

## **The DAM:**

### **The Creation of a Good Student Center at The City College of New York**



Figure 1- A close resemblance of what our modern student center would look like.

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## **Introduction:**

What do you think about when thinking of college? For most students coming from high school, they tend to think about having the best 4 years of their life. They think about the chance to get more freedom and make new friends. But sadly, most of the time with commuter colleges, you don't really get this, since you miss out on "the dorming experience." Unfortunately, for us, The City College of New York (CCNY) is a commuter college. This means you will see a lot of students go to class then rapidly leave to go home or stay by themselves. This creates a place where students may feel too shy or afraid to socialize with one another. We think that creating a space for the students to interact with each other in different ways will help them socialize and feel more comfortable. This space can be a student center/union. Student centers (or student unions) are buildings or facilities within campus that act as hubs for everyone, including staff. This is a place where needs are met, such as a place to eat, to study, to socialize, to exercise, and to have fun. Student centers play a key part in creating a healthy and lively campus environment. In the middle of The City College of New York's main part of campus lies the Wingate Student Center. A few students mentioned that this center often gets boring because of the lack of activities (see appendix for survey quote). Additionally, asking around campus, many students did not know that Wingate was meant to be a student center, and rather only knew of it as having a gym. As said before, not as many students choose to remain on campus after classes, and decide to go straight home, as there is not much to do. (Google Form Survey). A student center at CCNY is needed to allow students to have a new space, a better campus community, and possibly a better reputation for the school. For our proposal we made a google form asking CCNY students what they would like to see in their student center, so that they are pleased and attracted to our new environment. We found that many students thought that having a game room, a meditation/sleeping area, a rooftop garden, and a private study were great ideas to add to

the center. We also found that students really wanted to have frequent events at the center, so that they could make more connections and friends.

One reason why we think creating a student center at CCNY will be needed is because it'll allow students and staff to have a 'third place.' According to American urban sociologist Ray Oldenburg, a 'third place' is a public place where people can informally gather and interact outside of home, the first place, and work, the second place. These places offer support to individuals and communities while fostering a healthy environment and breaking down boundaries of social classes and backgrounds. The lack of boundaries and formalities allows everyone to create connections and relax. In our case, the second place includes the university. The student center will create a place to enjoy a break after class, relax in their free time, and encourage students to meet and interact with friends or other students. In a case study by Daniel M. Maxwell, Ed.D., an associate vice president and vice chancellor for student affairs at the University of Houston, in which students and faculty participated in a project to renovate the student center, they found that "having a Sense of Place provides opportunities for students to cultivate belonging, identify with a purposeful place, and develop a connection to their community." Likewise, before the renovation, the students mentioned a "lack of an impression' the facility left on potential students and their family members during campus visits." The renovation of the student center not only created a healthy and thriving campus community but also played a vital role in enhancing success, persistence, and graduation in their students. A positive campus atmosphere can be helpful to not just students, as everyone on campus benefits from a positive mindset.

In a separate study on the possible benefits of living on campus, it was found that students who live on campus spent more time studying with classmates and engaging in extracurricular activities while decreasing alcohol consumption. (Araujo & Murray 2010) This is

because their environment is designed for studying and learning, allowing for more engagement within the community. Based on the study, living on campus and staying on campus for longer could be linked in some way. With a student center, students are more likely to stay on campus and use its resources, leading to positive behaviors that result in long-term academic benefits and retention. In an interview with a student, Ash, from Colorado State University, Ash mentioned that the student center is the center of the campus, and oftentimes it is the first place to go when you need something to do or a place to hang out. Likewise, the student center provides services often used by students attending the university, many of whom live on campus. Another student, Sebastian, from the New Jersey Institute of Technology, lives on campus in the honors college and uses their free time between hanging out with others and participating in school activities and clubs, many of which occur in the student center. When asked about how the student center has benefitted him, Sebastian replied that it is a good meeting place and place to work. In addition to that, he also mentioned a few recreational activities such as bowling within the center. In both cases, the student centers included a mix of recreational activities, food, study spaces, relaxation, events, etc. What better way to create friends on campus than creating a ‘third place’ within our student center?

### **Action Plan:**

Sadly, one of the main disadvantages of going to a commuter school is the lack of chances to make friends, which leads to a community not being as unified as it should be. According to a CCNY student who responded to our survey: “I transferred to the college this semester and I'm not the best at making friends or socializing right away, so I think a designated student center with opportunities to meet people in small groups whilst playing fun games would be nice.” To give students at CCNY that environment of feeling comfortable to socialize, we

decided to make the DAM, our new student center. We named it the DAM since our goal is to create a protected and comfortable environment for the beavers (students) at CCNY. Beavers build dams to create a home, and we hope that our DAM makes many students feel at home. We chose the construction space between the Marshak and the Administration office and the Marshak plaza to build the DAM. In our student center we plan to have two floors and a rooftop, with each floor having 91,000 square feet per floor, and the overall building to be about 364,000 sq feet. **(See below for floor plans)**

