

**Assignment 1**  
LLMs Generating Project Ideas for LLM Project

Due Jan 29, 10 pm

The goals of this assignment are:

- Generate ideas for the course project using LLMs
- Compare the results from three LLMs
- Run LLMs locally on your machine

Use the LLMs Mistral, Llama, and Gemini to generate ideas for a project for this course. You can run Mistral and Llama models on your local machine in a Jupyter lab or notebook. See <https://jupyterlab.readthedocs.io/en/stable/index.html> for information on Jupyter lab. Consult your favorite LLM on how to run Mistral and Llama on your machine using Python in the Jupyter lab. Gemini is only available online. Gemini Pro Research likely will give you the best results for Gemini. There is a one-month free trial for Gemini Pro.

People with Macintosh computers should install mlx so the models can run on the GPU. See:

<https://huggingface.co/docs/hub/en/mlx>

<https://pypi.org/project/mlx-lm/>

To download models, see: <https://huggingface.co>

**Prompts**

For each model, experiment with prompts to get good results.

**What to turn in.**

For each model, indicate which version of the model you used, the prompts you used, and the prompt results. Compare the results of the models. Turn in a document with four sections. One section for each model and one section for comparing the models. If you use Jupyter to run the models, you can turn in a Jupyter file. If you don't use Jupyter, you must prove that you ran the two models on your local machine.

You will turn in the assignment in Canvas.

**Grading**

	Percent of Grade
Prompt & Results per Model	16%

Running the models on your local machine	30%
Comparing the models	22%

### **Late Policy**

An assignment turned in 1-7 days late, will lose 10% of the total value of the assignment per day late. Once a solution to an assignment has been posted or discussed in class, the assignment will no longer be accepted. Late penalties are always rounded up to the next integer value.