Application of Ideation Tools and Methods: Where to Live?

Derek Davis

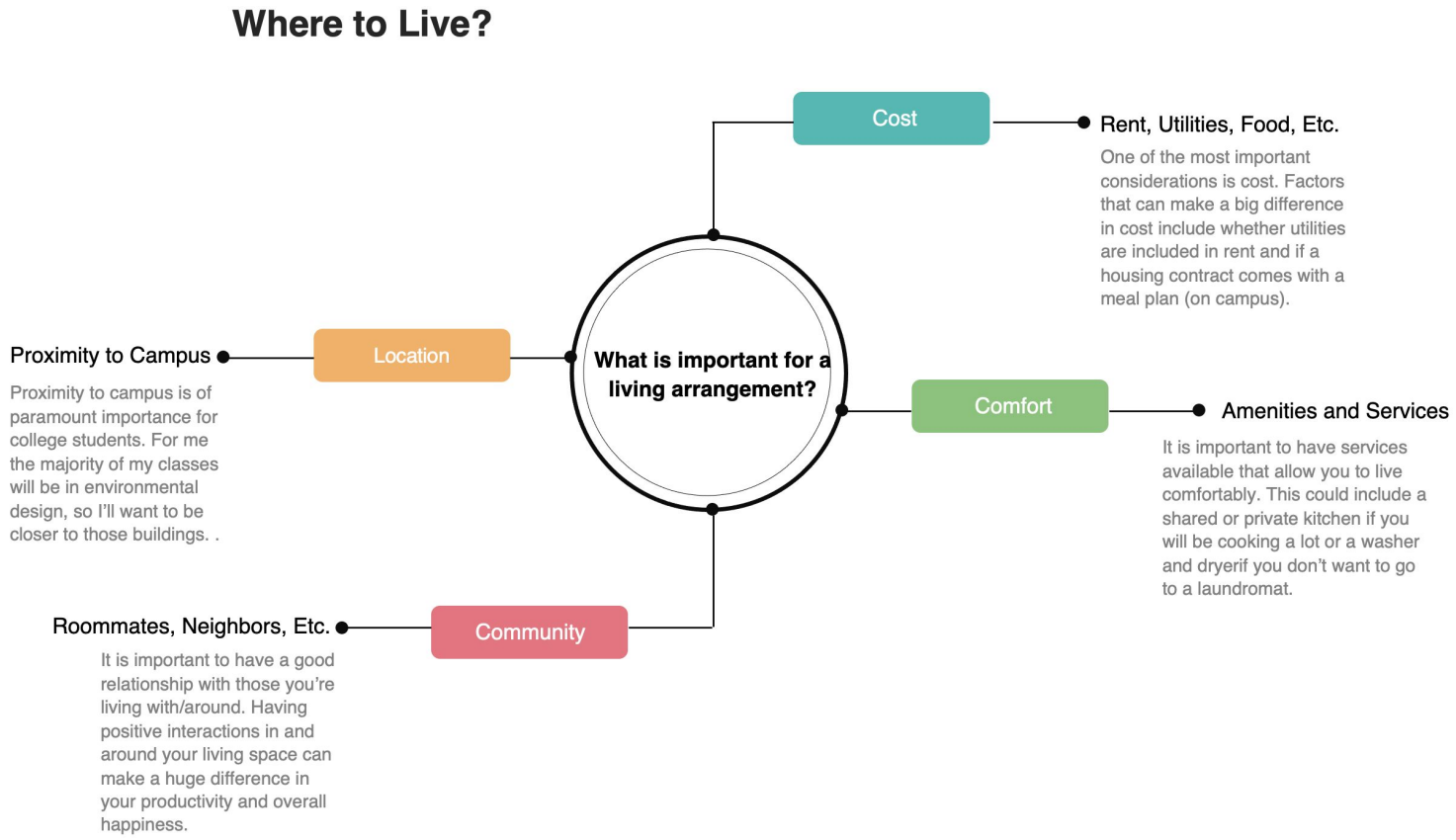
Approaching the Challenge

- Goal: Use various ideation tools and methods to find solutions to the problem of finding somewhere to live.

- Procedure: Determine the appropriate criteria for assessing solutions to the problem then evaluate and compare solutions to each other using ideation tools such as mind mapping, photographic analysis and secondary searching.

