

NYU FREEDGE PRESENTS



A human-centered toolkit for developing a  
food sharing community in higher education

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# THE PURPOSE

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## OF THIS TOOLKIT

The NYU FREEdge toolkit aims to help students in various schools and campuses of NYU (and beyond) to take a **human-centered design approach** to create a community fridge in order to reduce food waste and provide free food to those in need. It provides a **step-by-step process** to start and maintain a community fridge and develop a community of food sharing.

# WHAT IS NYU FREEDGE?

The NYU FREEdge is a **food sharing community**, which invites NYU students, faculty and staff to share excess food.

Created using **human-centered design** by **Design for America of NYU (DFA NYU)** in 2016, it is now run in partnership with the **Design Lab @ NYU MakerSpace**.

## OUR MISSION

We aim to tackle food waste and food insecurity in NYU and NYC using a community-centered approach.



**DESIGN *for* AMERICA**  
new york university students using design to create local and social impact

**Maker**Space



**NYU | TANDON**



Foyer of NYU Tandon MakerSpace  
Brooklyn, NY

# WHO ARE WE?

We are a **team of Design for America of NYU (DFA NYU)**: a community of students, undergraduates, and graduates across all NYU, who use human-centered design to tackle social issues in our communities.

We are partnering with the Design Lab @ NYU MakerSpace. The NYU FREEdge is “owned” by the NYU MakerSpace. We aim to tackle food waste and food insecurity in NYU and NYC using a community-centered approach.

## NYU FREEdge

This is a community fridge that aims at reducing food waste.

**GIVE** your extra food to the FREEdge.

**EAT** food from the FREEdge if you're hungry.

**SHARE** with your NYU community!

# OUR APPROACH

## HUMAN-CENTERED DESIGN

Our process for the NYU FREEDge was inspired by the **Human Centered Design (HCD)** approach. Human-centered design offers you an approach to co-create with communities, creating innovative solutions based on people's actual needs.

As stated by [IDEO.org](https://www.ideo.com/) in *The Field Guide to Human-Centered Design*, embracing human-centered design means believing that all problems, even the most challenging ones like food insecurity and food waste, are solvable.

The human-centered design approach involves three main phases: **Inspiration, Ideation, and Implementation**, which in some cases might overlap.



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### INSPIRATION

In this phase, you'll learn how to better understand people. You'll observe their lives, hear their hopes and desires, and get smart on your challenge.



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### IDEATION

Here you'll make sense of everything that you've heard, generate tons of ideas, identify opportunities for design, and test and refine your solutions.



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### IMPLEMENTATION

Now is your chance to bring your solution to life. You'll figure out how to get your idea to market and how to maximize its impact in the world.

# DESIGN PRINCIPLES

## KEY LEARNINGS THAT BECAME OUR DESIGN PRINCIPLES

### **BALANCE PRIVACY AND VISIBILITY**

- Location: a space where there is traffic but where there is some privacy (so people don't feel uncomfortable using the FREEdge).
- Transparency (opaque door vs. glass door) to make the food visible

### **CREATE AN ECOSYSTEM OF PARTNERS**

- Finding stakeholders (departments running events, facility department, cafeteria, clubs, etc.) to have regular donations of food
- Connect with local communities outside of NYU

### **CREATE A COMMUNITY OF SHARING**

- Develop community of students willing to be in charge of the FREEdge
- Create regular events where people can share (food drive, sharing events, etc.)
- Share meaningful stories on social media

### **NURTURE TRUST**

- In the freshness of the food: e.g. develop a labeling system, create a cleaning calendar, etc.
- In the team running the project: Create a poster with names and pictures of the team; Add contact information.