### **First Floor:**

As you enter the first floor of the student center, there will see a lounge area, with highchairs, tables, and couches, where students can sit and do homework, be with friends, or sit to eat. If you continue into the center, you will find our game room! **From our survey, we found that 83% wanted to have a game room with games like 8 ball pool, air hockey table, and board games so they could play with friends (See Appendix-Figure 2 for pie chart).** This was considered in our big purchases for the game room. In this room, we have a small office that holds all the materials for every game- which you are free to play with in exchange for your ID (which they will hold for as long as you have the game). There will also be a main seating area where people who want to play board games can sit. We would like to invite the board game club meetings there, so it can attract new students who want to learn how to play different board games and make friends. Then on the corner wall we plan to have pool tables, ping pong table, and an air hockey table. Finally, our biggest attraction, the video game room! Here, we plan to have two TVs that are connected to an Xbox and a Nintendo Switch where students can take turns playing and watching each other play! Pass the game room is the cafeteria (also known as

the food court). This is where students can come to eat their favorite fast-food joints, or food from home! **From our survey we found that many students wanted Chipotle, McDonalds, and Fruits/smoothies.** We plan to have events and be able to have more student jobs where the students can make money or volunteer here! We also thought it would be a good idea if students wanted to make a club or weekly food dish for their cultures (**since many people in our survey said they wanted Dominican food-View figure 3 in appendix**). Finally, we have our event space. In this space, we hope to open all types of events such as Arts and Crafts, Karaoke, and Music Shows (**Figure 4 in appendix**). When the space is not being used, we would like to have a small shopping mall. A place where students who have small business can sell their stuff here on campus and grow their business! We also thought about talking with the Zahan center, so they could help promote or help students start their own businesses here on campus.

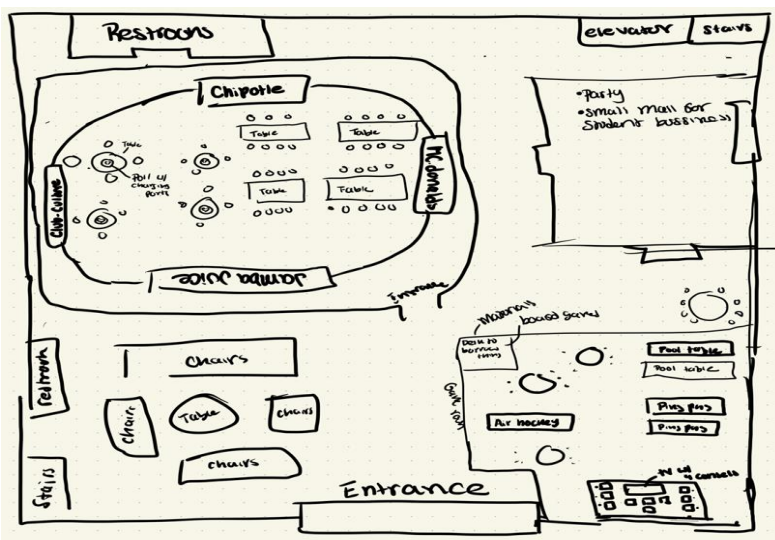


Figure 9.1: Floor plan sketch for first floor



Figure 9.2: AI floor plan for first floor

### Second Floor:

On the second floor we wanted to focus more on a quiet and relaxing space. There will be more seating areas for students and a meditation/sleeping room (**Since 76.2% said they wanted a meditation room, and 72.7% said they wanted a sleeping room in our survey- Check figure 5 and 6 in appendix for pie chart**). For our meditation room, we want all cultures to feel welcomed and safe in our campus/student center. We created the meditation room, so that anyone and everyone can have a private space either to take a break from reality or for religious purposes. For our sleeping room, we plan to have couches where students can relax and take a break from school. Finally at the very end, we have our study and club rooms. (**In our survey we found that 78.3% of CCNY students wanted study/club rooms- check figure 7 in appendix**). These are rooms that every student can use, and like the sleeping area it can be reserved for students where they can study or use for club meetings. Each study room will have a big table, with several chairs and a whiteboard.

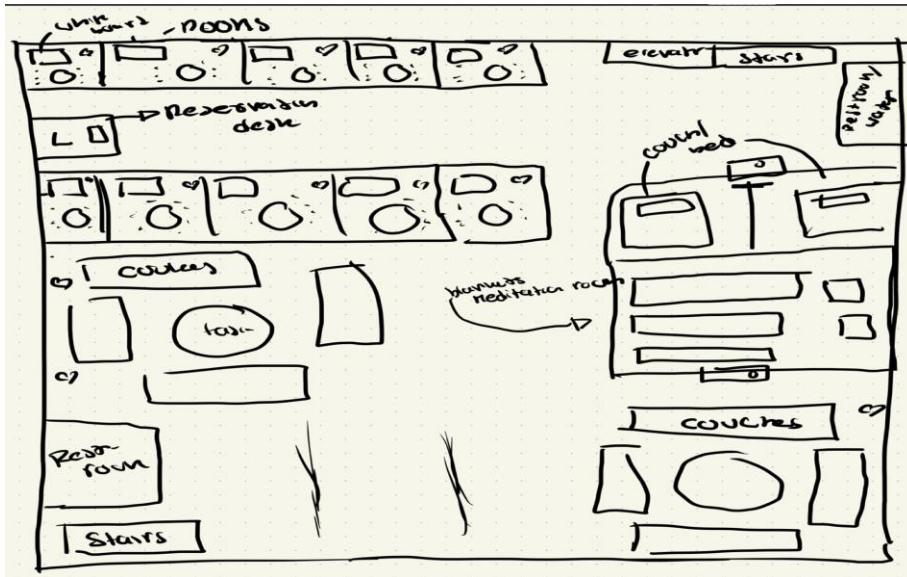


Figure 10.1: Floor plan sketch for second floor



Figure 10.2: AI floor plan for second floor

### Third Floor:

This floor is the “green floor.” As soon as you enter here, you will see the rooftop garden. Throughout the roof, there will be beautiful types of living plants surrounding the area. We