- Outcome: Using ideation tools and methods, possible solutions to the challenge of finding somewhere to live have been presented in various forms. Advantages and disadvantages of potential solutions have been listed for evaluation and final decision making

Mind Mapping



Photographic Analysis

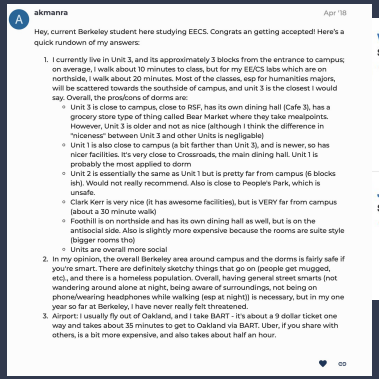
The advantages of on campus dorms can include premium location, meal plan, and community with other students.

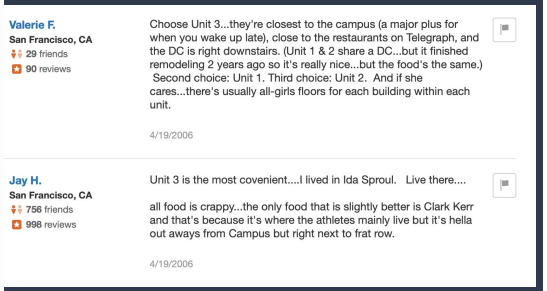
The UC Berkeley campus is large and spread out. Location is key in determining where to live.

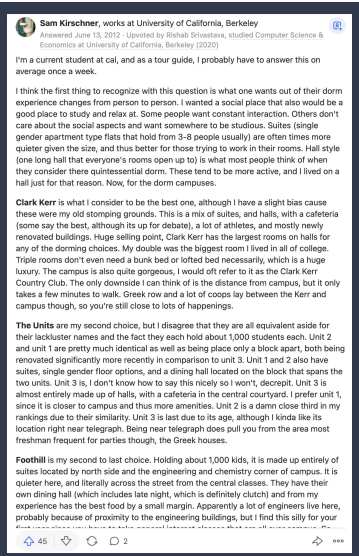
The disadvantages can include living in a cramped space and sharing things like bathrooms and laundry facilities with an entire floor of students.

Apartments, both on and off campus provide more space and less shared facilities while potentially retaining community with neighbors.

Secondary Search







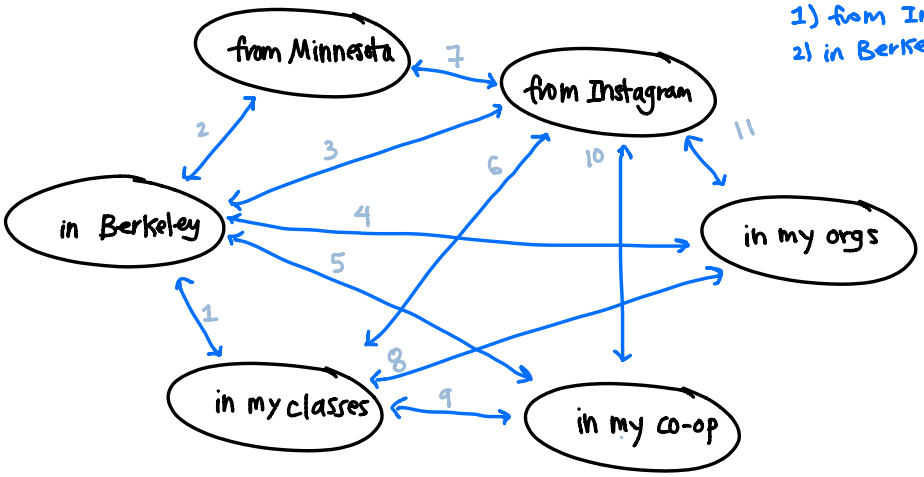
Using internet forums and social media to collect data on potential living arrangements we can construct a view of how people feel about certain area/living arrangements.

In this situation most of the data was feedback regarding UC Berkeley dorms. This data came mostly from students at Cal but also from members of the general public.

According to online reviews, on campus living options are reviewed generally positively with certain fallbacks. University-owned living spaces are beneficial due to their proximity to campus and classes.

