

*design portfolio*  
STEPHEN CHAN  
**2020**

# ABOUT ME

Hello!

I am a computer engineering graduate looking for a software engineering role, ideally at the junior or apprentice level.

I'm passionate about shaping my vision for how new internet technologies can be used to make sustainable change across the world. The intersection of technology in the learning space is rapidly growing and I want to make my contributions to its growth.

I have years of experience working in teams and adapting to meet our shared goals.

You can contact me via:

kawarii1@gmail.com || 201.780.3777

# CASE STUDIES

## CLOSET MONSTER

People need to help friends dress better. Closet monster is an app to help with that. I used Proto.io and Adobe XD to create prototypes and hi-fi mockups, respectively. I also created user personas and conducted user research and testing.

## BEYTI KEBAB

Beyti Kebab in Union City needed to drum up more business. Turns out they lacked business cards and other promotional materials. I brought their brand into the 21st century and designed new menus and promotional materials.

8

## AGUA VIDA

Working sustainably with water operators had a huge difficulty due to the lack of education in certain areas. I automated some work to get operators and engineers focusing on chlorination for thousands of people in a region of Peru.

14

## VECTOR

Our school newspaper was searching for its visual identity to help push copies. I rebranded and changed layouts to focus on photos, to great success.

4

## JASS MANUAL

The water committee manual wasn't seeing any use. I reworked it from the ground up and added desperately needed information to help volunteers across Peru train hundreds of groups.

6

10

## GDS

With the opening and shifting of various eateries on campus, new menus and promotional materials needed to be made. I made over 50 menus, maps, videos, and other promotional materials for all the food establishments on campus and learned a lot about typography.

12

## SENATE PRIDE

After Pride's last newsletter failed to give away any copies they needed help. I changed its format to a booklet and made it more attractive to pick up. The next issue literally flew off the shelves.

16

## PHOTOGRAPHY

I am also an award winning photographer and continue to take photos as a hobby. I've taken wedding photos, landscape shots, and know my way around Adobe Photoshop and Lightroom.

18

# AGUA VIDA

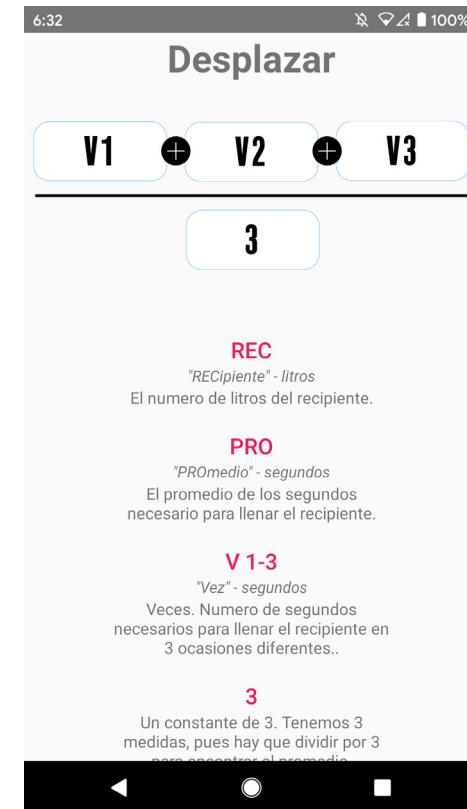
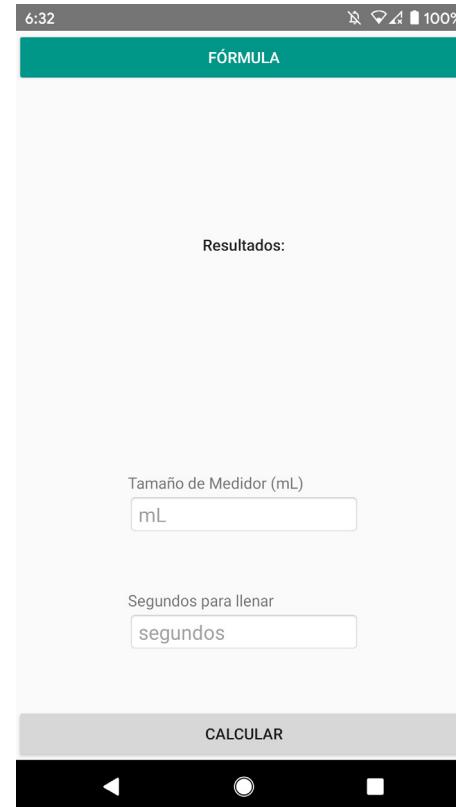
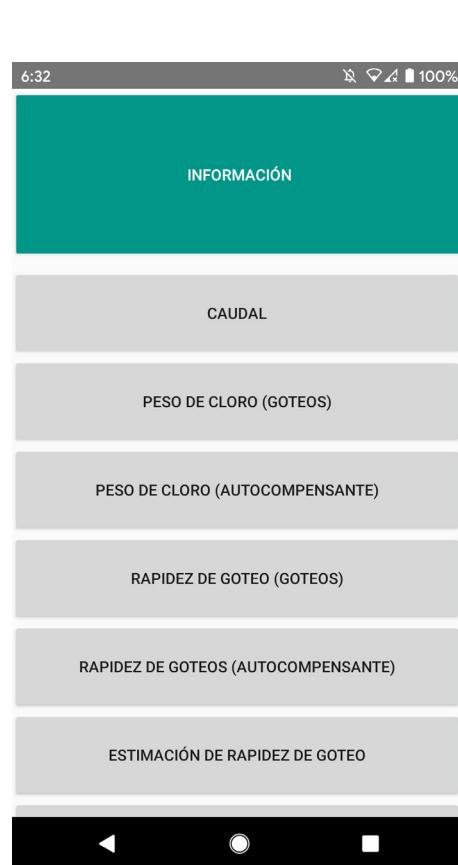
**role** Android Developer

