

Sprint 2 Plan
ImageGen
Complete on 02-13-2024
Revision 2
As of 02-13-2024

Goals:

A website that takes a user-submitted prompt and returns an image that follows the prompt, or takes a user-submitted image and returns a caption of the image.

User Stories:

- As a user, I want to interact with a website to input an image and/or caption. (8)
 - Set up Flask Inference
 - Implement Input and output validation (2)
- As a user, I want to be able to generate a funny descriptive caption from a picture I have uploaded. (CaptionGen) (12)
 - Implement LLM to make a funny caption
 - Link model to frontend
- As a user, I want to pick between a faster but less detailed image-generating model, and a slower but more detailed model. (ImageGen) (10)
 - Implement two different StableDiffusion ImageGen models
 - Link models to frontend
- As a user, I want to quickly edit my photos(with a prompt). (ImageEdit) (10)
 - Implement StableDiffusion image editing model
 - Link models to frontend
- Spikes:
 - Learn about BLIP, Instructpix2pix, and other ML models on HuggingFace

Team roles:

Joseph: Developer(ImageEdit/Backend)

Mani: Developer(Frontend)

Cullen: Scrum Master,Developer(ImageGen/Backend)

Mat: Developer(CaptionGen/Between Frontend/Backend)

Brian: Developer(ImageEdit/Backend)

Khaled: Developer(ImageGen/Backend)

Initial task assignments:

Joseph: (As a user, I want to quickly edit my photos(with a prompt) so that I can post them on my social media.), Implement StableDiffusion image editing model

Mani: (As a user, I want to interact with a website to input an image and/or caption),
Input and output validation

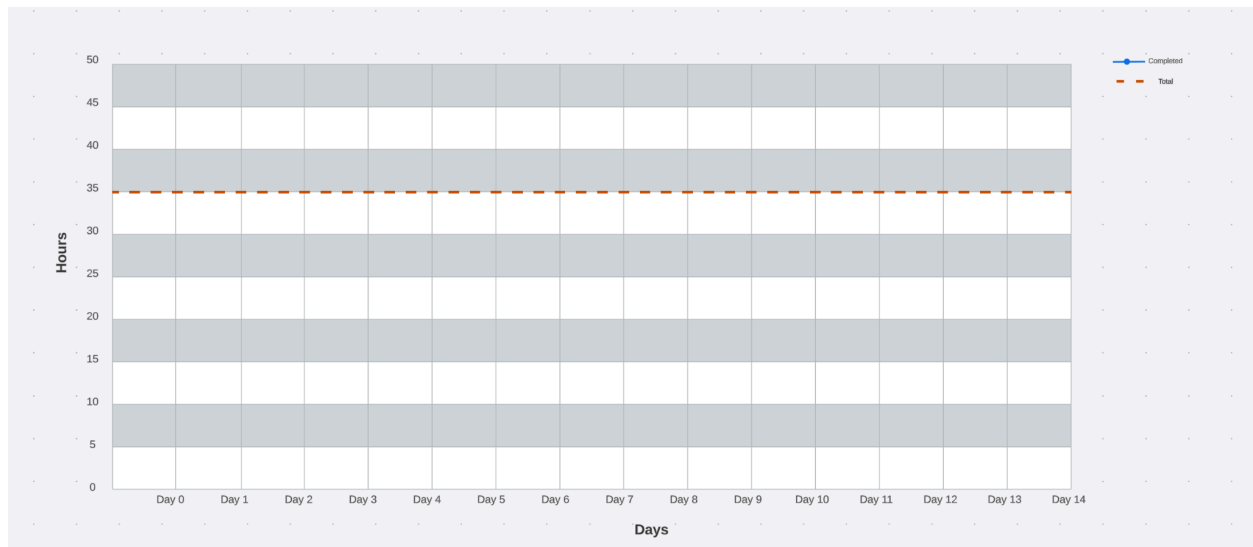
Cullen: (As a user, I want to pick between a faster but less detailed image generating model, and a slower but more detailed model), Implement StableDiffusion image editing model

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

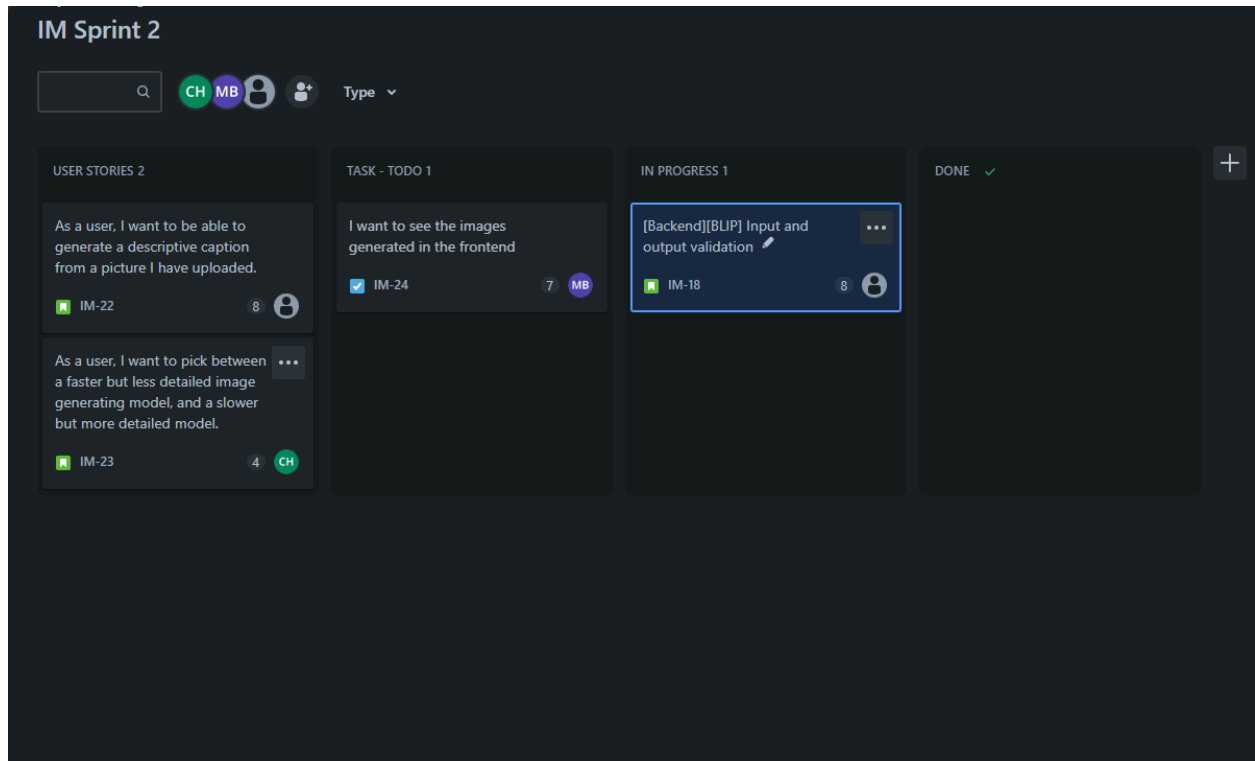
Brian: (As a user, I want to quickly edit my photos(with a prompt) so that I can post them on my social media), Implement StableDiffusion image editing model

Khaled: (As a user, I want to pick between a faster but less detailed image generating model, and a slower but more detailed model), Implement StableDiffusion image editing model

Initial burnup chart:



Initial scrum board:



Scrum times:

Mondays 9:10-9:25

Wednesdays 9:10-9:25

Fridays 9:10-9:25