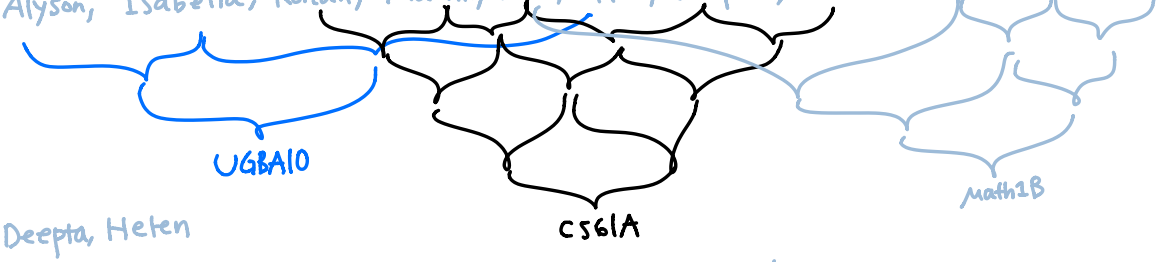
However, there is a perception by some in the general public who believe that the university's construction of student dorms is harmful to Berkeley's community and permanent residents.

How to meet more people in Berkeley // improve relationships:
(Affinity Diagram)



Most crossovers:
1) from Instagram
2) in Berkeley

1) Alyson, Isabella, Rohan, Martin, Peter, Kai, Deepta, zewdi, Mir, Leila, Holly



2) Deepta, Helen

3) Roma, Deepta, Hannah, Windsor, Aydin, Sid, Hannah, Nadia

4) clairine, Autumn, Alyson, Isabella, Youssou, Nicole

5) oona, Sylvie, Thomas, Luci, Maya, Amanda, Cyn, Jack, Breanna, Brissa, Martin

6) Roma, Deepta, Aydin, Sid, Troy, Alyson, Nainika

7) Arlina, Deepta, Helen

8) Alyson, Eliot, Isabella, Dylan?, Susanna

9) Jenna, Martin, zewdi, Rohan

10) oona, Sylvie

11) Clairine, Eden, Nicole, Alyson

Note / Reflection:
- ↳ a lot of crossover & repetition
- ↳ most important category is #1
- ↳ a little messy & non-exhaustive list

The Ideal Day in the Life of Me:

SUNDAY!

8:00 - 9:00 Breakfast w/ co-op friends in #5 category

9:00 - 11:00 workout w/ Thomas and/or other co-op people

11:00 - 12:00 shower + self-care

12:00 - 2:00 Hangout/study w/ #1 category person over lunch

3:00 - 5:00 study with #9 category friends at co-op

5:00 - 7:00 self-study

7:00 - 8:00 Dinner with group #5

8:00 - 10:30 Zoom/meet up with #4 category group to work on org work

Arya Majjiga

February 1, 2021

ARCH 24: Ideation Tools and Methods Exercise

Reflecting on my challenge:

I am a part of the college of Letters and Sciences here at UC Berkeley, and I am certain that I want to major in computer science. However, I am conflicted about whether or not to add a double major in economics as well. Although I am sure that double majoring in computer science and economics will help to increase my knowledge, give me more perspectives, and add different potential career options, I am unsure how much an economics major will help me in my career and future studies. For this reason, I am unsure about the benefits and costs of an economics major.I hope that undergoing the ideation process will help me to frame this challenge and put it into perspective.

Ideation Cycle 1: Using "A Day in the Life" method

For the first cycle of ideation, I am using the "day in the life" method to investigate what life is like for people with double majors and see how this affects my decision making process. People with double majors generally spend more time studying, because they have to complete the requirements for both majors instead of just one. This can limit the amount of extracurriculars that the average student with two majors does, because they have to spend more time studying and have less time available for other activities. However, students with double majors also form more connections with both professors and fellow students, because they are

exposed to classes and groups from both majors. Also, having to spend more time studying can help with time management skill

Ideation Cycle 2: Using "Secondary Search" method

The secondary search method involves looking at past empirical data and observations to help make a decision and come up with new ideas, so I will search for information from previous people who may or may not have double majored and learn from their experiences. According to past experiences, having a double major may help with getting hired into the workforce or getting accepted into prestigious graduate programs, depending on your field of study. This is because it opens up more opportunities for fields of study. However, people with only a single major in computer science have often not had trouble getting hired from anecdotal evidence. Also, past experiences show that a double major may not be as much extra work as initially anticipated by many people, since many of the major requirements may overlap, and some of the requirements may help to earn elective credits.

