Final Project Requirement

Team Spec:

You must team up in groups of **3 to 5 people**. Keep in mind, diversity can bring different perspectives that can be valuable for your team.

We understand that with the hybrid learning modality, it may be difficult to pick your teams. But we encourage you to reach out to your classmates. You may have worked with some of them before in the class exercises, others you may know from a different course or they are your labmates. You can also check the current teams, reach out to the members and ask if you can join. You can check these discussion boards or make your own discussion boards to look for team members: discussion boards in Cool . If at the end some people still cannot find a group, we will take matters into our own hands and allocate you.

Please write down your grouping on this spreadsheet: <u>DM2024 Project Group</u>. (The sooner the better).

Competition:

As for topics/competitions, there are two options.

- 1. <u>Kaggle Competition</u>: "Child Mind Institute Problematic Internet User"- In English
- 2. TBrain AI CUP Competition: "Application of RAG & LLM in Financial Q&A"- In Mandarin

Make sure you visit the websites to read the extended details.

After selecting your teams, you can discuss which one of the projects you would like to take on. Or if you are very interested in particular ones, you can find teammates who are also interested in it.

When you have decided your team and the competition you will participate in, please go back to the spreadsheet provided and write down the competition at the top of your table next to the team number. For example: "Team 1: Kaggle", "Team 2: TBrain".

Grading Policy:

Regardless of the competition you select, for class purposes you will still be asked for the same deliverables (report, code, demo presentation etc.) and will be evaluated in a fair manner. Evaluation details:

- Progress report: 20%
- Competition result (ranking): 50%
- Final project report: 30%
- The final score of an individual will be recalibrated based on their contribution to the team. For instance, in a 4-member team, if a person contributes 23%, he/she would receive 92% (23/25) of the group's overall grade.

In addition to the benefits of the learning experience, all projects have prizes which you can collect if you win and are eligible (please read regulations of the competitions for more details). So better get at it, the clock is ticking!

Timeline:

10/7 Project Announcement launch

10/11 Decide the team

TA will randomly distribute the team members if needed

11/4 First Progress Report

Please prepare a slide presentation and a short video (<4 mins) about the progress of doing the competition. These need to be submitted through NTU Cool **before 11/1 11.59pm**. Only **one member** needs to submit from each team.

The content include the following:

- 1. Provide a concise overview of the competition (including but not limited to what is the problem/challenge and the goal of the competition)
- 2. Discuss your data observation that your team has done during this time. You can provide some graphics or charts to support your findings and discuss interesting findings you found, especially related to solving the problem.
- 3. Discuss your preprocessing steps, including but not limited to feature engineering, feature selection etc. What the input looks like in relation to the proposed method and why.
- 4. Discuss your plan for the proposed method or the method that your team has tried during this time, provide insights and reflections. If available, you can provide the submission attempts that your team have tried, the result and the reflection on how to improve the result (future plan)
- 5. You can also discuss the challenges you encounter and how you plan to solve them.

Please note that the progress report clip will **not** be uploaded to YouTube. It will only be available on NTU Cool to ensure the competition details remain within the class.

11/9 TBrain Al CUP Competition Preliminary Round Deadline

11/18 Second Progress Report

Similarly, please prepare a slide presentation and a short video (< 4 min) explaining about the progress continuing from before. The materials need to be submitted through NTU Cool **before 11/15 11.59 pm**. Only **one member** needs to submit from each team. The content include the following:

- 1. Concise overview as before
- 2. Data observation and preprocessing as before. If there is new data observation or preprocessing steps, do provide and talk about them
- 3. Discuss the submission attempts that have been done, including how many times, the methods that are used for each attempt (include the reason why using each method), how long it takes, the result of the attempts, insights you get and your reflection upon the result
- 4. Future plan reflecting on previous attempts, the challenge and solution plan on how to improve the result

Please note that the progress report clip will **not** be uploaded to YouTube. It will only be available on NTU Cool to ensure the competition details remain within the class.

12/7 TBrain AI CUP Competition Semifinals

12/16 Final Project Presentation

The final presentation will take place on the class platform (not on YouTube). The specific location of the class platform will be announced later.

Please prepare a slide presentation and a short video (< 4mins) about the final update of the competition. The materials need to be submitted through NTU Cool **before 12/13 11.59 pm**. Only **one member** needs to submit from each team. The content include:

- 1. Concise overview as before
- 2. Concise data observation and final preprocessing step
- 3. Discuss your final submission attempts, which method give the best result, the reason behind it, the insights you get from the final submissions
- 4. Reflection on doing the competition

12/19 Kaggle Competition Deadline