**context** Personal Project

**year** 2019 - Ongoing

## Tools

Javascript - Android Studio



## PROBLEM

Me and the rural water engineer were supposed to teach complex chlorination formulas with several parameters to operators who sometimes didn't finish high school. On several instances they did not recognize the division sign.

How do you teach complex formulas to someone who doesn't understand math?

## MY ROLE

We spent several months with this problem developing all sorts of activity sheets and so on attempting to simplify these calculations to extremely basic levels. Later, I noticed that the vast majority of the water operators that I encountered had android smartphones, and I thought that perhaps I could pass these worksheets directly to these phones from mine.

Then I thought, why don't I just make a free application that anyone can download, including operators outside of my site?

With this idea I approached the water engineering division of the local branch of the Peruvian regional government and we collaborated. They provided the official formulas that the government mandated for water disinfection and other material and I set about implementing them in an android application. I worked independently with some mentorship from colleagues back home in the states.

## RESULT

I successfully released a beta version 1 on the app store which is currently being evaluated for use. There are some changes that need to be made but it is currently functional and up on the google Play Store.

I am currently working on this app remotely due to the worldwide evacuation of Peace Corps volunteers in March 2020, as a freelancer to support water outreach goals in Peru. So far my work partner has been using it to simplify chlorination in his work.

# JASS MANUAL

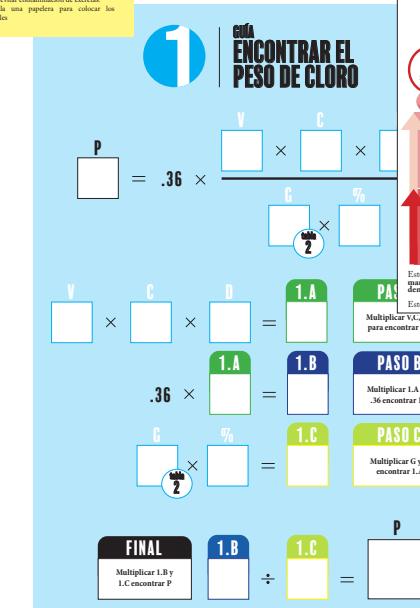
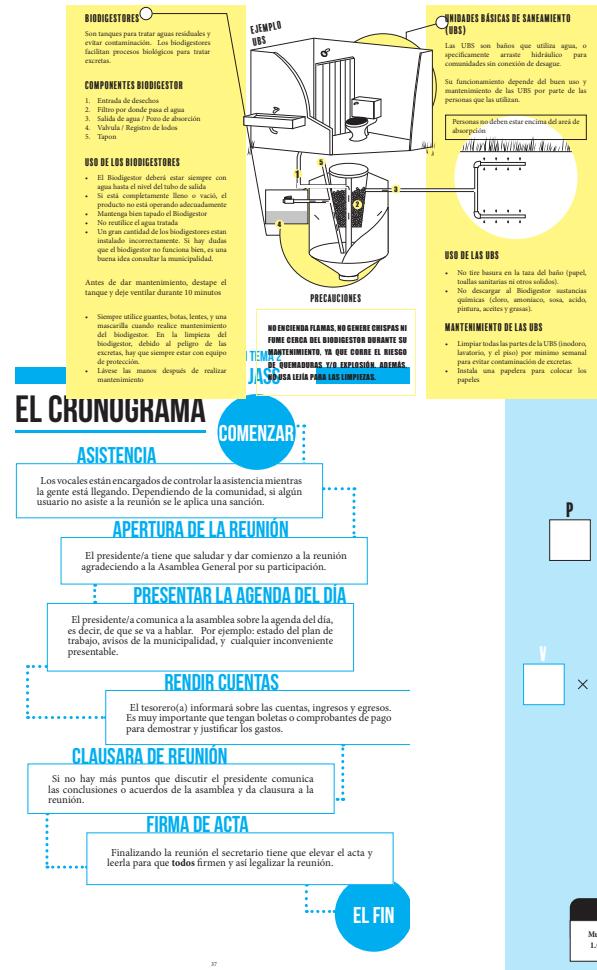
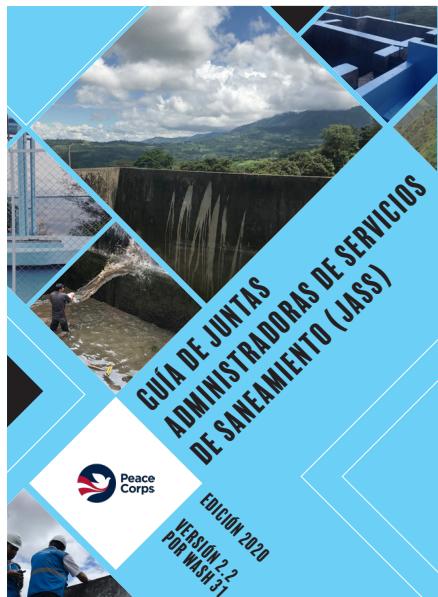
**role** Editor

