

# Team Apple

[Cloud 9 Workspace](#)

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### Problem:

To be able to apply brand image to images, as well as create abstract/geometric art for Apple's marketing purposes.

### Brainstorm:

#### Highlighted = Completed

##### 1st Tier:

- Add transparency to image
- Grayscale, different variations of black and white
- Options for parameters/inputs to affect output

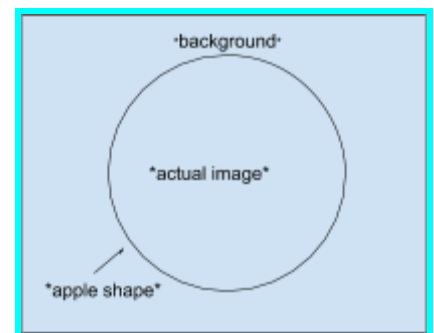
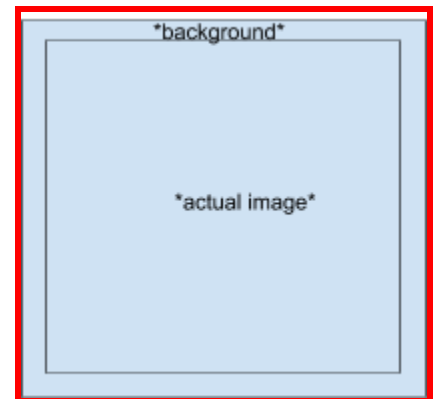
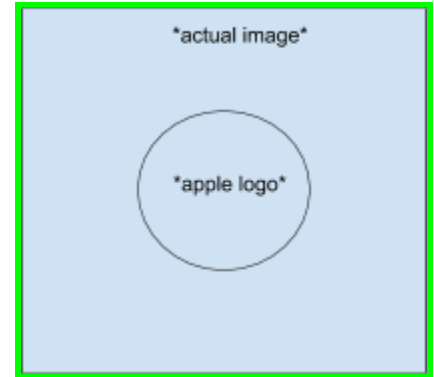
##### 2nd Tier:

- Background
- Modify colors
- Change color of apple logo
- Creating a frame or border around the image

##### 3rd Tier:

- Shaping the image as an Apple
- Applying a logo (Apple) to different photos
- \*Adding text (slogan) to image

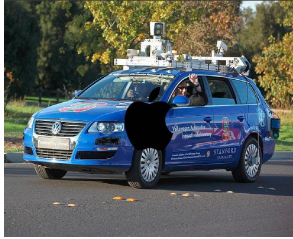

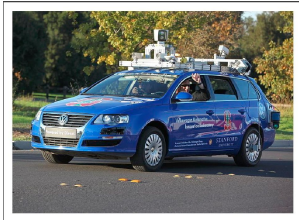
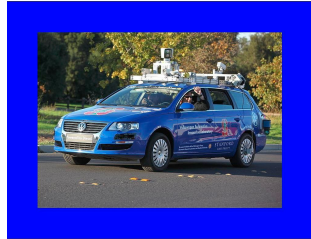



\*able to get text to appear on image, but the capabilities of changing the text font or size is not developed yet





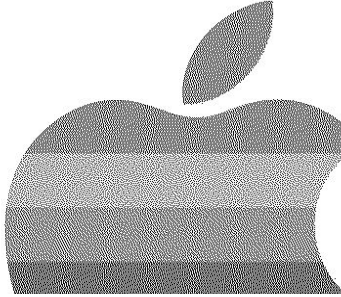



**Original Images:**

**Outputs With Parameters:**

Parameters:	None applied		
apple_logo_single/ apple_logo			
Parameters:	Color	Color	Thickness
add_border_single/ add_border			
Parameters:	None applied	Background Color	
apple_reshape_single/ apple_reshape			
Parameters:	None applied		
transparency_whiteba ckground  transparency_blackba ckground			

Parameters:	Color	Color	
objectcolor			
Parameters:	Color	Color	
background_color			
Parameters:	None Applied		
pixelated blacknwhite *zoomed in to show the image texture			
Parameters:	None Applied		
grayscale *zoomed in to show the image texture			

[Google Slides Image Artist Presentation](#)

### Gallery Walk

**Instructions:**

- Use CD to navigate to the Project\_Images directory (cd workspace/1.4.7/Project\_Images/) if not already inside
- Use %run ../Boen\_Phaneendra\_1.4.7.py to run the file
- Functions with “all” in the name apply the effect to every image in your current working directory
- Docstrings are available to clarify what each function does

Likes/Pros	Dislikes/Cons
<ul style="list-style-type: none"> <li>• I liked how you could change the color and border width, and the pixelated black and white effect was pretty cool as well.</li> <li>• I like how many options you have to alter your pictures with</li> <li>• I like the large number of options I get</li> <li>• Significant amount of parameters and a large variety of selection</li> <li>• The pixelated one looks very cool</li> <li>• This is a different and new appra</li> <li>• I liked the variety of modifications, was very unique <ul style="list-style-type: none"> <li>◦ Addresses business aspect very well</li> </ul> </li> <li>• You have detailed docstrings</li> </ul>	<ul style="list-style-type: none"> <li>• I don't get why you need a pixelated black and white</li> <li>• Reshaped Image is a strange frame</li> <li>• Most of your features are very confusing and would not be used on a frame for a family</li> </ul>

### **Conclusion:**

Reflect on the team dynamic and on the design process. What were areas for improvement? What steps could you take next time to make those improvements?