would also have a room where students or staff can bring gardening materials that can be used to take care of and grow a variety of plants. (we decided to add this because we found that 89% wanted a greenhouse rooftop, many students even showed enthusiasm to do some gardening- check figure 8 in appendix). In the middle of our garden will be a small cafe where students can buy coffee, boba, sandwiches, pizza, and pastry. This cafe will have an indoor area in case of bad weather, but also an outdoor area for warmer temperatures.

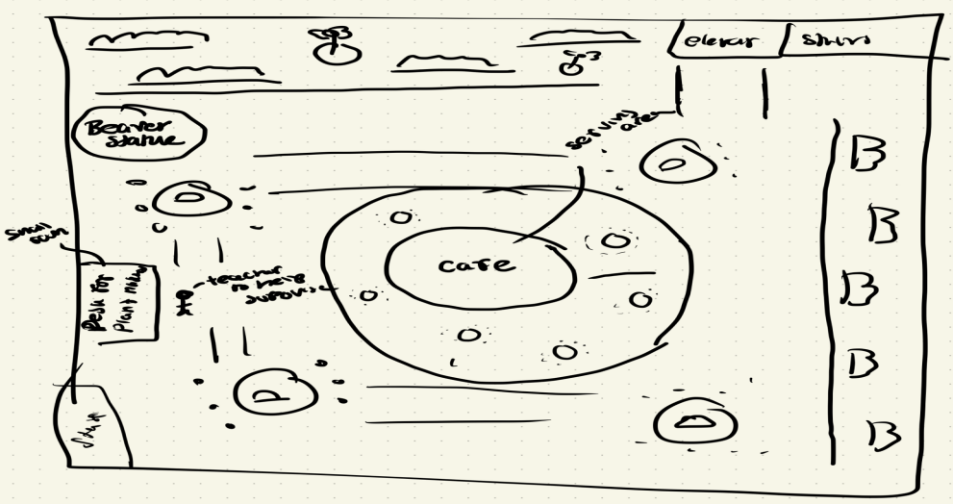


Figure 11.1: Floor plan sketch for second floor



Figure 11.2: AI floor plan for second floor

### Construction Timetable (Gantt Chart):

Below, you will find our Gantt chart, that we made to show how long it'll take to create this student center. In total we estimated it would take about 78 weeks (about 1 and a half years) to finish the entire project.

Table 1: Our timeline for construction

	Task	Assigned To	Start	End	Dur	%	2024				2025			
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	The Dam	Daring Dam Constructors	4/3/24	10/6/25	390									
1	Foundation		4/3/24	5/1/24	21									
2	Framing		5/1/24	6/7/24	28									
3	Exterior Design		6/7/24	8/23/24	56									
4	Roofing		8/23/24	9/20/24	21									
5	Mechanical, Electrical, and Plumbing Systems		9/20/24	3/20/25	126									
6	Interior Design		3/20/25	7/15/25	84									
7	Furnishing		7/15/25	9/30/25	56									
8	Inspection		9/30/25	10/6/25	5									

### Cost and Benefits:

Finally, we believe that CCNY needs a student center, because it will give profit and a better reputation for the school. Creating a student center is exciting to plan, but budgeting should also be considered. Down below we have a table. This table shows the big purchases and items that we plan to include in our student center. This table also shows the cost of each of the big purchases. For more specific information and pricing about some of the purchases, see table 1.2 in the appendix.

<u>Items:</u>	<u>Cost:</u>
<b>Construction:</b>	<b>\$34,548,000</b>
<b>Game Room:</b>	<b>\$8,700</b>
<b>Cafe:</b>	<b>\$75,000</b>
<b>Chipotle Franchise:</b>	<b>\$1,400,000</b>

<b>McDonalds:</b>	<b>\$2,000,000</b>
<b>Jamba juice:</b>	<b>\$598,875</b>
<b>Main Lounge:</b>	<b>\$40,000</b>
<b>Green Roof:</b>	<b>\$2,125,00</b>
<b>Event room:</b>	<b>\$ 20,000</b>
<b>Separate Rooms:</b>	<b>\$ 30,000</b>
<b>HVAC: heating, ventilation, air conditioning</b>	<b>\$2,117,267</b>
<b>Electricity:</b>	<b>\$2,520,000</b>
<b><u>TOTAL:</u></b>	<b>\$45,212,842</b>

Table 2: Table with total budget and purchases needed.

