Progress Report

PROJECT TITLE	Neural Canvas, an AI Art Picture Frame		
SUBMITTED BY	Jeff Cooper, Ian Cox, Chase Melisky	**PROJECT TYPE**	Art and Technology
CLASS	CS2210: Computer Organization	**GROUP #**	24
DATE OF PROPOSAL	Oct 13	**TOTAL ESTIMATED BUDGET**	$2154.98
START DATE	Sept 15	**PROJECTED COMPLETION DATE**	Nov 27

SUMMARY OF PROGRESS

V1.0

In v1.0, we created a program to take user input and generate an image on a webpage. The user enters their image prompt through a textbox and generates the image upon clicking a button.

V2.0

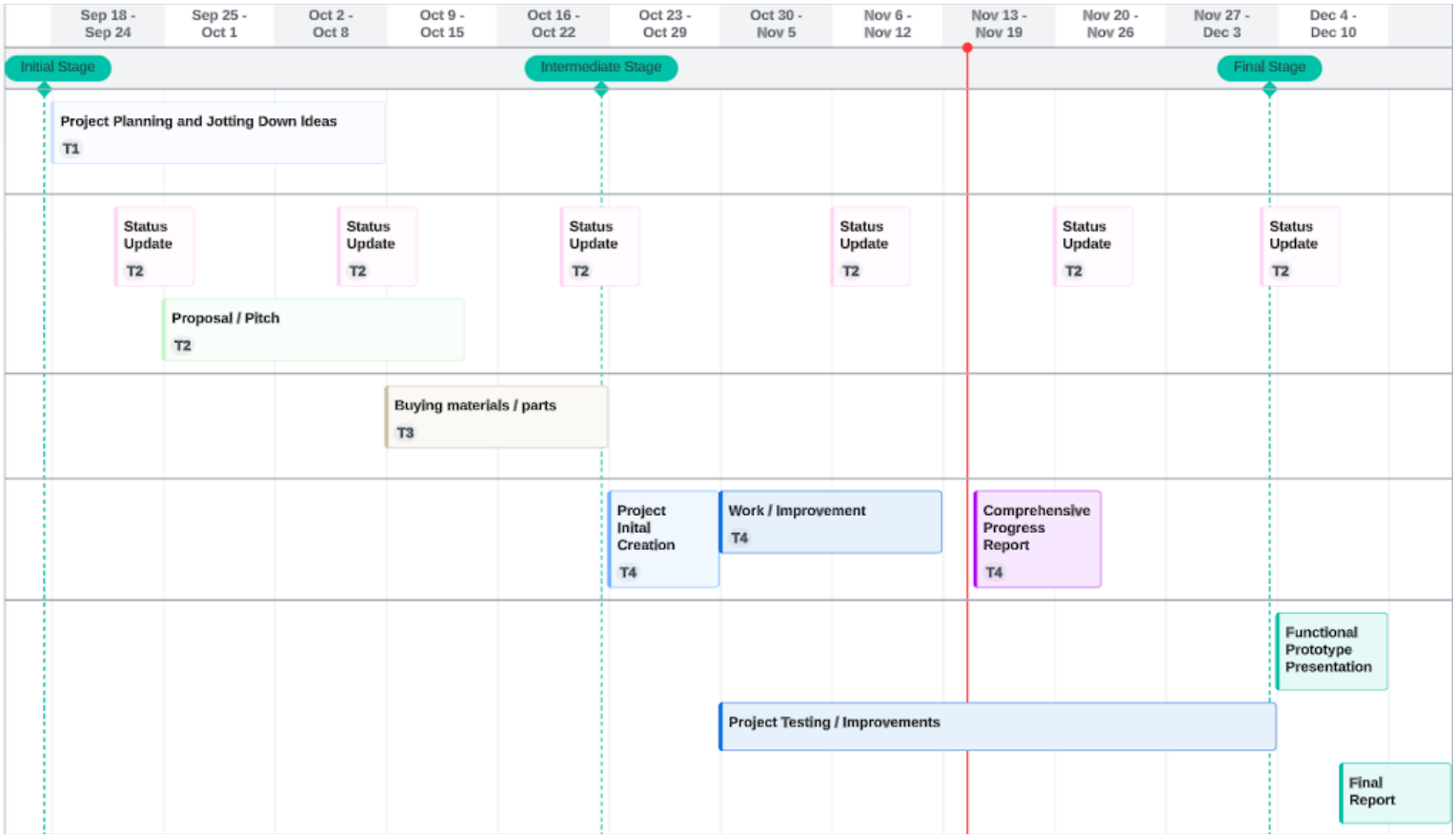
In v2.0, we implemented the speech recognition feature of our project. Upon running the program, the user is prompted to speak. After 5 seconds, the speech is transcribed and entered into the image generator. The program then creates an image in the project folder.