#### **Daylen:**

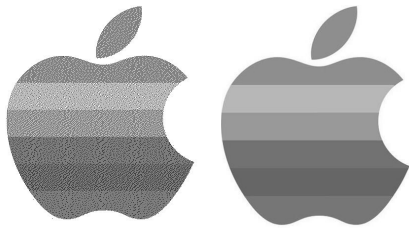
Our team dynamic was based around productivity and rapid experimental testing. We worked on functions mostly independently and then combined them, improving and giving feedback on each others functions to reduce clutter. It was efficient and quick. Some improvement we could have made was converse on exactly what functions we were working on as our actual communication was somewhat lacking up until we combined our functions. Simply talking and giving updates would solve this problem.

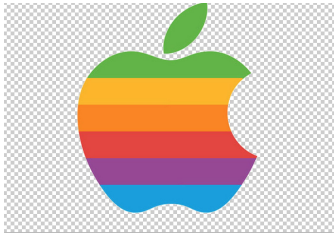
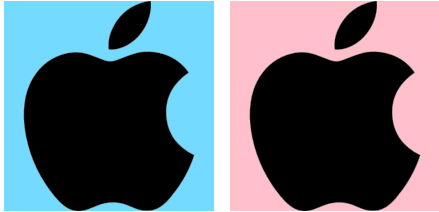
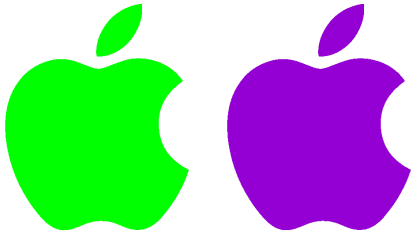
#### **Siri:**

The team dynamic was productive and we both equally contributed to this photo manipulation project on both aspects of coding and documentation. Regarding our design process, we both expressed our brainstorming ideas and started experimenting with our code. We improved on asking more questions and communicating with each other, which helped us efficiently work as a team. In the future, we could work on setting specific deadlines and timelines for our project to better plan ahead.



**Project Work Log:**

<b>Date</b>	<b>Siri</b>	<b>Daylen</b>
3/1	Decided on client, defined problem, started brainstorming ideas we can incorporate into the project.	Began documentation, did research on essential tools and began project
3/4	Created function that aligns two images side by side.	Creating function that placed apple logo onto target image, centered. Plan to allow for placement anywhere in image.
3/5	Working on blending two images to create one unified image.	Created function that creates a border around any image in the given directory. Plan to allow for friendlier form of input as raw_input in the console rather than as an argument
3/6	Researched and learned how to transform/manipulate images to black and white.	Did more research on how to properly put a mask onto an object when the target object is not the same size as the mask
3/7	<p>Created a function that allows the user to convert original images into grayscale (black and white). Two versions - one version that converts image to smooth grayscale, other that converts image to pixelated black and white image - "halftone".</p> 	Allowed user to apply any color they would like to the border, prompted to in the console when they run the function. Presets were also added for ease-of-access (type 'red' to apply red, etc, or type any RGB/A value for any color and opaqueness). Also added a quality-of-life improvement to the "all" functions, so that the name of the file is printed as well as the number of the file.
3/8	Created a function that allows the user to convert an image's background color to transparent.	Created a function that puts an apple logo onto any image as a mask, reshaping the image into the shape of the apple logo. Improved the docstrings of all functions.

		
3/11	<p>Created a function that allows user to modify the background color or the object color of an image.</p> 	<p>Attempted to create a function that puts text, or a slogan, onto an image. A problem occurs when trying to add different fonts.</p>
3/13	<p>Working on implementing user input for the background color and object color changing capabilities.</p> 	<p>Created single-image functions for functions that only applied to all images in a directory.</p>
3/14	<p>Worked on the text capability. Able to get the text on the image.</p>	
3/20	<p>Worked on the text capability. Trying to find a way to change the font size and font type. Added to the documentation.</p>	<p>Added a feature to the border function that allows the user to adjust the size of the border.</p>
3/21	<p>Worked on documentation and inputted original and manipulated images. Contributed to the slideshow.</p>	<p>Documentation work. Created slides and preparing for the gallery walk.</p>
3/22	<p>Worked on slideshow, answering conclusion questions, and making final edits to the documentation.</p>	<p>Mostly documentation and small changes to the program, preparing for the gallery walk</p>

**Credits:**

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