**Benefits:**

Down below is figure 4, which is a line graph showing the accumulative profit amount of the franchises we desire to have at DAM over a 12-year span. Chipotle was reported to have an annual profit of around \$200,000 (Africa, 2024). After about seven years, Chipotle’s profit will cover the total investment cost that was spent. McDonald's profits are seen after eight years, with an annual profit of about \$250,000 (Maya, 2024). Both Chipotle and McDonald’s would reach an overall profit of one million dollars by the end of the 12th year. Jamba Juice on average makes about \$107,721 in profit annually (Amoroso & Amoroso, 2023). By the sixth year, the Jamba Juice franchise would have recovered its initial investment. About \$693,777 in profit would be made after 12 years. Lastly, the cafe has the lowest annual profit generated of \$60,000 but was the fastest in recovering the initial investment spent, which was after the third year. Around the 12th year, about \$645,000 in profit would be made.

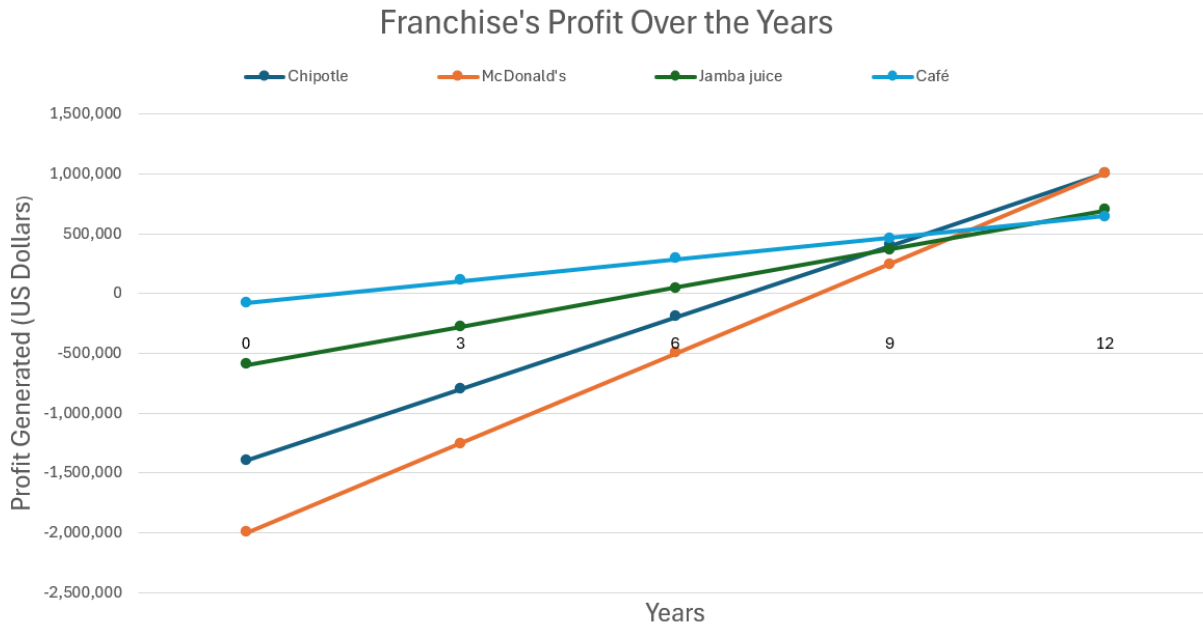


Figure 12: A line graph showing profit of each franchise in the DAM over 12 years

**Experience - The Daring Dam Constructors:**

We would like to give thanks to the four individuals who helped create and set up the student center!

**Mariela Roa** is a first-year student at the City College of New York, majoring in Mechanical engineering and minoring in studio arts, which she hopes will go into animation. She was born and raised in New York where she attended the High School for Environmental Studies. Here she really got to learn more about the environmental crisis happening around her, which caused her to want to pursue a degree in engineering. Since, she wanted to help reduce and stop climate change, pollution, and the amount of plastics/ trash produced every day. In hopes to gain more experience and qualities she joined many internships including: EVC, where she got to learn more about the injustice topic Racism, and created a documentary to bring awareness for it; Teen Leaders, where she got to learn Research several women and create websites, and storyboards

about them; and finally even joined the National Honor Society at her school, which she help led many volunteering services during her senior year. In her spare time, Mariela loves to bike ride and draw and hopes to one day to make an animated series and help create a machine that helps solve/reduce these environmental problems.

**Kevin Lin** is a first-year student at the City College of New York, majoring in Computer Science. They moved to New York around two years ago from New Jersey during their senior year of high school. They spent their middle and high school years working in a family restaurant, learning important skills such as communication and time management in often chaotic and busy environments which still benefit them today. Although working has helped them develop skills, they have not been given much of an opportunity to explore and learn about a variety of subjects in which they hope to peruse. They have an interest in working in conservation, plants, animals, and the environment.

**Rosanny De Leon** is a first-year student at The City College of New York (CCNY) majoring in Applied Mathematics and a Computer Science minor. Before attending CCNY she went to A. Philip Randolph Campus High School, where she took an AP Calculus AB class. This class helped spark her interest in mathematics. Since junior year of high school, she has been tutoring students in math, and she continues to do so for the CCNY STEM Communities. Besides tutoring, she also took a small course with FinTech Focus where she got to learn basic HTML, CSS, and Python. She wishes to practice and learn more about programming. From all these experiences, she has built the qualities of being a responsible and patient student, that she constantly uses and wants to continue using when she gets her career.