### **DEFINING A FOCUS: FOOD WASTE AND / OR FOOD INSECURITY**

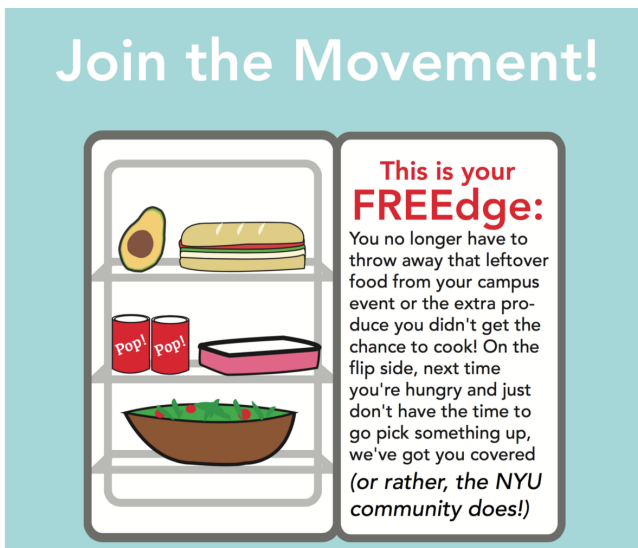
- Being aware of the stigma associated with food insecurity

# OUR HISTORY

## From Project Avocado to NYU FREEdge

### 2015 (SPRING)

NYU FREEdge was started as Project Avocado by DFA NYU



- Research showed an interest in sharing food and that food insecurity was an issue at NYU
- **Mission:** Foster community engagement and trust and to create a movement around food sharing, reducing the environmental footprint from food waste, and providing food for those in need

### 2016

- A fridge was donated to DFA NYU
- DFA NYU Project Avocado joined the FREEdge network
- DFA NYU FREEdge team was awarded the Prototyping Fund Phase 1

#### Learnings:

- People did not know about NYU FREEdge or did not check it.
- Stigma around food insecurity

#### Action:

- The NYU FREEdge was moved to its current location in the MakerSpace foyer, an open area located in front of the MakerSpace and nearby the cafeteria.
- Focus message around food waste



# OUR HISTORY

## 2017 (SPRING)

NYU FREEdge was awarded funding from the Prototyping Fund Phase 2.

### **Learnings:**

- Make it easy to see the food
- Provide information on when the food
- Creating a trusted community is essential but difficult.

### **Actions:**

- Bought a fridge with a transparent door
- Experimented with methods for tagging the food
- Ongoing efforts (events, social media, etc.) to develop a strong food sharing community.

## 2018

The DFA NYU project was put on pause and the MakerSpace “adopted” NYU FREEdge

# OUR HISTORY

## 2019

### Learnings:

- Students continued to use NYU FREEEdge
- Increased institutional support around sustainability and waste reduction.

### Actions:

- The NYU FREEEdge relaunched as a DFA NYU project in Fall 2019
- Made NYU FREEEdge more visible (decoration, orientation, Logo)
- Prototyped a variety of labelling systems
- Hosted food sharing events with other clubs to encourage food donations

## 2020 (PRE-COVID)

### Learnings:

- Crucial to **develop an ecosystem through partnerships**
- Create **trust** and connect better with users

### Actions:

- Started a conversation with NYU Eats for a possible partnership
- Created a poster with team members and a cleaning schedule.
- Prototyped labels to be more considerate of food allergies

# OUR HISTORY

## 2020 (POST-COVID)

- Mid-March, the campus closed and we could not operate NYU FREEdge.
- Yet food insecurity was growing in NYC, with community fridges blooming in NYC.

## 2020 (FALL)

The campus partially reopened and most of our team was remote.

### **Actions:**

- Outreach and social media marketing
- Research on community fridges and food pantries
- Ran a dry food drive and gave the donations to a local community fridge in Fort Greene, Brooklyn.

## 2021 (SPRING)

### **Actions:**

- Developed partnerships with other campuses as well as with NYU EATS.
- Ran a semester-long drive at NYU Tandon and through our partnership with NYU EATS, discussed a plan to expand the food drive locations to include two other major dining halls.
- Revived our social media presence to create a community

# PHASE 1: HOW TO: CREATE YOUR NYU FREEDGE

In this section, we describe based on the Human-centered design process and our experience, *how to create your own food sharing community*. For each phase, we provide a description, along with some examples and resources to help you.