**context**

Project for PC WASH Program

**year**

2019-2020



## PROBLEM

Volunteers were given a JASS framework manual that we were quite frankly, not using. It was extremely text heavy, hard to follow, and lacked pictures and information. Rural JASS members wouldn't read it.

## MY ROLE

I came on as an editor due to my previous experience with a newspaper. I identified the reason why people weren't using it, including areas of information it severely lacked. Afterwards, a team of skilled volunteers across different disciplines coordinated with me and they filled in the technical information and data it sorely needed.

I implemented a design language to make it "less scary" for rural community members with limited reading ability. It had to be eye-catching, and easy-to-follow.

In addition, I felt it was best as a modular manual. Every single page is a printout that can stand on its own as a graphic for trainings. Volunteers could take only the pages they needed for trainings and either print out the page, or the graphic, or put them in a powerpoint.

## RESULT

Ultimately, I took the information we already had, which was 88 pages, and implemented it in a way that was much easier to read while adding over double the amount of content it had before, such as formula sheets, extra activities, and instructional pamphlets and printouts.

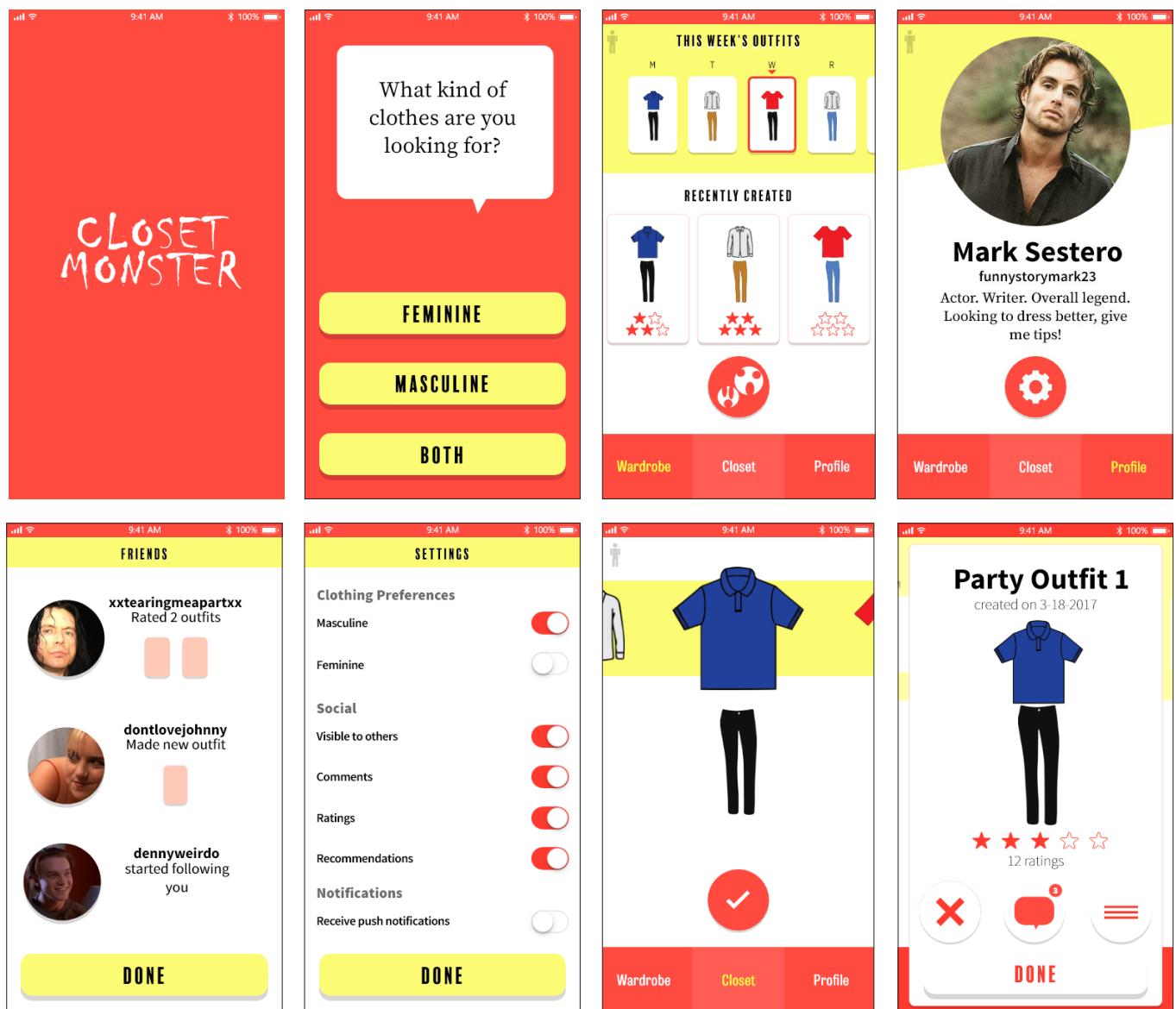
The manual, after my final edits, now stands at 193 pages with all the new material spread out.

