

Splash: Redesigning Your Computer

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Brainstorming Session:

What We Are Doing:

- We are doing client number 3 creating a product.

Product:

- It may be a computer/phone or other tech product and add our logo.
- Some sort of device holder that we can manipulate into something.
- Robot.
- Watch manipulated onto something. It may be a watch, but better.
- Basketball manipulated with a football or another ball.
- Manipulate NBA player jerseys
- A new type of treat/snack
- A new type of clothes/fashion
- A type of electronic book which contains valuables.

Our idea:

- We are going to do a product related to the computer. We will be making a product where people can change the color of their computer to anything they want. We will also have the option of being able to change the color of the keys on the computer. For our project, we will be working with an Apple MacBook as the start of our product.

Partner Feedback:

- Says our idea is very creative and seems kind of like a company.
- Also, they said we should use 2-d images for our computers because it will be very hard to manipulate the image.
- They suggest we should finalize our images quickly as it will take a lot of time to take manipulate them.

Tier: 1

- Make a function which takes any image and places it in the top left corner of our image.
- Make a function which adds any color border for the images.

Tier: 2

- Make a function where it takes any computer and change the color of the keyboard and the back side

Array of Images

Original Image	Description (Of Manipulation)	Manipulated Image
	<p>In this manipulation, we took the original computer and changed the keys and color of the actual computer itself. In addition, we added a red border around it and our logo in the top left the corner.</p>	
	<p>In this manipulation, we took the back side of the computer and changed it to a nice red color. Like always we added a border and our logo.</p>	
	<p>In this manipulation, we took the base of the computer and manipulated it so that it would be blue. We added a blue border and the logo as well.</p>	

Gallery Walk Table/Feedback

Google Presentation

How to run the program:

1. %run/xu_vallapureddy_1.4.7.py (tab x)
2. the function name

Pros	Cons
I like the subtle changes with the pictures	Error- file not found
I like how you managed to change the way the Macbook has changed colors in every image	You seem to have something missing or obstructed ‘computer_front.jpg’
The shadow underneath one of the images is very nice. It shows mastery in this unit.	“ERRNO 2” computer_frontlogo.jpg not found
The images look very clean, and very smooth. It feels as if the image was actually real, not manipulated.	You could change the color of your logo based on the background as sometimes it doesn’t stand out from the other parts of the image.
Nice attention to detail! Even the reflections of the macbooks were changed. The logo and borders were nice additions as well.	you should keep the colors consistent
I like the original image and it’s look very clean.	
Looks really natural the way you changed the color, good job.	

Conclusion

Derek Xu:

In this project, both people focused on part of the programming, while Nibodh did most of the project notebook, and I did majority of the programming. The programming I did was mostly successful, and also I did part of the project notebook, like making its style more consistent throughout. One thing which I did too much of was maybe the programming, because I would usually find myself spending hours on it at home, writing code and solving issues with the code. How I can fix that is that I can be able to better know what I am supposed to do and do less work that I am not decided upon to do. I can also try to better arrange with my partner and consider more tasks, and ask each other who should do what. Also, during the gallery walk, I discovered that some other teams used more images, but did simpler and less time-consuming modifications than us. Next time, we can be able to get more feedback with groups, and see what they are doing, and see if our work can be simpler or harder.

Nibodh Vallapureddy:

This project required a lot of dedication and hard work and I believe Derek and I both did that. I was in charge of the creation of our documentation (the notebook) but I also did a decent amount of coding. Our team dynamic was great from the beginning as both of us wanted to create a computer-based manipulation which we instantly got to work on. Derek and I both wanted to change the color of the computer but we weren't sure how to at first. After some time, Derek was successfully able to find out the algorithm to change the color. He taught me exactly what the code meant and I also applied it and helped him create some of the ranges. On the other hand, I was able to discover how we can put a universal border and logo for any image which was also helpful. Looking at this project, I think we can improve by using our class time efficiently because there were some days which we didn't really get much done.