**Emelie Coello** is a first-year electrical engineering student at The City College of New York. She previously attended Queens Technical High School where her career in electrical engineering began. In ninth grade, she took an introduction to computer science class where she learned basic Python programming and used Arduino to code circuits to do something different. In tenth grade, she explored the three information technology majors at her school: computer repair, which informed her of the many types of computer hardware; cloud networking which gave her more practice with coding; and pre-engineering which she liked the most since as it allowed her to get directly involved in building circuits. After getting to explore all three, she became a pre-engineering major. In eleventh grade, she truly began to understand what electricity is and how circuits work. That year she became a Certified DC Technician through ETA International and a Certified Copper Cabling Specialist through C-Tech. By twelfth grade, circuit analysis and using a multimeter were second nature to her. Afterwards, she became familiar with both the digital and analog oscilloscope and earned three more certifications: OSHA 30 Certified, Certified AC Technician, and Certified Fiber Optic Cabling Specialist. Additionally, she soldered copper splices and components onto PCBs and block programmed Tello drones. Her goal is to work in the development and construction of electronics.

**Conclusion:**

We hope that the DAM becomes a new home to many here at CCNY. Not only will the DAM be a safe space but an environment of growth and opportunities. We planned the student center not only to please the students but to unify them. CCNY is a community full of diverse students and staff, but the DAM is welcoming to all.

Looking at the future, we also hope that more students apply to CCNY after seeing the unification and community at campus. This can also lower the rates of students that transfer out of CCNY because they will feel comfortable and pleased to stay. The DAM not only will captivate incoming students but will also open more opportunities to work on campus. Many cannot balance having a job and school, but with work study like at DAM, it can adjust to your schedule. The DAM is not a promised project to occur, but if it does, the DAM will be incredibly significant and essential to CCNY.

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**Appendix:**

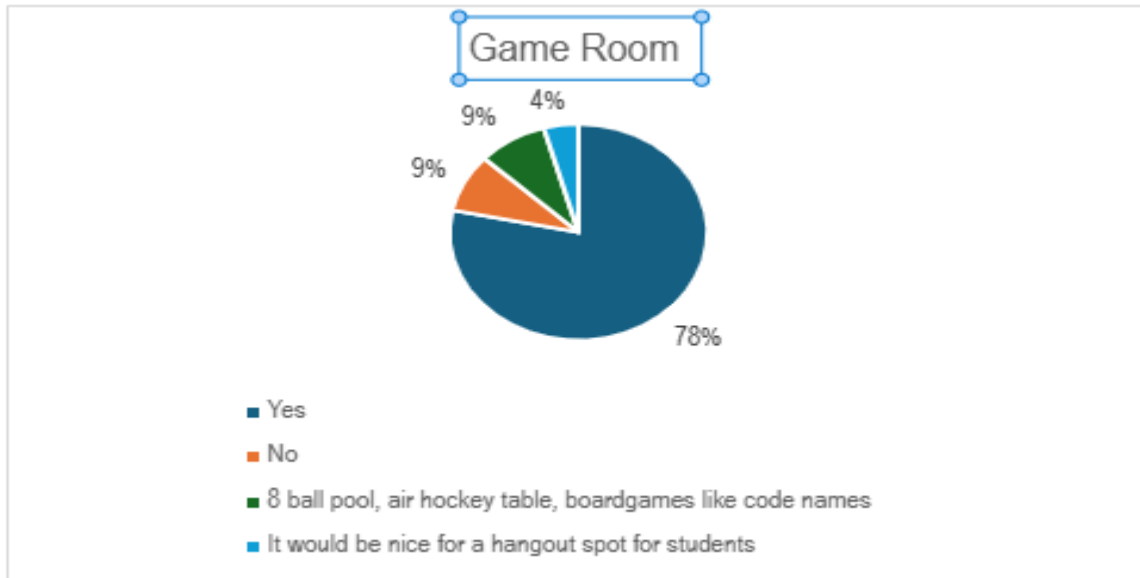


Figure 2: The percentage of students who wanted a game room to who didn't want one