It was heavily in use by the Peace Corps and undergoing more additions until the events of March 2020.

# CLOSET MONSTER

**role** Student/Project  
**context** Class  
**year** 2017

This is a concept of the landing page and first load user process. I wanted a clear path to the main function of the app, which is making and planning outfits.



Most of the buttons and navigation are at the bottom of the screen. I want navigation to be as effortless as possible so most clickable items are going to be within thumb's reach.

## CLOSET MONSTER APP RESEARCH: USER PERSONA

	<b>BASIC INFO</b>
<b>Average Working Male</b>	
John Smith	
Business Affiliate at Boeing	
<b>KEY DEMOGRAPHICS</b>	<b>GOALS AND TASKS</b>
25 Years Old Single, and looking Bachelors in Business	John is constantly traveling countries on a tight schedule for work; often he just wakes up, throws on the same old shirt and pants and is out of the door.  He wants to dress better but has little time to devote to actively planning his wardrobe.
<b>ENVIRONMENT</b>	<b>QUOTE</b>
He is experienced with using a computer and is on Facebook, Instagram, Snapchat and Twitter. He has 1690 friends on Facebook. He is an Android user and spends some time on Tinder looking for dates. He finds Closet Monster and decides to download it to improve his appearance on the job and off.	<b>“Does this shirt make me look fat?”</b>

## CLOSET MONSTER APP RESEARCH: USER STORIES ACCEPTANCE CRITERIA

<b>AS A</b>	Messy lazy person	<b>SHOULD</b>	-be easy/a pleasure to use -save user selected outfits -have a menu to select saved outfits -display outfits per day
<b>I WANT</b>	An interface to plan outfits quickly and easily	<b>EDGE CASE</b>	To look better my friends should be able to rate my outfits
<b>SO THAT</b>	i can look better than i currently do with minimal effort	<b>SHOULD</b>	-clearly display the clothing selection -be able to share information with other friends
<b>AS A</b>	Member of a group that must wear the same types of clothing	<b>EDGE CASE</b>	Should be editable just in case there are uniform changes for the group
<b>I WANT</b>	An interface to plan outfits with my group/friends	<b>SHOULD</b>	-be able to organize saved outfits per day -display numbers of socks/underwear for each outfit/total
<b>SO THAT</b>	We can plan our outfits for our friend's bachelor party.	<b>EDGE CASE</b>	Should have an option to suggest formal outfit for special occasions.
<b>AS A</b>	Person that is traveling for any reason		
<b>I WANT</b>	An interface to plan outfits for each day im traveling		
<b>SO THAT</b>	Packing will be less of a hassle.		

## CLOSET MONSTER APP RESEARCH: USE CASE & FLOW

USE CASE	1	FLOW	PACKING WITH CLOSET MONSTER
<b>SCENARIO</b>	John is traveling for work and is packing outfits for the trip.	John takes note of the formal and casual occasions he must attend on the trip	
<b>ACTOR</b>	John Smith	He inputs the number of days/outfits he will need for the trip into the app.	
<b>OVERVIEW</b>	John has a business deal in Europe. He must pack. He sorts his clothes, includes formal attire, and plans an outfit per each day of the trip.	The app searches his saved outfits and returns number of outfits for his trip. He packs them.	
<b>SUBJECT AREA</b>	Domestic	The app approximates how much underwear he'll need during his trip. He packs them.	
<b>TRIGGER</b>	John has a business deal.	App recommends two pairs of shoes: formal and casual. It also tells how many socks he'll need.	
<b>PRECON 1</b>	The deal is far away and so he must travel and pack clothes for the trip.	The app displays his assigned outfits per day of the trip, and can reuse some articles of clothing. John is fully packed in a minimal amount of time.	