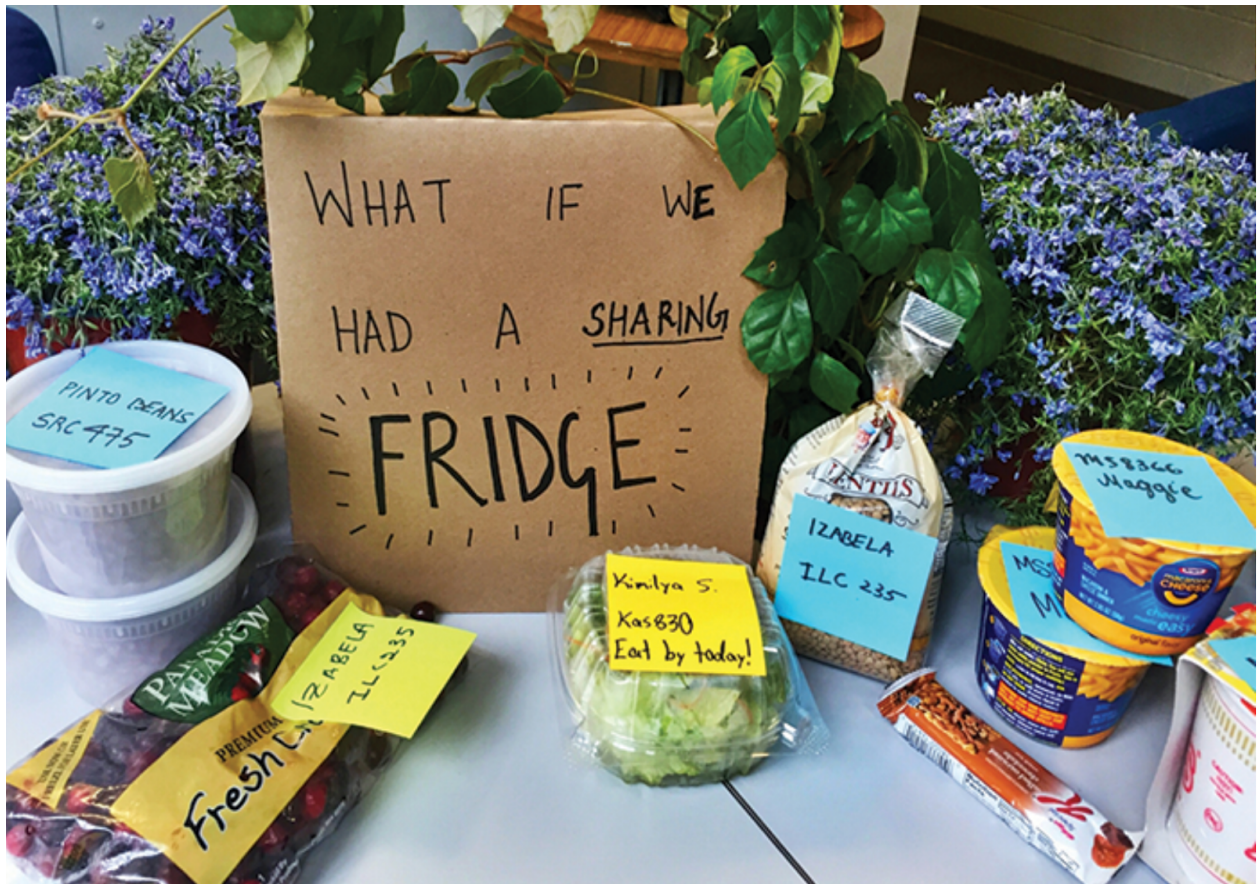
# STEP 1: RESEARCH



Start by doing research to **define your focus** (food waste and/or food insecurity), your **stakeholders** (end users but also faculty and staff), your **community**, and the **location**.

