Generative AI – Exam Guidelines (Group Project)

Goals

Each group will prepare, deliver and show a presentation on an assigned state-of-the-art generative AI model. The aim is to show clear understanding of the model, extend the explanation beyond the original paper using multiple sources, and demonstrate basic coding skills through experimentation. The coding part is **free in content**: you can choose what to implement, as long as you can show how to use the model and perform an experiment.

Deliverables

Each group will submit:

- **Slides** for the presentation (PPT and PDF).
- **Colab notebook** showing inference with the model and a simple experiment (fine-tuning, adapter training, evaluation, or another relevant choice). It must run in reasonable time with available resources.
- **Experiment log** (1–2 pages, PDF) describing what you tried, the setup, results, and your reflections.
- **Sources list** with references to all material consulted beyond the original paper.

Deliverables should be sent via email the day before the exam at: valerio.guarrasi@unicampus.it, l.tronchin@unicampus.it, daniele.molino@unicampus.it

Presentation

Each group has about **25-30 minutes** in total:

- 15 minutes for the presentation,
- 10 minutes for live demo,
- 5–10 minutes for Q&A.

The presentation should explain:

- The problem addressed by the model and why it matters.
- The model's key ideas and architecture.
- How it is trained and used in practice.
- Strengths, limitations, and open challenges.
- Any other relevant information.

All group members must speak in the presentation and contribute to both slides and code. Slides should be clear, with diagrams and examples rather than too much text.

Students should be prepared for questions not just on their slides, but also on broader understanding of the model and generative AI topics seen in class.

Coding Demo

During the demo, show how to load and use the model (for example, via Hugging Face). What you implement beyond that is up to you: possible options include inference on examples, light fine-tuning, or testing the model on a dataset subset. Keep it simple and executable within Colab's free GPU limits.

Sources

Use at least **sources** beyond the original paper. These can be documentation, blog posts, tutorials, talks, or repositories.

Evaluation

Will be considered:

- Understanding of the model
- Breadth and quality of sources
- Clarity and quality of presentation
- Coding demo & experiment quality
- Group collaboration & Q&A performance