Weekly Report

4/23

1. Summary of Weekly Progress

- Improve prompt at Phi-4, to tell story
- Try to replace or upgrade the existing Stable Diffusion model
- Minor improvements to the frontend
- Tuning the Stable diffusion model parameters
- Organizing the technical workflow of the project
- Try to do regional inpainting

2. Task Assignments and Contributions

Team Member	Assigned Tasks	Completion Status
徐浩哲(01157030)	1. [phi prompt modify](#) 2. test diffusion model 3. learn more about pipeline	Complete
翁子翔(01157048)	1. Upgrade the Stable Diffusion model v1.5 to Stable Diffusion model 2.1 base 2. [Organizing the technical workflow of the project](#) 3. Frontend modification 4. Tuning the Stable difussion model parameters	1. Complete 2. Complete 3. In progress 4. In progress
蔡豐蔚(01157010)	1. Organizing problems and techniques 2. Test some model (blip, [inpainting](#))	1. Complete 2. In progress

2.1. Comments

Comments
learn how to do the right prompt to make stable diffusion work better，adding story to the image. At future can add words and speak to the vedio. And still can modify parameter, to make better picture.
Due to unsatisfactory results after tuning the parameters of the original Stable Diffusion model, I upgraded it to Stable Diffusion model 2.1 base, which showed significant improvement. I also made some minor frontend modifications to enhance the visual appearance and attempted to add video output functionality. Currently, I'm still experimenting with adjusting the parameters of the Stable Diffusion model to achieve better results.
Tested the BLIP model to see if it's better than Florence, but its output descriptions are not as detailed as Florence's. and I also tried the Inpaint model, hoping to correct the unclear parts of the image.

3. Challenges and Issues Faced

- Some thresholds need to be adjusted for better image alignment
- the excessive and not silky enough ,it's too obvious.need to find a way to make transfer.
- the model we current use may improve by change it
- Should more user options be added?
- The effects of inpainting on the images are limited

4. Next Steps and Goals for Next Week

- Consider tuning the parameters or adopting a more advanced image alignment method
- find a way to transfer between two photo
- Organize backend code
- Frontend modification

5. Additional Notes/Comments

decide not to use latent space vector, turn to use clip