MOVING FORWARD

The next step moving forward is taking that generated image and displaying it on the webpage. The image will need to be resized to take up the full landscape view of the 7-inch display. We will also need to create a loop so the user can prompt the generator with multiple images, not just one. Lastly, we will need to construct a picture frame that can hide all the wires and pi behind the screen for a seamless design.

TIME LOG				
DATE	NAME(S)	ROLE	DESCRIPTION	TIME (hrs)
Oct 14	Jeff	Project Manager	Secured API key for AI image generation	1
Oct 16	Ian	Hardware Dev	Researched necessary hardware	1
Oct 18	Chase	Software Dev	Tested image generation in the terminal	1
Oct 25	Ian, Chase, Jeff	All roles	Bought all materials needed	1
Nov 1	Ian, Chase, Jeff	All roles	Tested screen set up with pi, created python files	2
Nov 8	Jeff	Project Manager	Tested image output with text prompts	2
Nov 14	Ian, Chase, Jeff	All roles	Meeting to discuss next steps and current challenges. Testing	1

UPDATED GANTT CHART



REFLECTION

We would say that we are working well together and bouncing ideas off each other in an efficient manner. Something that might need improvement is the ability to work together more often because all our team members live in separate locations.

PROJECT PICTURES

V1.0

Enter your prompt:
cow floating in outerspa

Generate Image
Click to Speak

Generated Image:

V2.0

```
Say something:
Transcription: a cow floating in outer space
static/img20231115010436.png
```

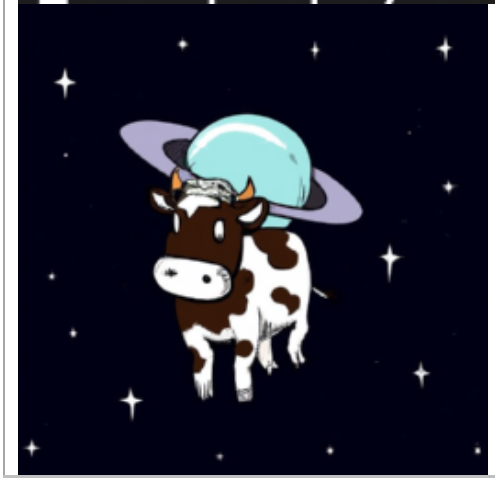
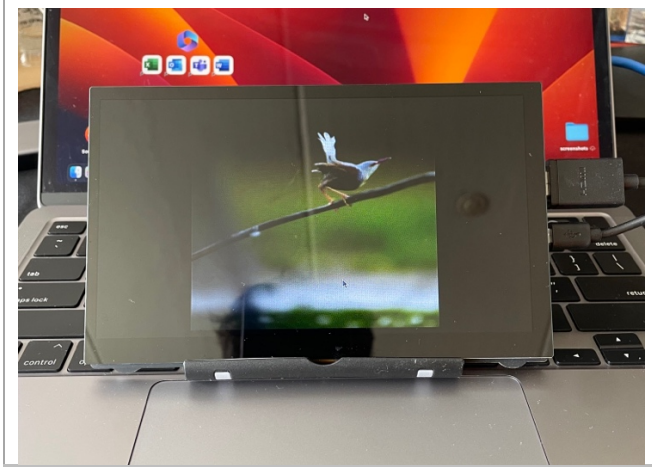


IMAGE GENERATION

```
jeffc@raspberrypi:~/NeuralCanvas/static$ ls
img20231031192402.png  img20231111145353.png  img20231111170729.png  img20231112180317.png
img20231031193054.png  img20231111150242.png  img20231111172526.png  img20231114191912.png
img20231031232807.png  img20231111170631.png  img20231111173221.png  img20231114192325.png
img20231031232813.png  img20231111170641.png  img20231111173237.png  img20231114192437.png
img20231031234435.png  img20231111170645.png  img20231112174748.png  img20231114192515.png
```



CHALLENGES

We are on track to finish the project with time for testing and final optimizations. Our challenges mostly stem from the development of the program. Determining the best/most efficient way of accomplishing our project goals and general programming errors are the majority of our struggles. Other than that, another challenge will be how we create our physical display as we want to design a sleek looking picture frame but will have to hide wires and the raspberry pi in the process.