Ideation Cycle 3: Using "Big Data Mining" method

The big data mining method involves looking at large amounts of data and looking for patterns. I can implement this method in my challenge by finding data related to double majoring and using the data to help frame my challenge. The data shows that people with double majors earn a 3.2% salary increase over people with only a single major, so this may be a reason to learn towards adding a double major in economics as opposed to only majoring in computer science. However, the percentage of graduates with a double major has decreased from 14.2% in 2009 to

12.9% in 2015. This may show that a double major is not needed, which is why many people choose not to get one.

Should I come back to campus?

Shortly after moving to campus I had to go back home to quarantine because my roommate contracted Covid and a large spike occurred on campus.

Strategy Plan

- Wednesday, Jan 27 - Roommate has suspected covid symptoms so begin isolation
- Thursday, Jan 8 - Return home in Marin and quarantine in basement to reduce chances of getting covid from roommate
- Monday, Feb 1 - Get covid test five days after exposure
- Wednesday, Feb 3 - Get covid test results and end quarantine if negative
- Saturday, Feb 6 - Make decision on going back to campus

Scenario Forecasting

If I return to campus:

- The exact same scenario could happen again every few weeks
- My chances of getting sick are much higher
- I will mountain bike less
- I will spend thousands of dollars more

If I stay at home:

- My chances of getting sick is much lower
- I will mountain bike more
- I will not meet nearly as many people
- I will have more space at home
- I will save money to pay for future semesters of college

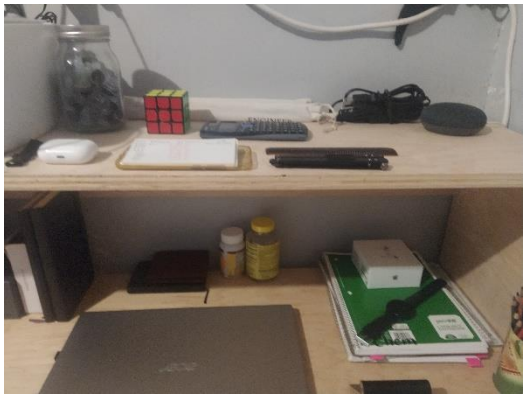
Behavioral Archaeology

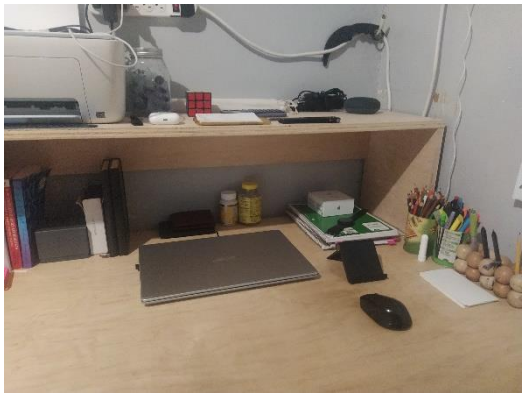
- I take note of how students will react to this large outbreak
- I'll observe how and if their behavior changes
- I'll record how often people go to large events and parties
- I'll record me own behavior at home compared to in the dorms then think about which I prefer

AN EXERCISE IN THE APPLICATION OF IDEATION TOOLS AND METHODS

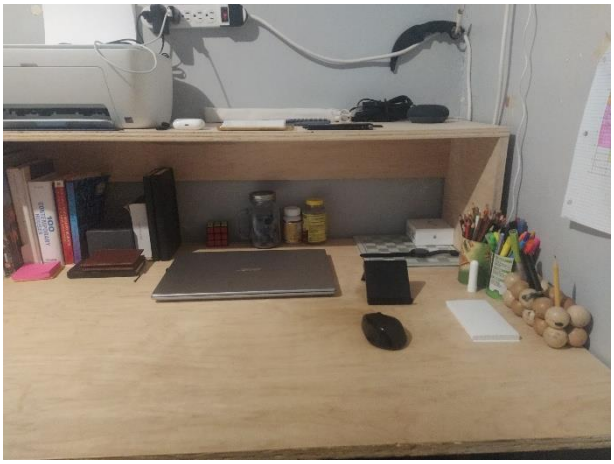
Problem: Finding a desk configuration that suits me well

Original:





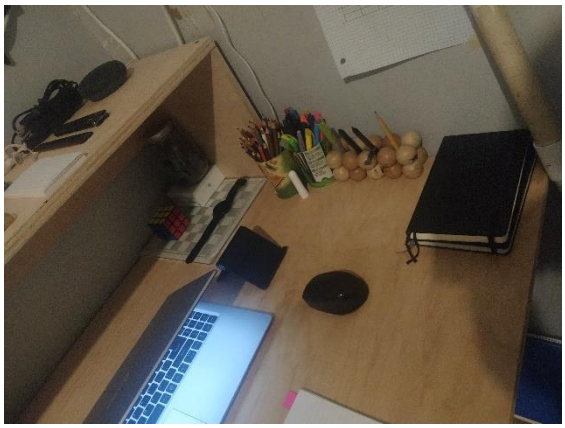
Rearrange One:

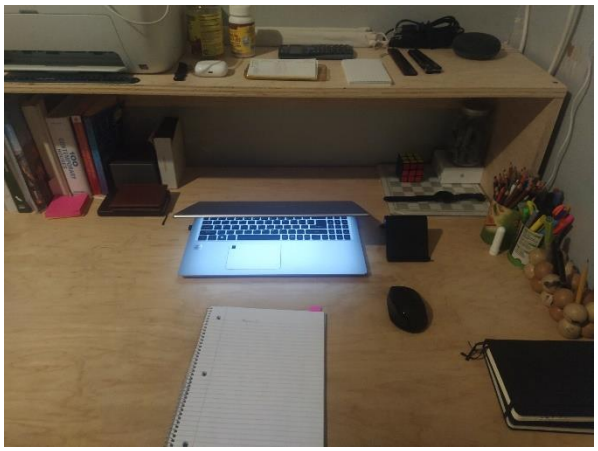


Changes: Moved chess pieces (jar) downward, as well as removed the notebooks from the desk altogether. Not a hassle, as they are still within reach. Relocated my wallet and pocket notebook closer, which makes getting on the go faster, so I will be keeping that change.

Thoughts: I want to try and move the large notebooks closer, or at least easier to grab, as well as make some space to scoot my laptop back for desk space.

Rearrange Two:

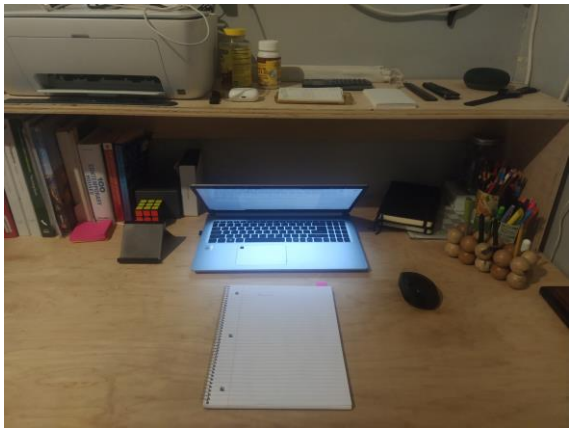


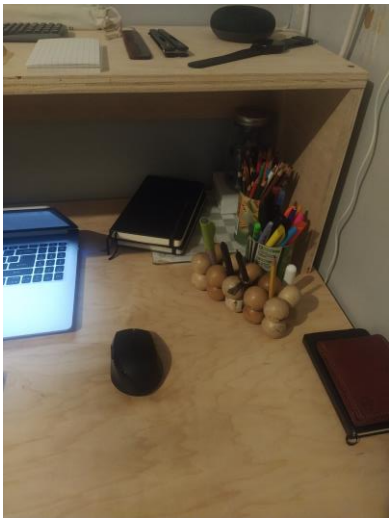


Changes: Removed Vitamins from the back, so I can slide my computer back, and now have my two large notebooks closer to me. Also moved post-it notes to the top shelf.

Afterthoughts: I like being able to push my computer back and reaching for my large notebooks is easier. Some of the changes previously made also stayed.

Current Configuration:



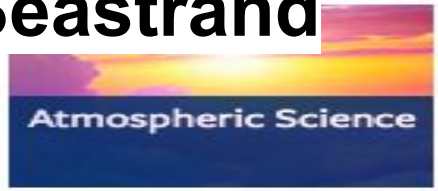


Changes: Rearranged the stationary area, angling the pencils towards me, moved my wallet and notebook towards me more, and although I moved my large notebooks back, they are easily accessible.