Each FREEdge will differ because of its different cultural context and the different needs of each community.

# EXAMPLE 1: FOOD-SHARING EVENT



*Food sharing event to test the assumption that students will be willing to share food - bring it or take it.*

The first students who had the idea of starting the NYU FREEdge created a food-sharing event. They created flyers and posters to invite students to stop by to bring some food they had extra or to pick up some food. During two hours, they set up a table on campus with a sign. Many students came. Several who did not know about the event stopped by as they saw the table. People brought food; others took some. Several simply stayed to discuss and share their views on the project. The team learned that there was interest in creating a sharing community. They also learned what kind of food people might share.

# EXAMPLE 2: INTERVIEW GUIDES



The team developed interview guides and interviewed multiple students. They first started with their friends, and friends of friends.

## REMEMBER:

Make sure to document your findings  
Make sure to know who are the decision-makers in your school/campus

## RESOURCES:

**Card sorting:** <https://www.designkit.org/methods/card-sort>

**Interviews:** <https://www.designkit.org/methods/interview>

**Observe:** <https://www.designkit.org/methods/immersion>

**Co-create:** <https://www.designkit.org/methods/co-creation-session>

# STEP 2: FRAME & IDEATE



Once you have a better understanding of your community's needs, frame your project. Here are some questions to help you:

- Its mission: What **needs** are you trying to address? How? For who? (Who will be the beneficiaries: NYU students or local communities?)
- Who will be your **institutional partners** (Facilities, Student Affairs, the Sustainability office, etc.) and **outside partners** (local community fridges e.g.)? Do you need any funding?
- Who will **own** the FREEdge?
- Where will it be **located**?
- Where will the **food** come from?
- Who will be **responsible** for its cleaning?
- How will you **engage** students to share food?



# STEP 2: FRAME & IDEATE

## REMEMBER:

Each context is different, with different cultural norms, different users, with different needs. Therefore your final solution might not be a community fridge.

Your FREEdge might only be shelves, donation boxes, a series of sharing events, or a platform/app where people might exchange ingredients, buy-in bulks, or share recipes.

Who knows?

You might end up realizing that your audience does not need the food and the issues are mostly excess. In that case, you might focus on collecting the extra food and distributing it to communities in need.

## RESOURCES:

**Define your audience:** <https://www.designkit.org/methods/define-your-audience>

**Explore your theory of change:** <https://www.designkit.org/methods/explore-your-theory-of-change>

**Create journey maps:** <https://www.designkit.org/methods/journey-map>

**Brainstorm:** <https://www.designkit.org/methods/brainstorm-rules>

# OUR PARTNERS & FUNDING

## PARTNERS

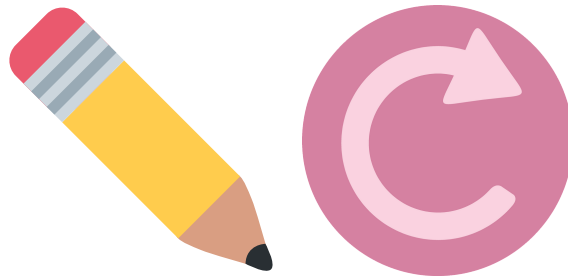


- Originally our first partner had been **Facilities** as we needed their approval to get a location to put the FREEdge and then the shelves. Getting their approval was essential, which our faculty advisor was able to obtain
- When the **MakerSpace** took over ownership of the FREEdge, they became the main interlocutor with Facilities
- We also developed partnerships with **Student Affairs** and some student groups who started sharing food after their events and helped spread the word
- We recently started a partnership with **NYU EATS (dining services)** to expand our food drive. They also agreed to purchase bulk food donations using some of the Dining Dollar Donations, a program where students can donate unused meal swipes

## FUNDING

- The first fridge was given to us. The second one was purchased thanks to the award of the Prototyping Fund. The shelf for the dry food was purchased by the MakerSpace

# STEP 3: PROTOTYPE & ITERATE



Rapid prototype to test your assumptions and iterate to refine your project's description.