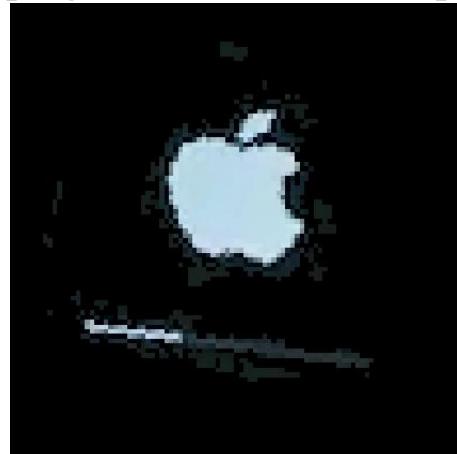
Daily Log

3/4/2019 - 3/24/2019

Date	Nibodh Vallapureddy	Derek Xu
3/4/19	I started to brainstorm ideas for our project and discussed with my partner what we should do for the project (Client #).	I created the folders in for this project, and the code file. We got started in this project
3/5/19	We decided to choose client #3 which was a product. Our product was redesigning the MacBook to our own computer. We looked for ideas for the logo but ran out of time.	I created a logo for our company today. Then, I tried to reshape the logo and paste it onto the computer. I eventually failed, so I just planned out what I was going to do with the logo.
3/6/19	We brainstormed what we wanted to add onto the computer and started to add the logo on along with our border. 	I continued to try to reshape the logo and paste it onto the computer. Also, I tried to help my partner with issues he ran into in his coding.
3/7/19	I added the logo on but I couldn't get it slanted right on the image and tried to fix this error the whole entire period.	I tried to make the image of the logo a numpy array. Then, I attempted to trim then slant the image of the logo.
3/8/19	We decided to change the computer keys to red which was one of our original ideas and we figured out that we needed to go by rows for	I made a new editable numpy array of the logo that my partner wanted us to use. Then, I tried to make the keys to the front of the computer

	our project.	red, using an image my partner found.
3/9/19	<p>Today I tried to tilt up the logo on the image but had no success as it required 3-d manipulation which is very complex. But, I was able to enhance the brightness of the image.</p> 	<p>Today, I made the image of the front of the computer into a numpy array. Then, I made the keys of the computer red, and organized the code for this project into functions that perform specific tasks. Here is the picture of the computer with red keys:</p> 
3/10/19	I continued to experiment with the enhancement feature and looked for a way which I could tilt the logo that we were going to place.	I added the modified picture of the computer with red keys to yesterday's activity log. I finished up the activity logs of today and yesterday. I edited the activity log of 3/8/19.
3/11/19	I started to work on the back side of the computer by changing the opaqueness on it and making it more transparent.	I started to try to make the keys on the picture of the back of the computer red, like the ones on the front of the computer. I also tried helping my partner with some issues.
3/12/19	I filled in all the hole of the daily log and started to organize it all together. I also collaborated with Derek to discuss what we needed to work on the project.	I attempted to make the gray portion of the computer blue, but I failed to do so, and did not make much progress.
3/13/19	Block Schedule	Block Schedule

3/14/19	I started to look for different images which we could try on our function on.	I started to make the front of the computer change its color to blue but did not finish in class.
3/15/19 (no school)	Out of town.	Today, I tried to make the front of the computer blue, and I partly succeeded in doing so. I was able to make most of the computer's front blue, but some parts of it were still light, and parts of it around it also turned blue. This was what I was able to do yesterday: 
3/16/19 (No School)	Out of town.	I removed some of the blue unneeded parts around the computer, and also filled in some of the parts the computer that should be blue. Here is my progress so far: 
3/17/19 (No School)	I worked on the back of our computer by adding a random logo on it and adding a border on as well. In addition, I helped Derek	I got started and almost completed a function that extracts an Apple progress bar from an image and pastes it on the front of the

	<p>work on the front side of the computer.</p> 	<p>computer. This is the image of the progress bar that I will be pasting:</p> 
3/18/19 (No School)	<p>Today I worked making the base of the computer a different color. I looked for images but could not find any in the end.</p>	<p>I also changed the keys of the keyboard such that they are all green, along with removing even more stray blue parts on the image of the computer:</p>  <p>I prepared a function that makes a border around the front of the computer, along with a definition and an additional part of the function that pastes the loading bar. I edited yesterday's activity log, and I finished today's.</p>

		
3/19/19	I helped Derek to make the back of the computer red by changing the range and color value of the function which we had made for the back side of the computer.	I removed the loading bar from the front of the computer, and I also tried to make the back of the computer red. Here is the front of the computer: Here is one of my attempts for the back of the computer: 
3/20/19	Block Schedule	Block Schedule
3/21/19	I worked on our documentation by adding in comments on the workspace. In addition, I started to finalize which images which we were going to put on our google presentations.	I made more parts of the computer front image consistent with our previous changes. I replaced the Apple logo with a new logo that my partner made. Here are our new changes: 
3/22/19	I added a border to the red computer and its logo.	I completed the activity log for today and yesterday.

		
3/23/19	I created the logo which Derek put on the computer we finalized the project and got ready for the gallery walk.	I put a transparent logo on the images of both the front of the computer and the back of the computer. Here is the front of the computer: 
3/24/19	I finished up the red computer and all the blue base. In addition, I added the missing documentation (comments) on our code.	Here is the back: 

		
		I completed my activity log for today and yesterday.
3/25/19		I did nothing today.
3/26/19		I tried to make the project notebook more consistent in style and added the conclusion questions section. I also fixed the page numbers in the table of contents. I finished my conclusion questions and the activity logs for today and yesterday.

Raw Images



Thanks to [Energepic](#)



Thanks to [Kari Shea](#)



Photo was taken by Nibodh himself