission deadline. Take into consideration that some of the information needed for the solution will be introduced to you next week. Plan the organisational procedures and communication techniques. Remember to include the Moderator in the planning, if necessary.
3. In the group brainstorm, analyse the problem and design a solution. Remember working with data and data frames, data wrangling operations, the exploration and visualisation. Decide on the Python code format – in notebooks, in packages, or both.
4. In the group, divide the code implementation into subtasks and distribute the subtasks between pairs or individual group members. You can decide to duplicate some components, to split the solution in stages or in context. Remember validation and testing of the written code. Use the Moderator as a tester, if you find it appropriate.
5. Individually, start working on your part of the solution. Use help from the class exercises, the Titanic demo code, the instructors, the Moderator and other available sources. Do not copy large code segments from anywhere, better type small portions of code and test them interactively.
6. At the next workshop, gather again to integrate a full project solution. Organise it in a clean and readable file structure. Prepare a short Readme file, explaining the process and the results. Write the names and the contributions of the individual team members. Discuss briefly the role of the AI Moderator, reflecting on its usefulness and usability qualities.

Have fun!

the instructors