## **What to prototype? How? Ask yourself:**

Does your concept have legs?

Will people be willing to share food?

That was the question the Project Avocado Team asked when they started. To answer it, they set up a food sharing event from 2 to 4 pm in a student area. They created posters /flyers, shared on social media, and told their friends, etc.

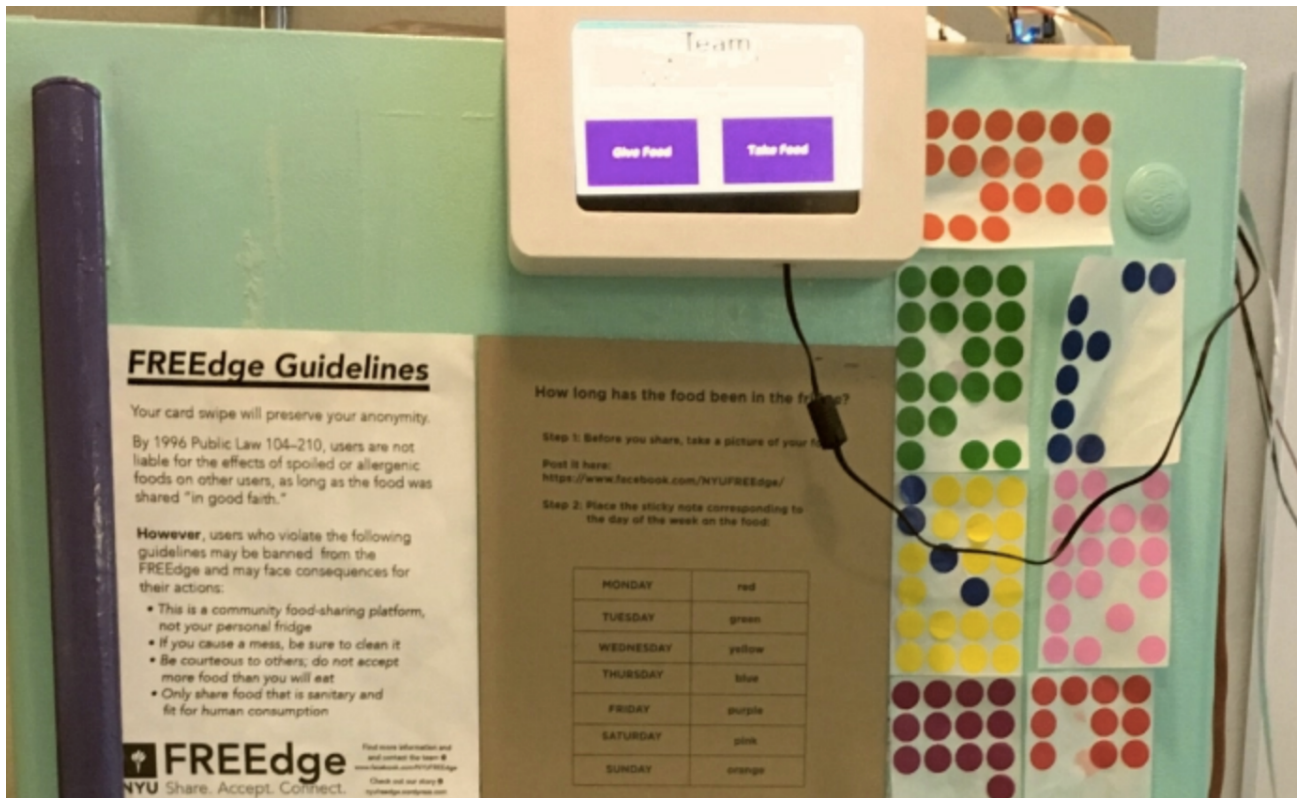
The response was positive and the project was launched.