## PROBLEM

There are a lot of guys like myself that want to dress better but aren't exactly fashionistas. However, we all have friends that do know how to dress well. They need to come together.

## MY ROLE

As a student, I performed research on a lot of "Tinder for clothes" apps that were meant to help people dress better. It turns out many of them are actually focused on getting clothes sold through the app. This is difficult on mobile because studies show that conversion rates for shopping apps are dismal on mobile. People prefer to purchase on their desktop to weigh their decision more.

This app is instead truly meant to connect friends by having their outfits get rated by others. Users can leave comments and give suggestions, as well as create outfits for others to wear. To that end, I created user personas that focused on users' goals to envision a clear path through the app. This also helps me implement features that I otherwise would have missed, and helps give my app a clear purpose for our end user.

After creating wireframes of the functionality, I finally began creating a working version of the app on Proto.io, but refined its appearance on Adobe XD. I based my design philosophy on accessibility and understanding.

## RESULT

I now have an interface that keeps the end user in mind while maintaining its ease of use.

I am currently implementing the user interface with code. I had a navigable version running with OnsenUI, but ultimately I will have to further my studies will working on this app to get server-side information up and running.

This is a concept of the landing page and first load user process.

I wanted a clear path to the main function of the app, which is making and planning outfits.



# VECTOR

**role** Design/Research/UX/Branding  
**context** Student Employee  
**year** 2016-2017



## Out with the old...





This was our logo immediately before I rebranded. We didn't even make this. A friend from another club made it in five minutes and the old EiC liked it.



This was the logo I designed. Above all, our logo needed to be "modular." I created an easily recognizable shape that would look great on all our material and work well with text.

## PROBLEM

People weren't picking up the paper. We were wasting thousands printing our newspaper and needed a kick to get going. I needed to generate some interest in our brand again.

## MY ROLE

I did a thorough study of our brand and page layout. Why weren't people picking up our paper? Very simply, our front pages relied too heavily on text to fill up space. Readers need photos with action, especially of people to catch their eyes. Several front pages and issues even lacked photos in the front. In addition, our last two logos were oddly shaped and led to awkward page layouts. We needed a new, modern visual identity immediately.

I rebranded. We needed a logo that captured what we are, a paper, and one that would work well on print, web, videos, and various other promotional materials. We needed it to work in a number of different formats too, as a square and as a banner that could stretch across the front page. Thus, I created our iconic V shape to point to our texts in print and online that works with other text and standalone.

In addition, I created a modular style guide that allowed greater freedoms and more eye-catching design. We made use of power colors, like bright reds to draw readers' eyes to important stories and information.

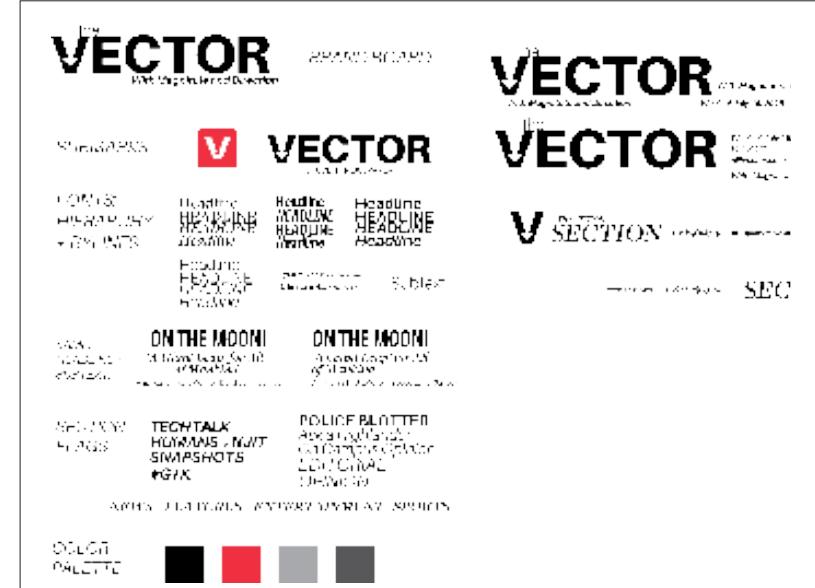
## RESULT

As a result of all the redesigns, our front page now looked better than ever, and it showed in the lack of papers from the collection racks across campus. We also received several compliments from students, faculty, and staff about the new visual direction of the paper.

We used whitespace more efficiently, and our paper took a lot less time to create each week. Our paper relied less on templates and more on creative page design and graphics.

