Weekly Report

2/26

1. Summary of Weekly Progress

Set up the execution environment to test different models locally as a practice for using Hugging Face. Additionally, test LLMs using Ollama. Evaluate the feasibility of the project to identify the most suitable and executable direction. Use Trello to organize team members' progress and workflows.

2. Task Assignments and Contributions

Team Member	Assigned Tasks	Completion Status
徐浩哲(01157030)	test to combine two models in a program _use a photo to write a story (im2tex,LLM)	Complete
翁子翔(01157048)	 Test Stable Diffusion v1.5 with Hugging Face. Test Stable Diffusion 3.5 - Large with Hugging Face. Run the LLM (DeepSeek-r1) locally using Ollama. 	 Complete Complete Complete
蔡豐蔚(01157010)	Trello board management	Complete

2.1. Comments

Comments

This project mixes LLaVA's talent for seeing pictures with Meta LLaMA's skill at telling stories. But there are some things we can do better. For example, if we check what people type in, we can stop mistakes and security problems. Also, both looking at pictures and making up stories use a lot of computer power. If we save the models instead of loading them every time, the program will run faster.

I tested Stable Diffusion v1.5 and Stable Diffusion 3.5 - Large. The performance of Stable Diffusion v1.5 did not meet expectations, while Stable Diffusion 3.5 - Large was able to generate highly detailed images, with prompts accurately reflected in the visuals. However, the drawback is that it requires higher hardware configuration.

The LLM is now successfully deployed locally using Ollama, and selecting the appropriate model has become a key decision point. Hardware considerations also need to be taken into account.

Use trello to manage our projects, including to-do items, work items and work progress, so weekly progress will be recorded on it

3. Challenges and Issues Faced

- We don't know how to handle Google 360 panorama
- The output images of AI may appear unnatural
- Which large language model to use
- A better hardware configuration is required

4. Next Steps and Goals for Next Week

Set the topic. Decide whether to keep the old topic or adopt a new one. Make all necessary decisions regarding the tools and technologies for this project, including the choice of LLM and web framework. For the LLM, experiment with different models and compare the effects between them, selecting the one that best suits the project's topic. As for the web framework, we may consider the needs of the project to find one that is convenient for development.

5. Additional Notes/Comments

The topic may change. Some models only run on GPUs that are more powerful than the ones we have.