

Project Proposal: Flux Diffusion Image Gen

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Overview:

A full-stack application enabling users to generate high-quality images from a text prompt. Users will be able to login and view their image generation history, download images they generate, add or manage a friends list, and view friends' images. The application will also feature a community gallery of anonymous images from other users outside their friends list.

Objectives:

- Provide accessible, general use image generation to users
- Implement community networking to connect with friends
- Develop a clean, intuitive user interface that loads quickly
- Implement login + authentication for users to track data

Features:

- User authentication (login, signup)
- Personal history management (view, remove, public/private)
- Social features (friends list, inbox, method for adding)
- Image generation with a FLUX diffusion model
- Community gallery of recent images
- Ability to download generated images

Tech Stack:

Frontend:

- React/JavaScript
- Tailwind CSS
- Redux

Backend:

- Flask/Python
- Supabase (Cloud PostgreSQL)
- AWS S3 Bucket (Image storage)
- **ML model info**