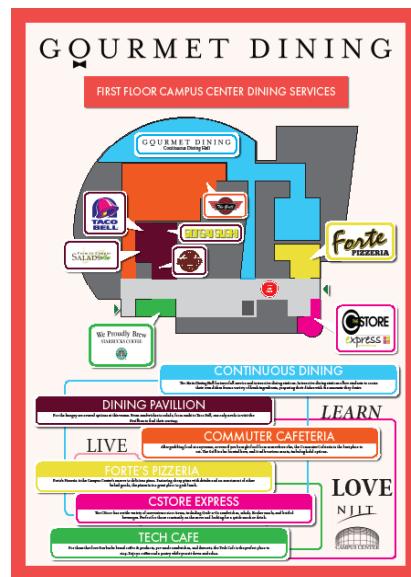
This was our style guide for the entirety of the last year.

This was all stored in an Indesign draft that we worked with during layout if it wasn't already automatically imported through our drafting process. With this, layout was truly modular.



# GDS

**role** Design/Marketing/UX  
**context** Student Employee  
**year** 2015-2017



This was the first thing I made for them. It will always have a special place in my heart.



## PROBLEM

When I came in, Gourmet Dining Services on my campus were restructuring virtually all the eateries on campus. As a result, they wanted to rebrand almost everything, in addition to adding new venues. All of the materials had to adhere to a cohesive brand per eatery.

## MY ROLE

I was tasked with researching my peers to gather information on how to create designs that appealed to them, in addition to actually designing the work. I was constantly communicating with several designers and my superiors to review with venues. Most importantly, I had to make sure that everything was very easy for customers to read.

## RESULT

Over the course of two years I designed a little over fifty works, from ads, to menus (static and animated), and even business cards. A lot of venues now have menus when they had none before. Several students liked the designs and thought the quality of the venue actually improved when actually nothing had changed.

Most importantly, I learned a lot about typography, placement, and user experience through the art of menu design- it turns out that there is a huge psychological component to the placement of items on a menu to get a customer to buy something.

This was the last! The creative director wanted to install new TV menus, so I created this. Up until the very end I was trying to convince him to make it animated so it would actually utilize the fact that it's a TV.



The image features a red coffee traveler box with a handle, centered within a white circle. The circle is set against a red background. Below the circle, the text "SHARING IS CARING. GRAB A COFFEE TRAVELER" is written in white, with "COFFEE TRAVELER" in a larger, bolder font. At the bottom, the text "Start the day off right. You and your group can enjoy 96 fl oz of fresh brewed coffee. Plus, get 12 cups and enough condiments for everyone. All in one convenient package." is displayed in white. At the very bottom, the words "TECH CAFE" are written in large, bold, white letters, with a green circular logo containing a white Starbucks mermaid and the words "TECH CAFE" above it.

<b>Coffee Traveler Info</b>	
-Portable and disposable	
-Serves 12 (8 fl oz cups)	
-Includes condiment caddy (cups, sugar, milk, stir sticks and napkins)	
<b>ORDERING IS EASY</b>	
Just fill out the information below to order in advance and give it to your barista. Keep the stub. Give it to the barista for an easy pickup.	
<b>ORDER UP!</b>	
On Date	<input type="text"/>
For Time	<input type="text"/>
Name	<input type="text"/>
Phone	<input type="text"/>
Decaf	<input type="checkbox"/> Regular
<b>Order Info</b>	
Hello! We will have your Coffee Traveler ready at <input type="text"/>	
Pick it up at the Tech Cafe.	

The Forte's menu at the bottom was actually animated. The image behind the text showed the entire pizza creation process, a neat little addition to the otherwise static menu.

<b>Forte</b> <b>PIZZERIA</b>	
<b>SLICE</b>	<b>SPECIALTIES</b>
PLAIN (CHEESE)	MUSCHETTA
BEEF TOPPING	VEGGIE PIZZA
SPECIALTY	ANNE'S ANTIPASTA
PREMIUM	MEATBALL VODKA
<b>PIE</b>	Eggplant Pizza
14" DIAMETER	
PLAIN (CHEESE)	CHICKEN PARMIGIANA
BEEF TOPPING	CHICKEN BURRITO
VEG TOPPING	SICILIAN MINDRE
WHITE (RICOTTA)	SHAMROCK'S SAUSAGE
REGGIE SUPREME	CHICKEN BACON
WHOLE GRAIN	BUFFALO CHICKEN
SPECIALTY	CHICKEN & CHEESE
PREMIUM	CHICKEN & CHEESE
<b>SIDES</b>	<b>PREMIUM</b>
4 GARLIC KNOTS	CHICKEN STEAK
STROMBOLI	WELL LAYERS
SAUSAGE ROLL	ITALIAN HON. DOG
HOT DOG ROLL	KICKUNDER SPECIAL
<b>CALZONE</b>	PIZZA SLATED FREE PERSONAL PIZZA 10.00 8.95
CHEESE CALZONE	
HON CALZONE	
CHICKEN CALZONE	
PEPPERONI CALZONE	
VEGETABLE CALZONE	



