

Sprint 2 Report (02/13/24) - ImageGen

Actions to Stop Doing:

These are the activities or actions the team determined they should stop doing. This is the answer to the question, "What things should we stop doing?" The items should take the form of a brief description of what the team wants to stop doing, followed by a brief explanation. If there are no items, this section should describe why the team is completely satisfied with their current process.

- **Stop working on AWS Suite:** Remove AWS and spikes related to that because it was a waste of time.

Actions to Start Doing

These are the activities or actions the team would like to start doing to improve their development process. This is the answer to the question, "What should we start doing?" The items should take the form of a brief description of what the team wants to start doing, followed by a brief explanation.

- **Start Working On Image Generation On Local Machine:** We started working on getting the different stable diffusion models working on local machines.
- **Start Working On Backend Server:** We started working on developing a framework for the APIs that would be used in order to connect the backend to the frontend using Flask.
- **Start Working On Creating New GitHub Repo Branches:** Now that the project is past starter code and setup, we need to ensure we are discussing all changes we are making to the repo to minimize merge conflicts and maintain clean functioning code.

Actions to Keep Doing:

This is the answer to the question, "What is working well that we should continue to do?" The items should take the form of a brief description of what the team wants to start doing, followed by a brief explanation.

- **Pair Programming.** Having someone to rely on speeds up development and also gives a sense of accountability. We will continue assigning tasks to pairs.
- **Continue testing Models & LLMs and its parameters:** Edit and redesign the UI of our website to look nicer. This gave us time to show the progress of our work over time, as opposed to back-to-back meetings. It helped make our scrum meetings feel more productive.
- **Using Discord:** We utilized Discord for our group development session code or demo things together. We also used it for sharing relevant resources since you can pin messages.
- **Using Jira Board:** Using Jira has been helpful in keeping track of what other team members are working on and what needs to be done this sprint.

- **Demoing:** This helps identify problems that need to be fixed right away. In addition, identify what improvements we can make related to the product we are trying to make.

Work Completed + Not Completed:

This is a list of the user stories that were completed during the previous sprint, and a list of the user stories not completed during this sprint (but which were part of this sprint and were in the sprint plan).

As a user, I want to interact with a website to input an image and/or caption. (Incomplete)

- Task 1: Set up Flask Inference (Completed)
- Task 2: Implement Input and output validation (Incomplete)

As a user, I want to be able to generate a funny descriptive caption from a picture I have uploaded (CaptionGen). (Completed)

- Task 1: Implement LLM to make a funny caption (Completed)
- Task 2: Link model to frontend (Completed)

As a user, I want to pick between a faster but less detailed image-generating model, and a slower but more detailed model(ImageGen). (Completed)

- Task 1 - Implement two different StableDiffusion ImageGen models (Completed)
- Task 2 - Link models to frontend (Completed)

As a user, I want to quickly edit my photos(with a prompt)(ImageEdit). (Complete)

- Task 1 - Implement StableDiffusion image editing model (Completed)
- Task 2 - Link models to frontend (Completed)

Work Completion Rate:

This section should report the following: total number of user stories completed during the prior sprint. Total number of estimated ideal work hours completed during the prior sprint. Total number of days during the prior sprint. For the previous sprint, the user stories/day and ideal work hours/day figures should be reported. For sprints past the first sprint, this section should also provide the average user stories/day and average ideal work hours/day figures computed across all sprints to date. The final sprint burnup chart for the previous sprint should be available for viewing in the lab and an email of this chart sent to the TA/prof.

Numbers of Story worked vs. Estimates:

- We estimated 35 hours across our six user stories. We actually worked about 42 hours.
- For the most part, we worked an average of 3.23 hours per day.

Burn-up Chart:

