





- 5 Background Information
- 8 What We Did
- **8** Assumptions

- 9 Hypothesis
- 9 What We Need to Find Out
- 11 Planned Implementation



T





- 12 Implementation Process
- 18 Data Collected
- 24 RtD Artifact

26 Reflection

27 Sources



Janet Peng Meeting organizer; plans and records meetings



Emily Spooner

Data analyst; leads data interpretation and synthesis

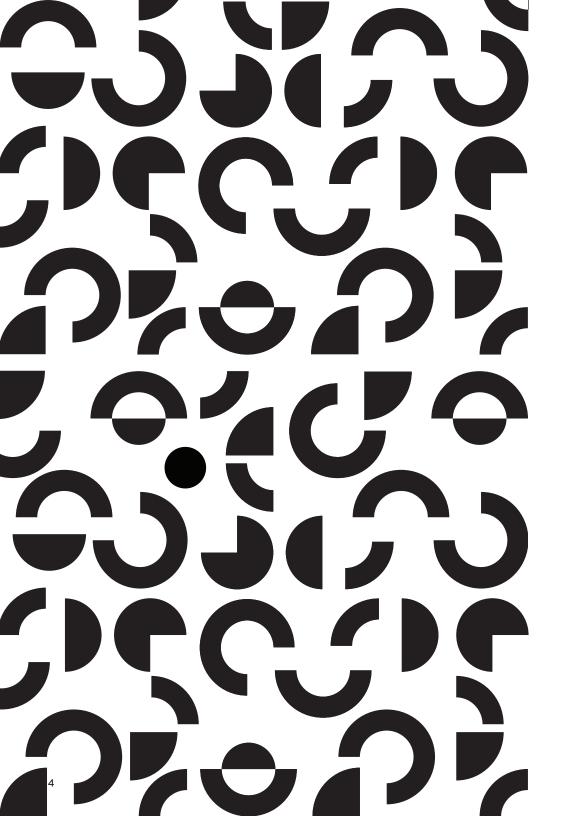






Langston Wells

Designer; layout and visual design



BACKGROUND

The methods we applied in Homecooked and how it relates to our new direction

What We Did

Assumptions

Hypothesis

What We Need to Find Out

Background

Last semester, we researched how cooking events could help foster community at CMU. The result was a system encouraging students to connect with others through cooking and sharing meals. The system

helped people schedule meetings and purchase ingredients. We would like to research the desirability and feasibility of this system by further understanding student's needs and time constraints.

WHAT WE ALREADY KNOW FROM PREVIOUS RESEARCH

Cooking events with few

participants

building

are successful

at relationship

Cooking creates a shared task for

participants to

engage, opening

conversation over

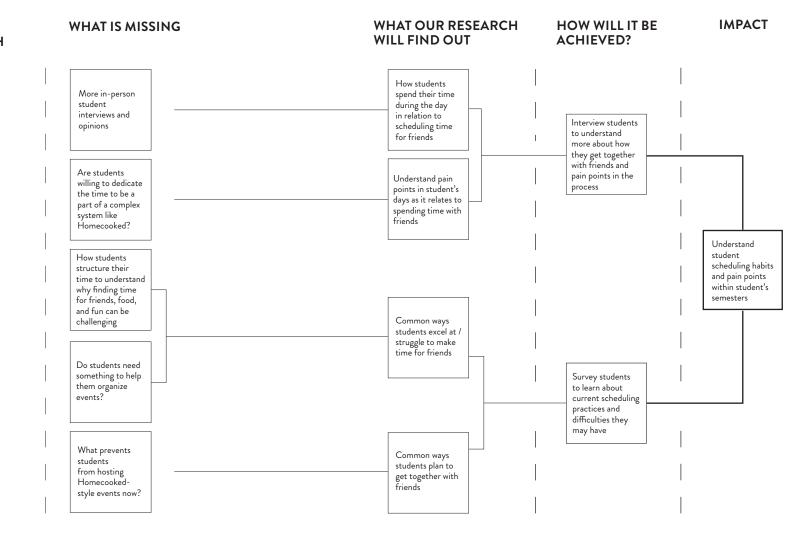
mutual interest.

Choice is important for students: there is lack of choice in the dining system

Food holds cultural significance and students often think of holidays, traditions, family when talking about favorite foods

Food is seen a means of survival, not as an experience. opportunity to build relationships, time of rest

Repetition in events builds stronger relationships over time



6 Background

Research identification

In deciding next steps for research, we examined our previous assumptions to identify aspects of our design that may not have been backed by strong factual evidence.

WHAT WE DID

Our previous intervention plan "Homecooked @ CMU" strove to provide a service that would help CMU undergraduate students make new connections and friendships through shared cooking and eating experiences. This would be a CMU-supported organization that utilizes the incoming communal kitchen space and transforms it into a casual hub for students to use to cook together in small groups.

While mostly centered around physical meetings, we also created an app to help students facilitate meeting times and locations to have a common space to organize plans. Through this program, we hoped to give students an opportunity to meet new people with common interests and spark interdisciplinary connections and friendships to feel more connected to the CMU campus community.

2 OUR ASSUMPTION

In the creation of our intervention, most of our research revolved around the cooking itself and how food can be used as a vehicle to bring people together. What we hadn't researched, however, was the assumption that the main problem in bringing students together is in the scheduling and messaging of making an event.

We had built our app around these functions, including a common space to record meeting times, locations, and recipes for all group members to see and modify. We also decided to include a messaging system to help connect members together and communicate within their groups.

While we personally felt that these parts of the app would help make it easier for students to get together, there was no research involved that educated that decision.

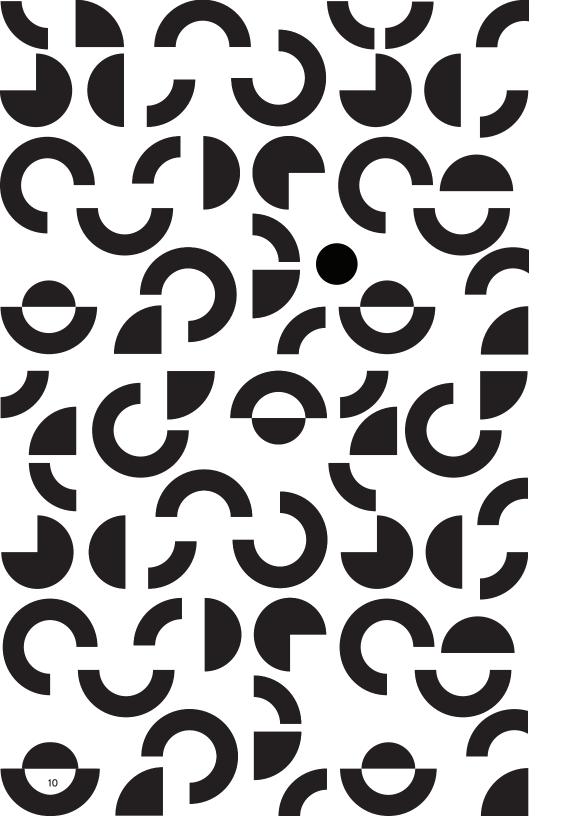
3 OUR HYPOTHESIS

Our hypothesis is that we are correct in our assumption that students' pain points in getting together lie in the scheduling and planning of the event itself. This will either support or discredit our decision to base our app around facilitating event organization and may possibly inform other possible features to include.

4 WHAT TO FIND OUT

In order to create a service that will properly help students, we need to find out what the actual student pain points are in getting together with friends. By communicating with students, seeing their schedules, and hearing what they struggle with when getting together with friends, we can inform the decisions we make moving forward in terms of how our intervention develops.

8 | Background | 9



PLANNED IMPLEMENTATION

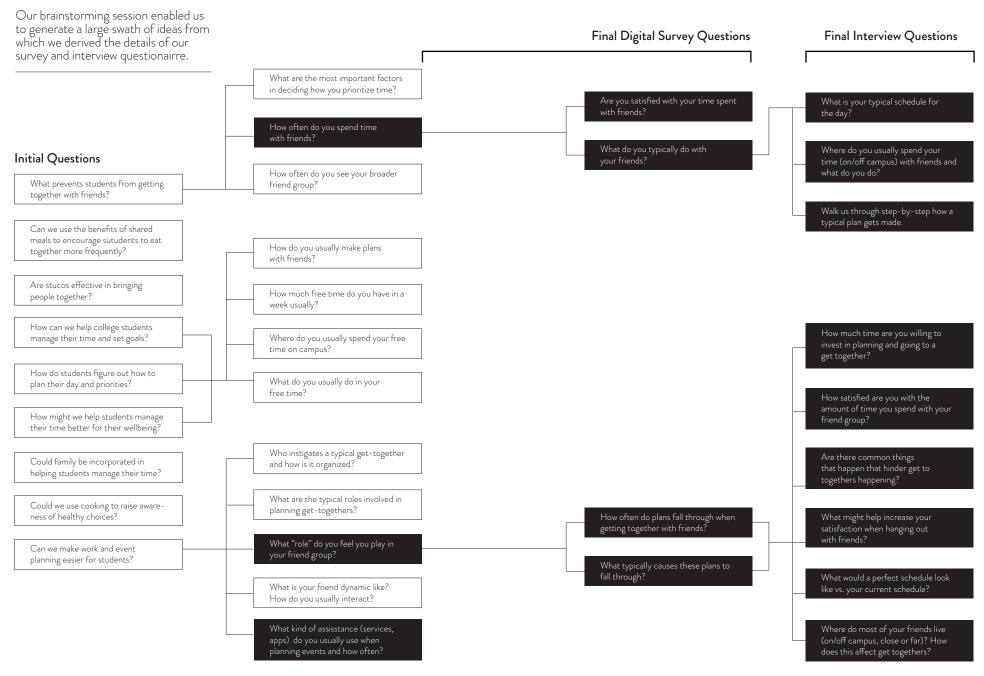
Our team developed two planned implementations - a digital survey and an in-person interview questionairre

Implementation Process

Data Collected

RtD Artifact

Brainstorm Process



12 Planned Implementation Planned Implementation 13

AEIOU Model

Using the AEIOU model helped our team brainstorm initial questions to use for our digital survey and in-person interviews.

Activities	Environments	Interactions	Objects	Users
What is your typical schedule for the day (classes, meals, activities)? How do you typically decide how to best delegate your time? What are the most important factors in deciding how you prioritize your time?	Where is most of your time spent on campus and why? Where do you usually spend your free time when on campus? What do you usually do in this time?	How do you usually make plans with friends? Walk us through step-by-step for how a typical plan gets made: Who instigates it and how? How is it organized? What are the typical roles involved in planning getting together?	What kinds of assistance (services, apps) do you typically use when planning an event and how often? Do you use any tools to help with organizing or planning getting together?	What is your friend dynamic like? How do you usually interact with others? What kind of "role" do you feel you play in your friend group? How do you or they go about making an event or meeting?

Takeaway

From the AEIOU model, our team was able to narrow in on specific questions we thought best suited our research methods. While not every question was directly referenced in our final questionnaire, those that were used provided valuable insight into commonalities among participants.

HOW WHO WHATWHY WHERE

Questions to Consider

From the AEIOU method we were able to fill in the details of our chosen research methods. The next section looks at the who, what, why, when, where, and how of these methods.

Answers to Our Questions

Before research, our team formalized answers to these so that we operated off the same details going into survey and interview conducting.

WHO

Our target population is CMU undergrads. We chose a large simple random sample for our survey to reduce bias. Each team member also interviewed one student each from a wide variety of schools, majors, and social involvement to gain a variety of student perspectives and identify any possible trends.

WHAT

We designed an online survey which was sent to various social groups through messaging, email and word-of-mouth. This survey consisted of 7 questions about quality, quantity, and common methods for social outings, friend group roles, and the likeliness of a successful event. In our interviews, we prepared a common question and answer sheet comprised of 9 questions and 1 activity to understand student's current schedules vs. ideal schedules, scheduling mishaps and why, and the way they usually plan events.

WHY

From our research last semester, one thing that struck us was the irregularity of events due to misaligned schedules and the difficulty of planning and pulling off events. Because of this, we decided to look more into how students scheduled social time in relation to other activities, the process of planning events, and the likelihood and reasons behind disappointing events, to understand where potential problematic areas lie in students social lives.

HOW

Our digital survey was sent to a large variety of undergraduate groups at CMU through email, Facebook, messaging, and word-of-mouth, and our questionnaire was conducted through in-person interviews. Both methods helped us identify new problem areas and confirm our initial assumptions.

WHEN

Our digital survey was initially sent out on Saturday, February 1 but was continually sent out to various new groups over the course of the following week. Our interviews were carried out between Sunday, February 2 and Friday, February 7, primarily in evenings at times of mutual convenience.

WHERE

Our survey was only located digitally as the project timeline and resources did not afford setting up time on the Cut or in the University Center. Interviews were carried out in mutually convenient meeting spots on campus, like the Morewood Gardens lounges and the Tepper dining area.

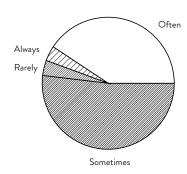
16 Implementation Implementation 17

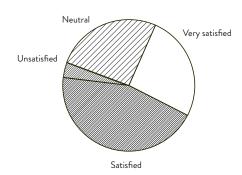
Data collected - Survey

27 people responded to the digital survey that was sent to the 2022 design class, various group chats, and a Morewood 5th floor C/D mailing list.

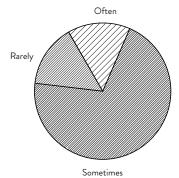
How often do you spend time with your friends?

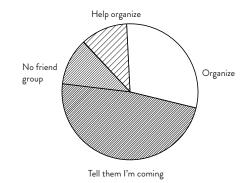
How satisfied are you with your time spent with friends?



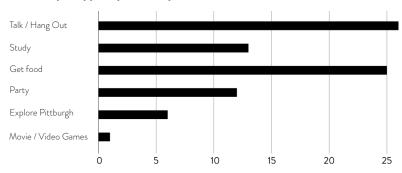


How often do plans fall through when getting together with friends? What kind of "role" do you feel you play in your friend group?

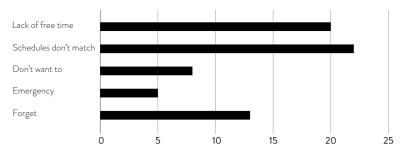




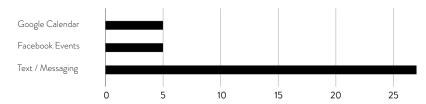
What do you typically do with your friends?



What typically causes these plans to fall through?



What tools do you use to plan get-togethers?



Data collected - Interviews

We each interviewed one person with the same nine questions. Interviews lasted thirty minutes and were not repeated. Interviewees average daily schedule charts are included below.

Exercise: Fill in the 24 boxes below to describe your typical schedule for a 24hour day (classes, meals, activities, sleep, work)

Taiz: Sophomore, Chemical Engineering, interview at 5 PM, Friday, February 7 in Morewood Gardens

SLEEP	SLEEP	SLEEP	SLEEP	SLEEP	SLEEP
GYM	BREAKFAST	DEVOTIONS	SCHOOL	SCHOOL	LUNCH W/ FRIENDS
SCHOOL	SCHOOL	SCHOOL	SCHOOL	SCHOOL	EXCEL
HW/NETFLIX	HW/NETFLIX	HW/NETFLIX	HW	SLEEP	SLEEP

Sabrina: Part-Time Junior, Policy and Management, interview at 5:30 PM, Wednesday, February 5 in Tepper Quad

SLEEP	SLEEP	SLEEP	SLEEP	SLEEP	SLEEP
SLEEP	SLEEP	HW	HW	HW	FOOD/ CLASS
FOOD	TA	TA	TA	CLASS	CLASS
CLASS	BUGGY	BUGGY	FRIENDS	FRIENDS	MISC

Tara: Sophomore, Statistics, interview at 11:30 AM, Monday, February 3 in Gates 3.

SLEEP	SLEEP	SLEEP	SLEEP	SLEEP	SLEEP
SLEEP	HW	HW	HW	HW	HW W/ FRIEND
HW W/ FRIEND	HW W/ FRIEND	HW W/ FRIEND	HW W/ FRIEND	FOOD	FOOD
MISC	MISC	TA	CLASS	CLASS	CLASS

Sophia: Sophomore, Business, interview at 12 PM, Sunday, February 2 in Morewood Gardens

SLEEP	SLEEP	SLEEP	SLEEP	SLEEP	SLEEP
SLEEP	SLEEP	HW	HW	HW	HW
HW	RANDOM	RANDOM	FOOD	FOOD	ORGS
ORGS	CLASS	CLASS	CLASS	CLASS	CLASS

Data collected - Interviews

Below is a table of our interview questions and interviewee responses.

Questions	Taiz	Sabrina	Sophia	Tara
Where do you usually spend your time with friends (on- campus, off-campus) and what do you do?	Usually on campus (too lazy to leave). They study together, if not studying, they're eating (usually at UC upstairs or poolside). They also like to go to McConomy movies (usually every week).	Homework is done on campus before 11, after 11 HW is done with friends back at the dorm, hang out in the buggy garage with buggy friends, go off campus for food and groceries	Mostly on campus, in Morewood Gardens, otherwise off campus at Zens Ramen Bar.	Weekdays: doing homework, hanging/ cooking in the dorm, weekends: grocery shopping, go over to friend's house to cook/hangout
Walk us through step-by- step for how a typical plan gets made:	Monday - gets lunch with friends (have to schedule it in or would forget). Wednesday and Friday - sporadic, texts her friends and asks if anyone wants to hang out or eat. Weekend - see friends in lounge. Use Google calendar, but not usually necessary for get togethers (text).	Messenger group chat with her friend group (roommate and a friend from buggy), very sudden plans (no more than 2-3 days in advance), once per week someone asks to cook together and make something (don't go off campus too often). They don't know each others' schedules but from experience know when people are free	She usually attends events she is invited to (such as case competitions), and group chats are made in these cases to get together. Most of the time it's initiated by her friend and it's not that hard to get together; people usually respond in these chats.	Plans don't get made, stuff just happens usually through a text in a group chat (if going over to friend's house) or a knock at the door for friends who live in the same dorm. She generally initiates or comes up with random fun things to do.
How much time are you willing to invest in planning and going to a good get together?	Not more than an hour to plan. Usually too much work to plan so easier to go off campus and to a movie than plan a huge get-together.	Used to be a buggy social chair with bigger more serious events (large commitment), doesn't usually host events due to work involved but helps friend who does (since she lives off-campus)	She's willing to spend any free-time outside of work. However, sometimes work as business major allows her to meet with her friends.	Does not spend much time with plans (can be stressful when plans are big and require fore thought), generally spontaneous
How satisfied are you with the time you get to spend with your friends?	Pretty satisfied, if she saw them any more, she would probably get annoyed with them.	Pretty satisfied, sometimes wish more high-quality time than just casual events	She thinks she's spending quality time with friends if the weather is nice and they are outside. If the weather is great and they're inside, then this affects her opinion.	Fairly satisfied, living with friends helps sustain friendship. Having to make plans makes it harder to see people. More people means more complicated plans.
Are there common things that happen that hinder get togethers happening?	Usually only miss get-togethers if someone is sleeping or if it is too late. Often she feels like she is the one who is flaking (sometimes forgets about Monday lunches too).	Scheduling is difficult, diverse schedules. Sometimes someone will say they want to get together but no one really takes the time to schedule it	Usually due to different schedules or people are busy.	Once initiated things don't fall through, very reliable group of friends
What would help you increase satisfaction when hanging out with friends?	Nothing, pretty happy with everything.	Assist in a better distribution of roles and work, who does what, easier to have an event?	It would help if people shared similar activities because then she could meet her friends and be productive as well.	If other people initiated the hangout, initiating is proof that people want to hang out with you and that feels good
What would the perfect day schedule look like vs. your current day?	She would like to sleep exactly at 9:00 PM and sleep in a bit (past 6). Studying often hinders waking up early.	More time for bigger, more involved plans (like hotpot with friends, plan a week out)	Her perfect day would be to hang out with friends and go out. Currently, it's too cold and she has school to attend to.	Less work, more free time to pick up a hobby, waking up early and being productive
Where do most of your friends live? How does this affect getting together?	Most of her friends live on campus still, so not difficult to get together (farthest is the hill)	Lives with roommate from freshman year, other friend on 5th + Wilkins, 10-15 min walk. Other friends in Morewood, Squirrel Hill, and 5th + Craig (kitchen and distance determine where they hang out)	Most of her friends are pretty close by or on campus. This does not affect them getting together.	Many friends live on the same floor so her close friends can have spontaneous hang outs. If she doesn't run into some of her friends on the floor, plans don't get made and she doesn't see them as often.

22 Implementation 23

Data synthesis

In order to properly manipulate our qualitative data, we first had to analyze trends between our interviews and surveys for an accurate view of student life.

- Time Working Alone
- Time Working with Friends
- 7 Free Time Alone
- □ Free Time with Friends

SOPHIA

Business Major: Sophomore "It would help if my friends shared similar activities to me so that I could hang out with them while also being productive."

SABRINA

Policy and Management Major: Junior Part-Time

"Sometimes someone will say they want to get together but no one in the group really takes the time or effort to schedule it."

TARA

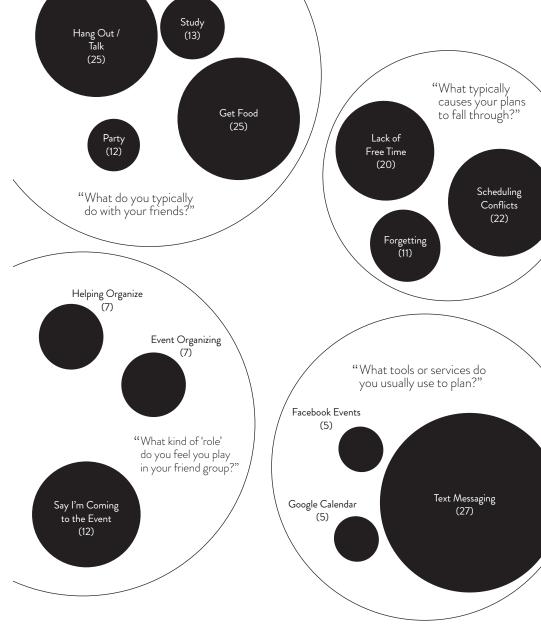
Statistics Major: Sophomore

"If someone asks you to hang out, it lets you know that they care enough about you to instigate spending time with you."

TAIZ

Chemical Engineering Major: Sophomore

"I wouldn't want to spend more than an hour on planning an event - any longer and I'd rather just go out to eat with my friends."



COMMON TRENDS

- Friends' schedules aren't always known but see when others are free from experience over time
- Time with friends is often combined with time doing work to be productive while having fun
- Not living next to friends makes getting together more difficult and require more effort
- Reliance on one person to instigate making plans results in more responsibilities for that individual
- Convenience is key: if you don't run into people, plans don't get made
- When people get together, they enjoy it, but it's the effort involved in planning that prevents it

24 Implementation 25

Reflection

After looking at our results from the online surveys and comparing each of our interview responses, we found valuable trends and a direction we can further take our research. We learned that we were correct in our hypothesis that planning events were difficult, that it sometimes prevented larger more complicated activities from happening, and that lack of time and scheduling problems did lead to students hanging out less. We were also pleasantly surprised by the presence of food and cooking in students' hangout plans, further reinforcing our research from last semester. Students were also generally satisfied after hanging out with friends which suggests that the pain does not fall on the event itself but the process leading up to it. We were not able to predict how students actually went through the process of organizing a get together. We learned that students don't like to plan events thoroughly, that things just happen naturally usually through a text in a group chat. We also learned that some students fall under the category of "initiators" while others are less likely to initiate get togethers. Our research suggests that there exists some strain on the students who constantly have to be the one to initiate get togethers.

Moving forward, we will be applying these findings by creating user journey maps of specific, common scenarios a CMU student may find themselves in while planning a get together. We will try and take into account weather or not the student is an "initiator", if the plan is well thought out or spontaneous, the size of the group,

and the method of communication between parties. We will be using user journey maps to visualize the major interactions that shape a user's experience when planning a get together with friends.

Finally, thank you to all our interviewees for taking the time out of their busy schedules to meet and talk with us. Further, thank you to everyone in the CMU community who helped further our research by filling out our survey. Without you, this project would not be possible.

Sources

Initial Research

https://www.bls.gov/tus/charts/students.htm

https://www.researchgate.net/publication/321261378_A_study_on_university_student's_time_management_and_academic_ac hievement

http://www.mycollegesuccessstory.com/academic-success-tools/college-life-balance.html

https://www.cmu.edu/housing/ https://www.collegexpress.com/articles-and-advice/student-life/articles/college-health-safety/8-tips-finding-balancing-college/

https://www.usnews.com/news/blogs/datamine/2015/02/06/college-f reshmen-socializeless-feel-depressed-more https://thetartan. org/2018/10/15/news/farnam

https://thetartan.org/2019/10/28/news/life-at-cmu

https://www.cmu.edu/stuco/teach-a-course/index.

https://www.cmu.edu/osp/funding/

https://www.cmu.edu/stugov/sbvpf/funding.html

https://docs.google.com/presentation/ d/1GNTH6gth9BesDeoWMu2jly8LQ j8oR3LURSJpl7zL2c/edit#slide=id.g40a1f52d58_2_5

https://www.facebook.com/fbacts/390237724681928

https://mashable.com/2017/08/09/why-facebook-killed-groups-app/

http://proc.iscap.info/2015/pdf/3424.pdf

https://liquid-state.com/ingredients-successful-mobile-app/

https://www.techtimes.com/brandspin/242584/20190503/what-makes-an-app-successful.htm

https://www.cmu.edu/student-affairs/slice/involvement/pittsburgh-connections/index.html

https://www.unigo.com/colleges/carnegie-mellonuniversity/q-and-a/what-are-the-most-popularstudent-activities-groups-17/4

https://www.educationandcareernews.com/collegepreparedness/the-impact-of-family-involvement-atthe-college-level/

https://www.insidehighered.com/news/2018/07/11/emotional-support-families-makes-difference-low-income-students

https://www.heri.ucla.edu/monographs/ TheAmericanFreshman2014.pdf

https://www.huff post.com/entry/benefits-of-cooking-for-others_n_5967858ae4b0a0c6f 1e67a15?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_

referrer_sig=AQAAAMPiMkHRTbbd_1Slvn9Lywwl-QY2OcbV8hh3HzSoq2M2iyE n1XMNWIX13rbjgzcCoLobdzBkIjGbduBykPaDdDhDKvSQE1-zT5EJyTdl41-j2wVrioBXK6JBc_Bg7xyylNmfa3Qn4UtpFlzCd43flkwpWfi4-SdgkuMz0bKgf6pn

https://www.health.harvard.edu/blog/home-cookinggood-for-your-health-2018081514449

https://www.forbes.com/sites/bethhoffman/2012/06/18/whats-so-great-about-cooking-four-reasons-and-resources-to-diy/#37793c725756

http://blog.ut.ee/how-sharing-a-meal-is-about-sharing-a-culture/https://childdevelopmentinfo.com/family-building/why-sharing-family-meals-is-so-important-2/#gs.u3cqao

https://www.theatlantic.com/health/archive/2014/07/the-importance-of-eating-together/374256/

Previous Research

From HomeCooked @ CMU project by Emly Spooner, Langston Wells, and Janet Peng for 51-241 How People Work, Fall 2019

Surveys & Interviews

Surveys were from anonymous respondants across the CMU campus

Interviews from Sophia (Business, 2022), Taiz (Chemical Engineering, 2022), Sabrina (Policy and Management, 2021), Tara (Statistics, 2022)

26 27