

Final Project

1. Summary

The final project consists of two main tasks:

- Task 1 (25%): Illustrate the course content.
- Task 2 (75%): Research new breakthroughs.

The project is carried out by a team with a maximum of 4 members.

In the mid-term, each team submits a draft version to Moodle for the assistant to review and assess the team's progress.

During the execution process, if you have any questions or need assistance, you can contact the assistant (Lê Nhựt Nam) through some channels such as Zalo, Email, and Moodle.

2. Task 1

2.1. Description

- Each group is required to provide illustrative examples for features and algorithms in at least 3 course topics and manually execute the steps to obtain the results.
- Specific topics will be assigned by the assistant.
- Examples can be referenced from internet sources, but your team must represent them such that they are intuitive (graphical images, tables) and demonstrated in detail and in step-by-step explanations.
- Task 1 only requires a report submission; no seminar presentation is necessary.
- You can write in Vietnamese or English.

2.2. The report structure

- Group information and members
- Assignment and completion status
- Summary of relevant knowledge
- Description of examples, images, tables, and manually illustrate algorithms.
- Reference materials

2.3. Submission

- Submit a report file in PDF format with a name format as StudentID1_StudentID2_...

2.4. Evaluation Criteria

No.	Criteria	Rate
1	(Quantity) Each topic must have at least 1 illustrative example	10%

2	(Quality) The examples should be presented in detail with images and tables, describing each step clearly.	50%
3	(Depth) Each topic should have additional distinct examples that differ from the previous ones.	20%
4	(Presentation) The report should be well-formatted, contain all the required information, and include complete citations for reference materials.	20%
Total		100%
Bonus (work with 4th, 5th topic if your team worked well in first 3 topics)		20%

3. Task 2

3.1. Description

In the list of papers provided in the link below, each team need to select at least one paper to study, experiment with, and evaluate.

Link: <https://people.csail.mit.edu/jshun/graph.shtml>

The selected paper should meet the following criteria:

- It should not be chosen by another team (the registration list is dynamically shown on Moodle link).
- It should not be a survey paper.
- Recent papers are preferred, encouraged from 2015 onwards.
- It need to be relevant to the course topics.
- If there is a more interesting paper that is not on the provided list, the team can propose it to the assistant for approval.
- Your team should choose papers with published source code and experimental data.

The presentation schedule is posted on Moodle.

3.2. The report structure

The report should show at least the following:

- Group information, members
- Rate of division of work, level of completion
- The method/model has been implemented
- Results obtained, evaluated results
- Self-assessment of the team's work results
- Video to show your work
- References

The slide preparation shows the following points:

- What is the problem outlined in the topic?
- Meaning of the problem /topic.
- Methods to solve it.
- Run experiments/demos (with google colab, v.v...)
- Conclusion

Each group presents for **a minimum** of 30 minutes and is attended and presented by all members. Slides encourage more illustrations and examples.

3.3. Submission

The group gathers the following files, compressing them into one file with the name StudentIDs of the group members:

- The slide
- File report in PDF format
- Other files such as data, source code, video ... (if any). If the size is greater than 25MB, upload these files to the external server and add the link in the report.

3.4. Assessment

No.	Criteria	Rate
1	Slide + presentation	20%
2	Reporting	60%
3	Format, references, videos, ...	20%
Total		100%
Bonus (second paper if you finished the first paper well)		20%

Note: Plagiarism will have 0 score.