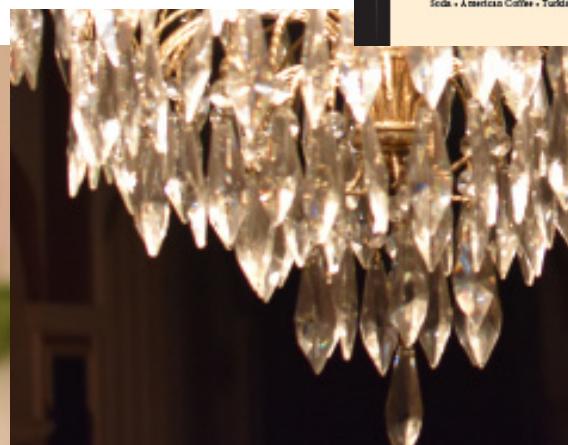
A full-page advertisement for NJLT Gourmet Dining Student Catering. The top half features a red circular logo with the text 'GOURMET DINING' at the top and 'STUDENT CATERING MENU' below it. Behind the logo are images of various food items like chicken wings, sushi, and sandwiches. To the right of the logo is a vertical menu section with sections for 'ENTERS', 'ALADS', and 'SALADS'. The bottom half has a yellow header 'Excellent Food on a Student's Budget' followed by a paragraph of text. Below that is a large '2016-2017' year graphic. To the left of the year is a small NJLT logo. The bottom right corner contains a large image of a sandwich.

# BEYTI KEBAB

<b>role</b>	Design/Marketing/UX
<b>context</b>	Freelance
<b>year</b>	2015-2017



They wanted an emphasis on their tasty halal meats since they also operated as a halal butcher. Their food is quite good.





I did a full visual redesign of all their materials. Now they have consistent cards and a logo for both their restaurant and butcher.

This was the cover of the in-restaurant menu that they gave to customers.



## PROBLEM

Beyti Kebab is a turkish restaurant in Union City that wanted a new look and better looking menus. They also lacked promotional materials like business cards for both their restaurant and butchery.

## MY ROLE

I studied their culture and the ambience of their restaurant. Their new brand had to evoke their atmosphere. I wanted to give their brand a warm, red glow to keep in line with the presentation of the restaurant and Turkish culture. I created a logo that echoed Turkish star shapes and implemented it across all their material. I also kept the marketing between their halal meat market and restaurant consistent, because they operate as a united entity.

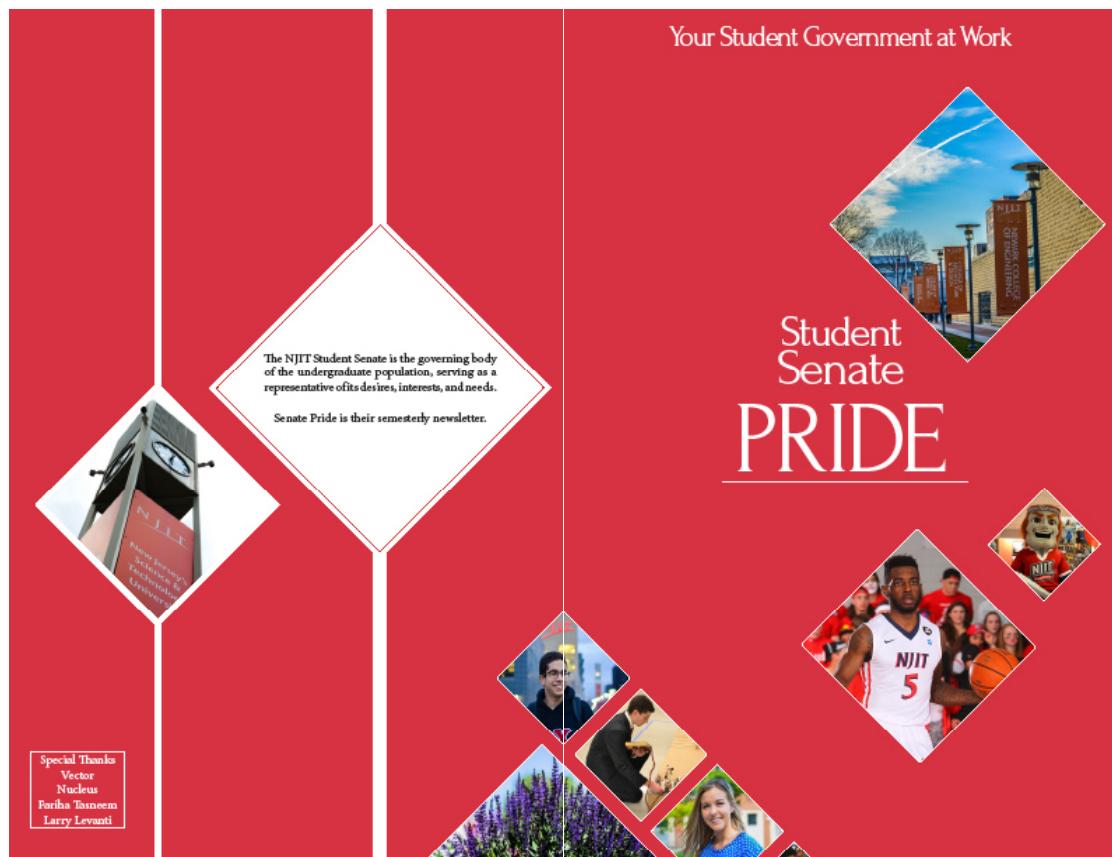
## RESULT

The redesign proved popular, several customers commented positively on the changes and believed that the restaurant had improved.