Later on, you might want to test more specific questions: Will people be willing to use labels? What kind of labels are more useful?

For this, you can **create several different prototypes**, leave them nearby the FREEge or create a small workshop where you invite people to try out different options and observe.

**Each FREEge will differ because of its different cultural context and the different needs of each community.**

# EXAMPLE : LABELS



*Example of the prototype with colored dots to indicate the day the food was dropped.*

## THE PROBLEM

The team thought that they needed to have labels for the food so that people knew when it had been shared. They were debating if people would take the time to write the date. Others said that maybe a color coding with stickers representing the days of the week would work.

# PROTOTYPING LABELS

## PROTOTYPE TO ANSWER QUESTIONS

- **Small workshop**
  - Simple scenario where people had to leave food in the FREEdge and they asked people to choose one of the two methods
  - Writing the dates on labels was the best option
- **Live Prototype**
  - They left some white stickers and a pen nearby. They printed a poster inviting people to write down the dates when they were leaving food. They quickly realized that most people would not take the time to write the date
  - They did another prototype with only colored dots that represented days of the week. If you put some food on a Monday, you put a green sticker. The assumption is that food should stay no more than a week in the fridge

# MORE ON PROTOTYPING

## ANOTHER WAY TO PROTOTYPE

- **Small Event**

- Creating a small event with a table or a shelf inviting people to give or take food is also a way to prototype.
- The question here is: does your idea have legs? Will people be willing to share food? Will they mostly take or will they give? What will they bring or take?

### REMEMBER:

Don't forget to get user feedback and then integrate the feedback. You will have to prototype and iterate multiple times. This is only the beginning!

### RESOURCES:

**Build prototype:** <https://www.designkit.org/methods/build-run-prototypes>

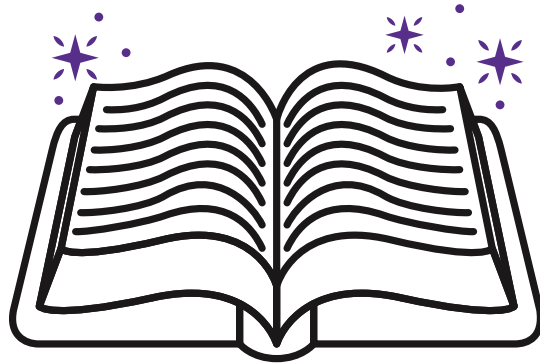
**Storyboards:** <https://www.designkit.org/methods/storyboard>

**Live prototype:** <https://www.designkit.org/methods/live-prototyping>

**Integrate feedback and Iterate:**

<https://www.designkit.org/methods/integrate-feedback-and-iterate>

# STEP 4: TELL A STORY



Develop a “story” that you can share in order to get support, such as financial support to buy a fridge/shelves, access to a location, etc.

## RESOURCES:

**Define your measures of success:**

<https://www.designkit.org/methods/define-your-indicators>

**Roadmap for success:** <https://www.designkit.org/methods/roadmap-for-success>

**Build partnerships:** <https://www.designkit.org/methods/build-partnerships>

**PHASE 2:**

**HOW TO:**

**"RUN"**

**YOUR NYU**

**FREEDGE**

Once you are ready to pilot and run your own FREEdge, you still have some more research, prototyping, and iteration to do. Remember design is never finished as context and needs change. Moreover, community building is an ongoing process.



# TRUST & AWARENESS

## TRUST

A **strong community** and a strong **safety protocol** are key to develop a sustainable food sharing community

## AWARENESS

- Create a visual identity with a logo, website, & social media presence
- Connect with admin, faculty, building staff and let them know about the fridge and how to donate
- Organize events and publicize them on social media
- Promote your fridge at student club fairs, welcome week, and other campus related events that will help spread awareness
- One thing we have been trying to figure out is how to let people know that food has been shared in the FREEdge. Only those who happen to walk by seem to know there is food. It is still work in progress. We tried technical solutions (e.g. have a camera inside the fridge, asking people to take a picture and share on social media) but none has been successful so far

## EXAMPLE: LOGO



*Iterations of the NYU FREEdge logo.*

## CREATING A VISUAL BRAND

The team realized they needed to develop a **clear visual brand identity** for promotion and creating consistent messaging as they built their community. The team worked with the MakerSpace to develop some designs for their logo. They wanted to keep it simple, but easily recognizable. They wanted it to immediately convey the purpose of the project while maintaining a connection to NYU through the choice of color.