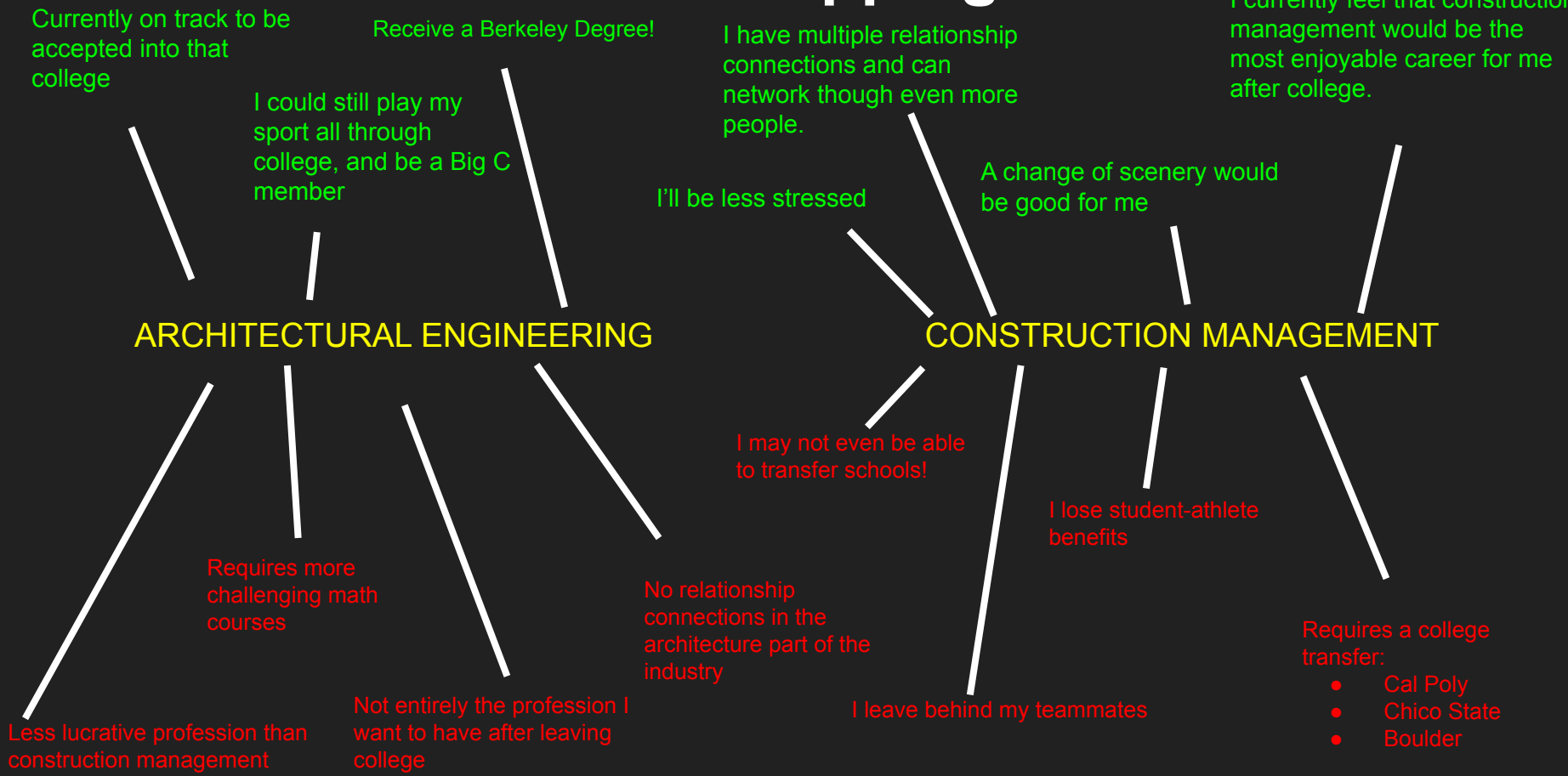
Thoughts, I like how my pencils face me, it is actually a great improvement, as well as having my laptop charger closer. The notebook again for space demonstrations.

