Instructions for EARIN Project

Summer semester 2023

1 General information

Welcome to the Project within the Introduction to Artificial Intelligence (EARIN) course!
This time you will have the opportunity to work on a longer assignment in **the same** two-person team (like during Minilabs). Proposed topics come from AI application domains such as computer vision, NLP, recommendations, etc.

2 Selection of Team Assignments

Please check the MS Teams channel for this Lecture to access the list of details. Go to the Files section and find the **Projects** catalog. A set of 20 project topics is provided in a separate Excel file.
Please select a topic and put your names to book. Any topic can be taken by a maximum of two teams.

3 Project Timeline

The project should be delivered according to the following schedule:

Date	Actions
April 21	Deadline for the project topic selection
Week starting April 24	Phase 1: Submission of preliminary assumptions (preliminary documentation)
Week starting May 8	Phase 1: Consultation on preliminary assumptions (based on report submitted by April 28)
Week starting May 29	Phase 2: Midterm solution consultation
Week starting June 11	Phase 3: Submission of the final solution (code and documentation)
June 16	Final deadline for project submission

4 Project meetings

Project meetings will be done on MS Teams (same slot as Labs) on specific weeks mentioned in the Project Timeline section. Meetings should be booked with an instructor responsible for the selected project topic.

5 Delivery of Solutions

You have 1/2 semester to work on your project. The project has phases, and you must keep deadlines for phases as specified in the project timeline. Late submissions will decrease grading by 20% per week late (max 2 weeks). The final deadline for project submission is June 16 (no extension in this case).
The delivered project will be worth a maximum of 25 points, and detailed criteria will be provided by the instructor assigned to the topic. You will need to document each project according to the detailed instructions given by the instructor in writing.

As part of the EARIN project requirements, a GitLab (our Faculty) repository should be created and maintained to store the Python code for the implemented solution. The repository will be considered an obligatory component of the project and will be used for version control, collaboration, and submission of the final code.

6 Requirements for particular phases

These are preliminary requirements for each phase. The complete version will be given by instructors responsible for any particular topic.

6.1 Preliminary Documentation

In the preliminary assumptions of the project, the following information should be included:

- A short description of the algorithms that will be used, along with some examples.

- Selection and description of the datasets.

- General plan of tests/experiments.

- Methods of result visualization.

- Definition of quality measures that will be used.

6.2 Midterm solution consultation

The midterm solution consultation phase aims to check the progress of the project and ensure that the teams are on track to complete the project within the given timeline. The following requirements are expected:

- Submission of the current state of the Python code for the implemented solution in the GitLab repository.

- Update of the documentation to reflect the progress made so far, including:
  - Description of the implemented solution, including the algorithms, techniques, and approaches used.
  - Any changes or updates to the initial assumptions and plans.
  - Preliminary results and analysis of the experiments conducted.

- Discussion of any challenges or issues encountered during the implementation and how they have been addressed.

- Demonstration of the progress made during the project meetings with the instructor, including any intermediate results or findings.

- Identification of any potential risks or obstacles that may affect the successful completion of the project (to be discussed with an instructor).

6.3 Final Solution

For the final submission of the project, you should include the following:

- Submission of the complete Python code for the implemented solution in the GitLab repository.

- Detailed documentation that includes:
  - A brief description of the implemented solution, including the algorithms, techniques, and approaches used.
  - Detailed instructions on how to run the code and reproduce the results.
  - Results and analysis of the experiments, including visualizations and performance measures.
  - Discussion of any challenges faced during the implementation and how they were addressed.

- Proper commenting and documentation within the code to ensure readability and understandability.

- Adherence to good coding practices, including code organization, modularity, and efficiency.

- Presentation of the final solution and results during the project presentation session.

7 Conclusion

Please make sure to follow the project timeline, meet the deadlines for each phase, and maintain regular communication with the instructor assigned to your project topic. Proper documentation and organization of the project in the GitLab repository are essential for successful submission. Good luck with your EARIN project!