# BUILDING A COMMUNITY

NYU FREEEdge is more than a community fridge or a dry food pantry. It's about **sharing and creating community**. It is therefore essential to **build a community of like-minded people** who will share food, possibly step in to volunteer for events and/or help with the operations of the NYU FREEEdge (e.g. cleaning)

## HOW?

- People trust people, so associating individuals with the FREEEdge is essential:
  - Create a poster with each of your team members' photos and names
  - Share content on social media about food waste, sustainability, and food insecurity beyond your own events to educate people and increase awareness about the issues
  - Consider organizing events to share knowledge (talks, podcasts, blog or newsletter) and engaging with local communities (food drive, donations to local organizations)

# EXAMPLE: THANKSGIVING BREAK



*Pre-Thanksgiving Break -- Food Drive and Event in Tandon Makerspace.*

## PRE-THANKSGIVING BREAK FOOD DRIVE

The team decided to hold an **event** that both helped to **raise awareness** about the FREEEdge, but also make the FREEEdge seem more **approachable** and **user friendly**. Since they knew students would be leaving for the Thanksgiving holiday, they encouraged the NYU community to come to the event and **bring their extra food** that might have spoiled over the break, filling the fridge for anyone planning to stay at school over the break. The event also encouraged students to **stay, socialize, and eat** some of the donated food and drinks as a way to **normalize the sharing of food**.

# OPERATIONS

- **Safety and cleanliness are essential:**
  - Be aware of legal requirements in your country/city and safety rules in your college campus. Here are some general guidelines to follow, but make sure to do your own research on this.
  - Create a maintenance schedule and make sure to also print it and make it visible (that's key for trust)
  - Develop safety protocols. This includes:
    - Maintenance schedule
    - Rules for discarding food ("after x number of days")
- **Have clear guidelines about what type of food can be shared;**
  - Perishable or non-perishable? Cooked food or home-cooked food?
  - Do you want to allow any open food? We only allow "open foods" from events. Would you allow students to bring in things like the rest of the pot of soup they made?
  - Develop and use a consistent and visible tagging system and have team members monitor the fridge and track donation dates

# EXAMPLE : MAINTENANCE SCHEDULE



*Posters of the NYU FREEdge rules and schedules.*

## CREATING A MAINTENANCE SCHEDULE

The FREEdge team created a FREEdge rule set as well as a maintenance schedule that they posted on and around the FREEdge to both give clear guidance on how to use the FREEdge and to help build trust so that users knew that the team was regularly cleaning and maintaining the fridge.

# FOOD DONATIONS

To have a sustainable food-sharing community, you need to have **regular donations**. Here are different options we have experimented with:

- We started with **NYU Community members** - students, staff, and administrators - but realized it was not consistent
- As there were a lot of events with free food, we developed partnerships with **event organizers** so that they would share the remaining food at the end of their events
- As we realized that there was also a lot of waste in dining halls, we started developing a **partnership with NYU Eats** (dining halls)

# EXAMPLE 4: FOOD DONATION INFOGRAPHIC



*NYU FREEEdge Handout to raise awareness.*

## CREATING AN NYU FREEEDGE HANDOUT

The team created a handout with the FREEEdge mission, team contact info, and the location of the FREEEdge. The hope was that when there were events in the building, the organizers would be aware of the FREEEdge and place any uneaten food in the fridge for the NYU community to share.



# CREDITS



## CONCEPTION

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## VISUAL DESIGN

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