They also had promotional materials whereas before they had none, so they were able to market themselves and gain more customers.

# SENATE PRIDE

**role** Print Design      **context** Freelance      **year** 2015-2016



For the booklet's cover I used several photos that me and my associates at the Vector took. I wanted the finished product to be glossy and smooth and also wanted the design to feel good on the page.

## PROBLEM

Student Senate Pride is a semesterly newsletter had a disastrous last issue. Nobody would take a copy, which wasted thousands of dollars for printing. The Pride needed change.

## MY ROLE

I was given complete creative control on the design and print of the newsletter. I started by finding out why it wasn't read. Last year, the issue was made in microsoft word and used comic sans as its main font. It was also printed on the same size pulp paper as our newspaper, the Vector. Finally, it was densely populated with filler pages that added to the page count and made it heavy. Bundled with our paper, absolutely no one wanted to carry it around.

## RESULT

It became a booklet. The community was confused which of the two was our actual newspaper and which was the newsletter, so I gave the Pride a new visual identity. Plus, more people would be willing to pick up a small, glossy booklet than a huge mass of paper.

I wanted Pride to reflect the NJIT community, so I used photos of people from NJIT on the cover. Pride, aptly named, should be about what we are proud about. It can't just be buildings, NJIT is people.

There was a very noticeable change in our return rates for the Pride. Throughout the last semester, the Senate office walls were lined with the last issue of Pride. However, the next semester of my changes we ran out of copies of the newsletter. Students and faculty reacted extremely positively and the newsletter was able to do its job.

Your Student Government in Action

Of Students...  
...For Students...  
...By Students

Student Senate is the government body of undergraduate students that strives to assist the student body in any way, shape or form.

Senate Pride is their semi-annual newsletter.

STUDENT SENATE PRIDE

NJIT

Spring 2016

I followed the same general style guide from the last Pride. Instead of red, I opted to go with blue to contrast the last issue. Similarly, instead of diamonds I went with circle masks. Me and the photography crew at the Vector also took several photos to help populate this issue.

# 1 ADDRESS

**STUDENT SENATE PRESIDENT**  
**RAJEET DAS**

Welcome Back Highlanders!

I hope that you have all sorted up over the Winter Break and are ready for another exciting semester at NJIT. While the weather may be cold, I would like to advise everyone to stay positive and smile. These are a couple of bitter months. In this semester, I encourage you to start to become an active member of the NJIT community here. There are opportunities for all types of personalities for you to get involved in extracurriculars on both a professional and social level.

The Student Senate is always working to make your lives easier and experiences better. This week looks features a stretch of events that we like to call "Week

We are one NJIT

# 3 XCLUBS

**Student Senate**  
Meets Wednesday Commencement Office Campus Center Room 306

**The Vector**  
Meets Fridays 11:30 AM - 1:00 PM  
Other Campus Locations

**Newspaper**

**SAC**  
Meets Wednesdays 10:30 AM - 11:00 PM  
Other Campus Center Room 476

**Event Planners**

**Nucleus**  
Meets Fridays 11:00 AM - 1:00 PM  
Officer Campus Center Room 476

**Yearbook**

**WJTB RADIO**  
Meets Tuesday 10:00 AM - 11:00 AM  
Office Campus Center Room 476

**Radio**

# 4 ZCLUBS & ZCLUBS

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**Radio**

One of the problems I had faced when designing this booklet was the difficulty of fitting all the information inside it in an orderly way.

On page 4, I went as small as reasonably possible with the text to fit the page in a neat orientation and used a serif font to make it easier to read.

# PHOTOGRAPHY



I actually enjoy taking photos for my own materials. It ensures that I don't pay for stock photos and it makes my work more personal- whether it's a website, magazine, or poster.

As part of the Vector, a newspaper, I was privileged to use our Nikon cameras. My favorite subjects are, by far, people.

I took this photo at my school's first annual HighlanderThon. Pictured is my friend Diego and a girl named Taryn. She suffers from a degenerative motor disease and the Thon raised money for Childrens' Miracle Network Hospitals.

I won second place at a national newspaper photography conference for this photo, the Pinnacle Awards.



THANKS FOR TAKING  
THE TIME TO LOOK  
THROUGH MY WORK!