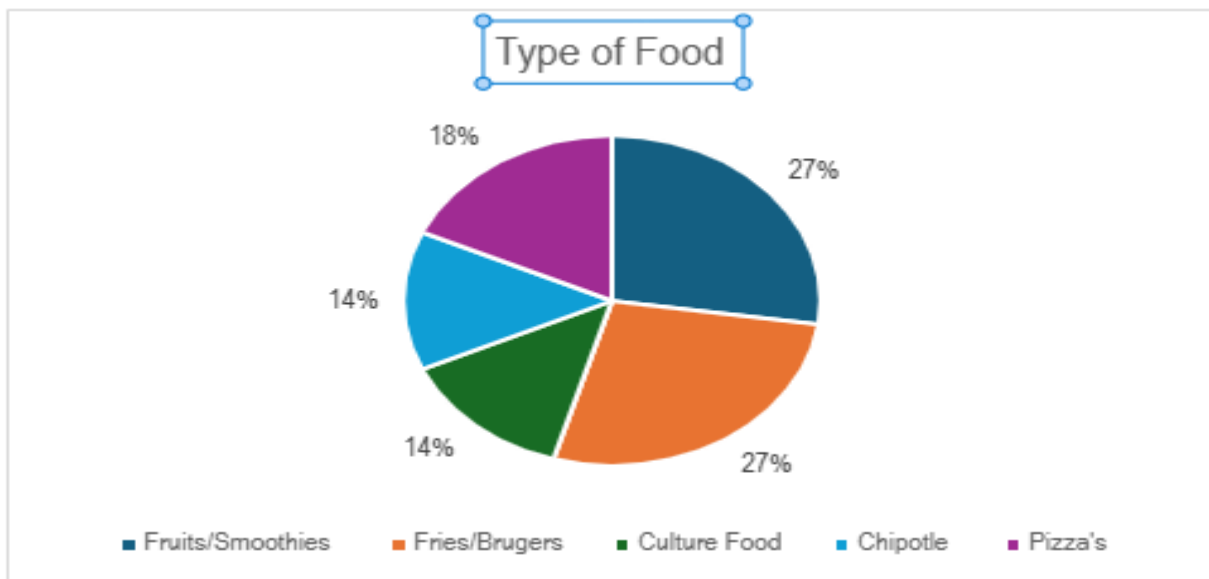


Figure 3: The percentage of the type of food's CCNY students would like to see at the student center

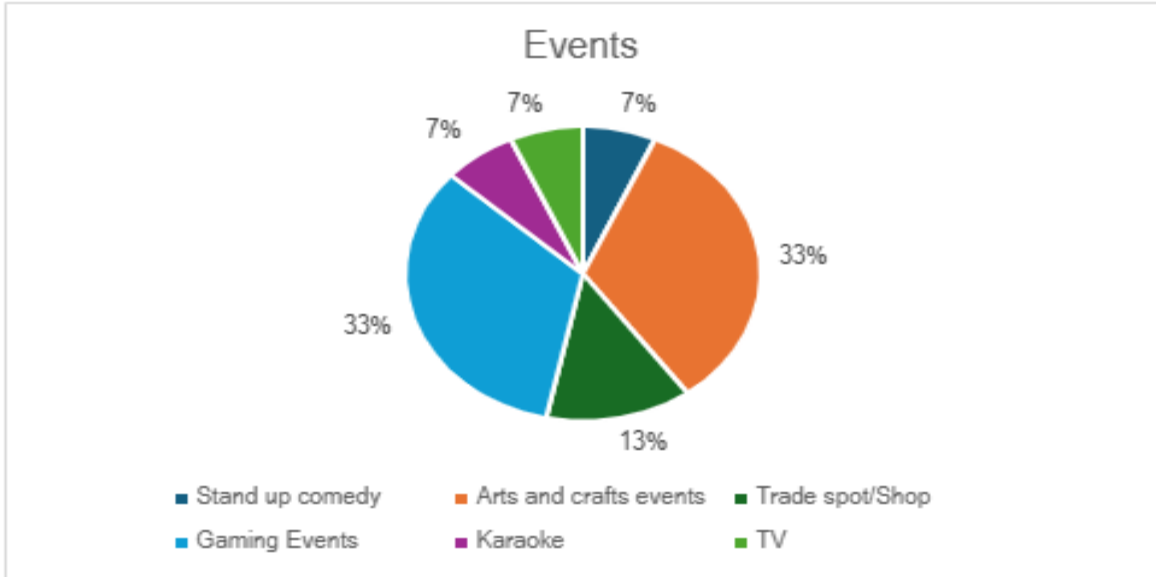


Figure 4: The percentage of the type of Event's CCNY students would like to see at the student center

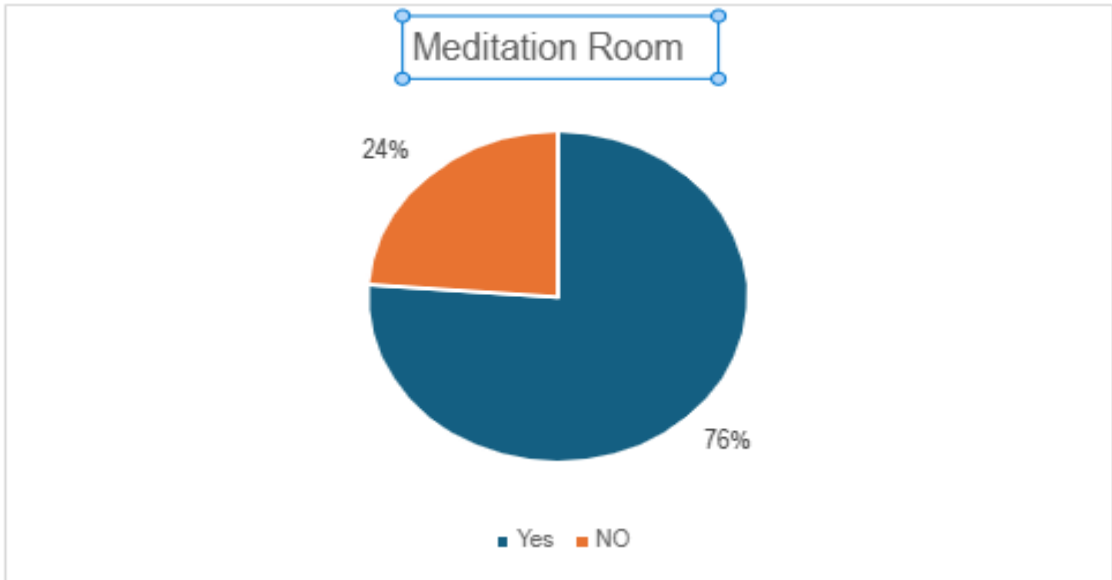


Figure 5: The percentage of students who wanted a meditation room compared to those who didn't want one.