Finding A Major

Clayton Seastrand



Mind Mapping



Secondary Search Facts

Architectural Engineering

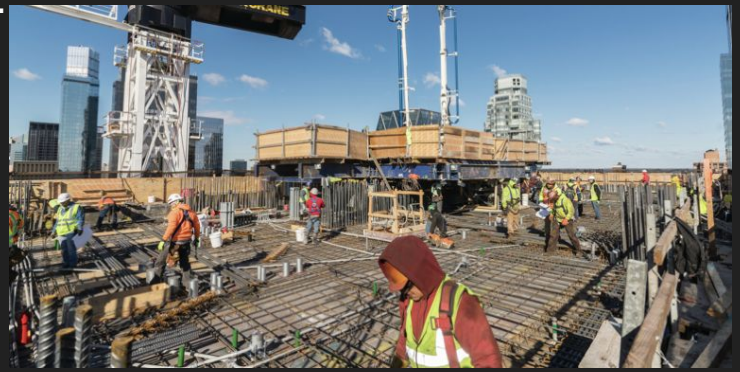
- Salary: Roughly $79,000 a year ($37.97 an hour)
- Bachelor’s Degree requirement
- Less stress due to being on a less strict time agenda
- Roughly 40 hours a week
- Can often be seen as more of a vocation than a job

Construction Management

- Salary: Roughly $90,000 a year ($42.02 an hour)
- Bachelor’s Degree requirement
- High stress levels due to unpredictability of construction
- 45-60 hours a week

Fly On the Wall

As a nephew of a president of Lusardi Construction company, I have had the opportunity to see what a day in the life of construction looks like. I see the stress of meeting deadlines, but I enjoy the organized chaos of being on a jobsite.



I have spent some time working on job sites as a laborer, I enjoy building things and what to be higher up in the construction world after I graduate

Kaan Taner

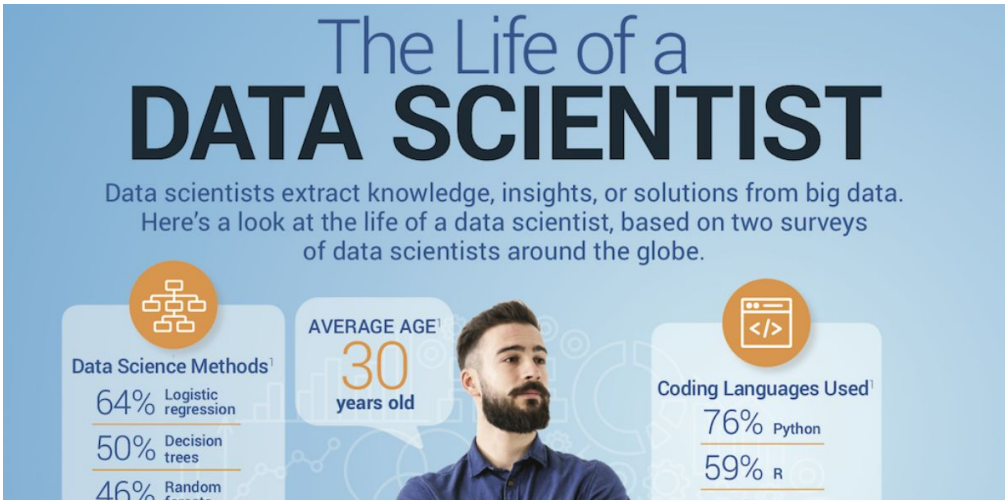
Arch24 Assignment 2: Ideation Tools and Methods

1/29:

As I'm sure my other students can agree, a problem that I have is choosing a major and career path. Part of me wants to pursue Data Science for its practicality, and possibility for at least some design, but the other part wants to follow something more creative, like Film, or something more basic and universal, like business. Today, I'm going to explore my possibilities for **Data Science**.

1. I could use Behavioral Sampling to see how other people who are pursuing Data Science, or who have already found their career in Data Science, how they feel about it, and what their hopes, expectations, experiences, and reasonings are. This would help me see if I fit in this group of Data Scientists. I guess by using behavioral sampling, I'm already thinking like a Data Scientist.

2. The second tool I could use, Affinity Diagrams, would allow me to abscess what the similarities are between the people to pursue Data Science, and it would allow me to see what the diversity of fields that Data Scientist are able to branch out to, in order to find examples of paths that I could emulate.



1/30:

To see how **Film** would work for me, I need to learn more about the path that Film Majors take.

1. I would utilize the method of The day in the life of a Person, to document and analyze the daily lives of someone who is pursuing Film and someone who has already reached their goal. This way, I would be able to learn about specific issues or frustrations that might come up if I am to go down a similar path to the people I've studied.

2. With Collaging, I could ask various participants from the field of Film to make a collage of the different experiences that they went through, and there accomplishments. I could then view these to see if I want to go through the same work that they had to do to reach their positions, and I could see if the lifestyle of someone trying to "make-it" in the Film industry is something I am willing to experience.

