Modyfi Generative Art Print App

*Project Manager:* Madeline McKune, Go To Market (GTM), madeline@modyfi.io

**Company Background:**

Modyfi is a browser-based, collaborative design application for multidisciplinary digital designers (i.e. designers who create a range of static and animated designs for web-based distribution). Modyfi combines powerful, non-destructive workflows, design-forward image editing tools, motion design capabilities, and AI image generation features within an intuitive, easy-to-use real-time user interface.

Modyfi makes it easier and faster to create exceptional, visually-differentiated design assets, optimized for social and web distribution. With our extensive library of modifiers, and designer-led image generation, we not only make it more efficient for designers to realize sophisticated visuals they might be able to painfully, tediously achieve in other software, but we’re unlocking types of visual design and expression that have been limited to people who have a very niche set of skill sets – e.g. 3D design and creative coding.
Description of Work to Be Done:

The goal of this project is to create a web app where users can order custom poster prints of the art they created in Modyfi. There is currently no way for users to export a print quality version of their project, so this platform will allow them to buy a physical copy of their artwork. The web app will need UI to update the design of Modyfi project, a way to upscale the project to print quality, and a preview view so that users can see how their project looks in different print sizes.

Figure 1: Example from CanvasPop on how their generative art platform works

Students will focus their efforts on the following objectives:

1. **Edit/customization UX** that users can make changes to their Modyfi project from the web app
2. **Print Preview UX** to show mockups of the chosen print format/size in various settings
3. **AI-based upscaling** so that projects are in print resolution
4. **Basic payment/ordering** for users to pay for their print and have it shipped to them

Modyfi will provide the architecture for editing a project from the web app and designs for the web app. The students will work with Madeline, a previous software engineer at Modyfi, and Piers, the CTO of Modyfi, if there are any technical blockers.
Figure 2: Example print ordering UI from Bohet.art

Desired Experience for Students:
- Typescript
- WebGPU & WebAssembly
- Supabase DB
- Stripe API
- AI experience

We understand that not all students in the group may have the desired technical experience. However, if you have experience calling an API, frontend development, or a desire to learn graphics, you can contribute to this project.
Preferred team size: 5 students
Given the scope of this project, 4-5 students are required.

Location Where Work Would Be Performed:
Madeline will attend weekly meetings at the Colorado School of Mines campus. Other Modyfi employees will attend via video calls.