Figure 6: The percentage of students who wanted a sleeping room compared to those who didn't want one.

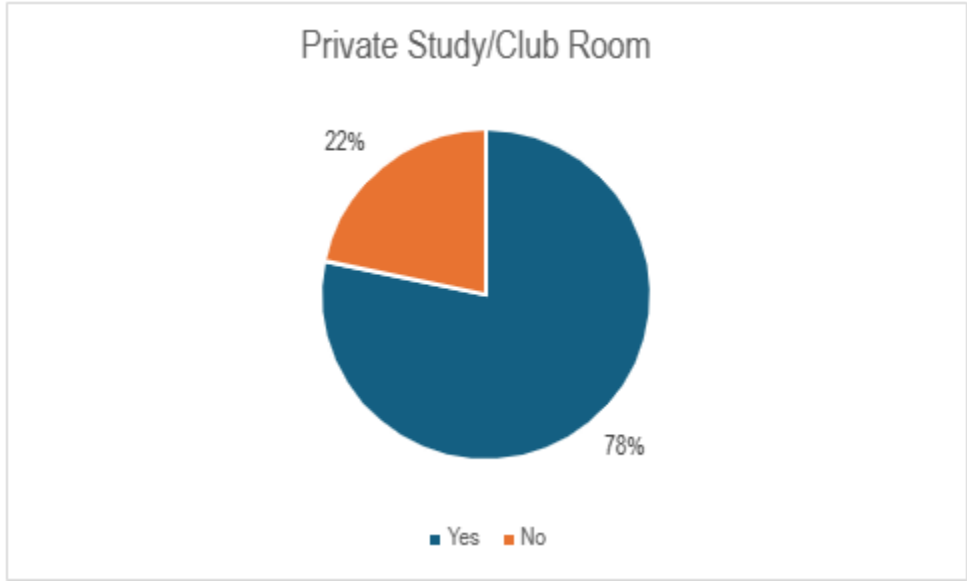


Figure 7: The percentage of students who wanted a private study/club room compared to those who didn't want one.

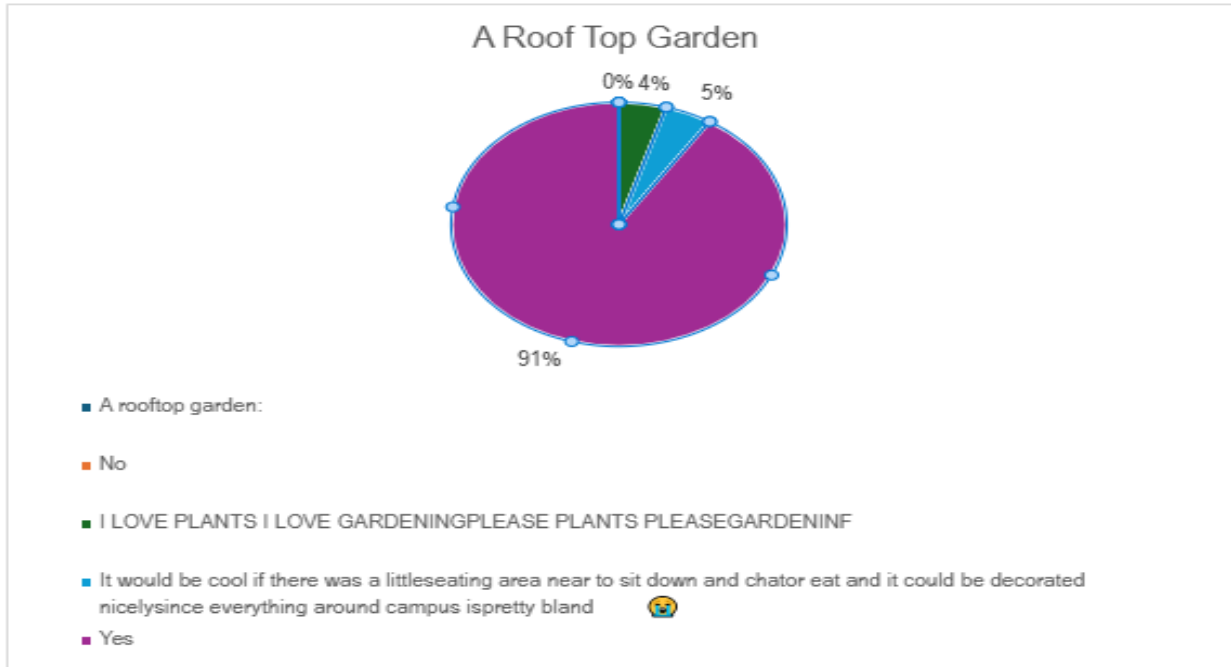


Figure 8: The percentage of students who wanted a rooftop to who did not want one

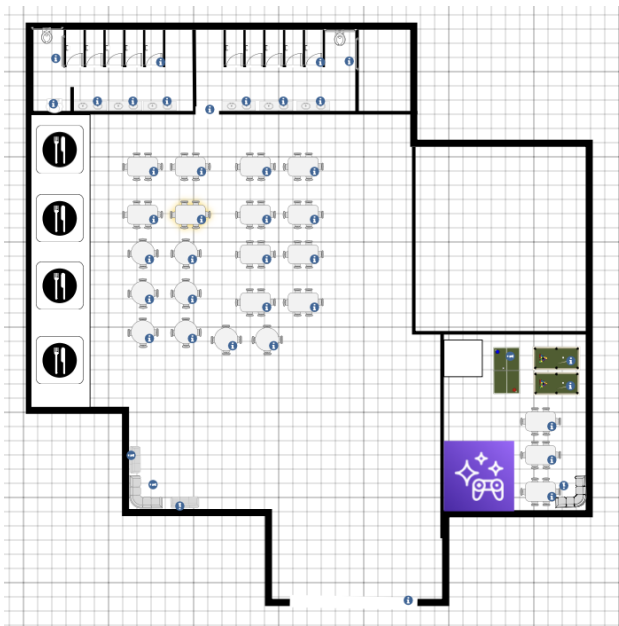


Figure 9.3: Floor Plans of the First Floor

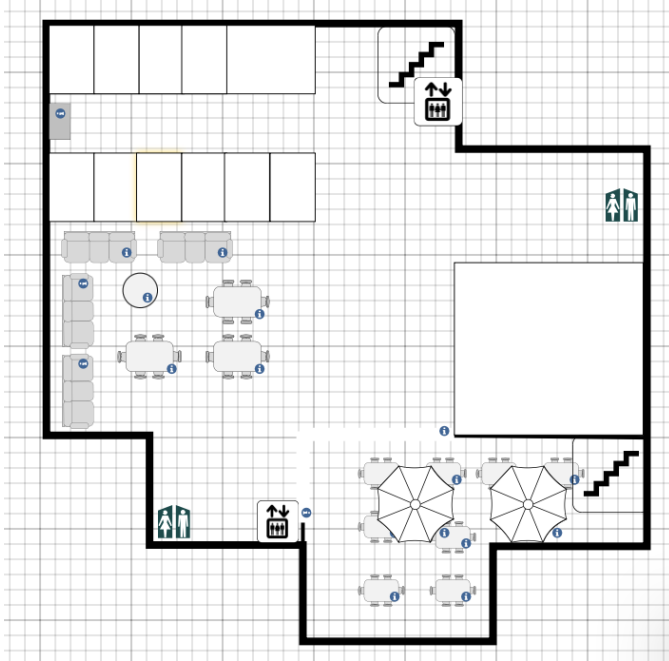


Figure 10.3: Floor Plans for the Second Floor

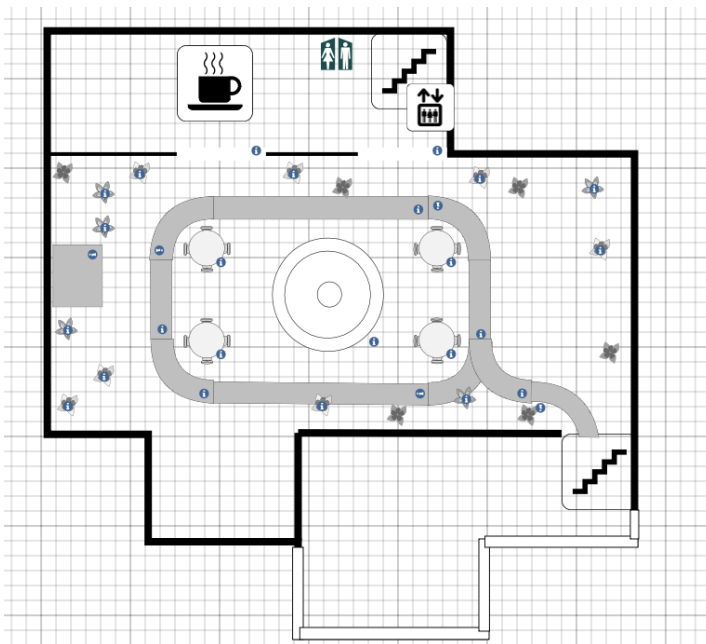


Figure 11.3: Floor Plans for the Rooftop

<b>Construction:</b>	<b>About \$125 per square feet</b> <b>Foundation: \$7 per sq ft</b>
<b>Game Room:</b>	<b>Two Ping Pong Tables: \$200 per table</b> <b>Two Pool Tables: \$400 per table</b> <b>One Air Hockey Table: \$2,000 per table</b> <b>Flat Screen T.V: \$2,000</b>
<b>Furniture:</b>	<b>Benches: \$1,000 per bench</b> <b>Chairs: \$100 per chair</b>
<b>HVAC:</b> <b>Heating, Ventilation, Air Conditioning</b>	<b>Installation: \$5.25 sq ft</b> <b>\$850 for BTU per 1,500 sq ft</b>
<b>Electricity:</b>	<b>\$7 per sq ft</b>

**Table 2.2: Specific cost into certain items/purchase**