1/31:

In order to explore Civil Engineering, I need to learn about what exactly Civil Engineers do, what the working conditions are like, and how to prepare.

1. The Fly on the Wall method would be perfect for this, because it would allow me to observe everything that a Civil Engineer does on a day at work. I would get an inside look into how they

interact with other members of their team, where they would work, and how involved they are. I can answer whether or not I could see myself designing intricate systems for buildings and cities or working on the field, with a team or as a leader.

2. Behavioral Mapping would allow me to see how a Civil Engineer interacts with their environment. Are they sitting in one place, coming up with ideas and managing the work of their co-workers. Are they actually engaging with the building process in the field and guiding others through the process. Do they get to make important decisions on the designs themselves? By seeing where to, how, and why a Civil Engineer moves, I might just have more insight into these questions.

2/1:

Just thinking about these different tools and how they would apply to my problem over the last couple days, has really helped me figure out different ways that I can come to a conclusion of what Major/Field to pursue. I will definitely need to find some people from each field to reach out to and do my own research!

Timothy Tucker

ARCH 24 - Assignment 2

An Exercise in the Application of Ideation Tools and Methods

The Challenge:

Everytime that I leave my dorm room to go to the bathroom, throw away trash, or visit one of my floormates, the door locks behind me. I have to constantly worry about carrying my key and deal with unlocking my door to do simple, everyday tasks. I want to find a solution to this problem by manufacturing a tool or buffer that allows me to easily block the locking mechanism to keep my door unlocked at all times when I am on my floor.

Applying Ideation Tools:

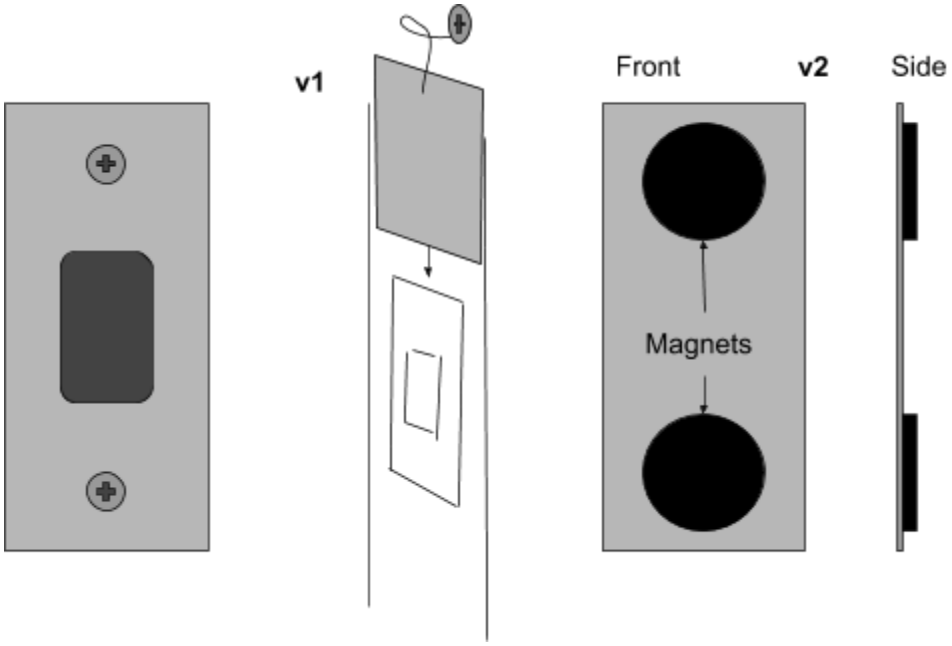
1. Behavioral Archaeology -

   I started off by engaging in some behavioral archaeology by recording how I interacted with my environment around the door and how the tool would be best placed for easy use when going in and out of my room. Here are some of my notes:

   - Shelf near door used for quick access items and on-the-way out necessities
     - Empty space for more items
   - Key taken from hook near door on way out with mask
   - Often leaving items from pockets on shelves when returning
   - Quick spot to set down items when taking key out of door

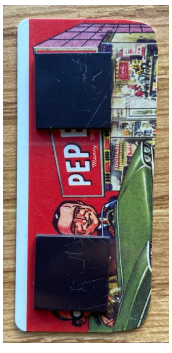
2. Sketch Drawing -

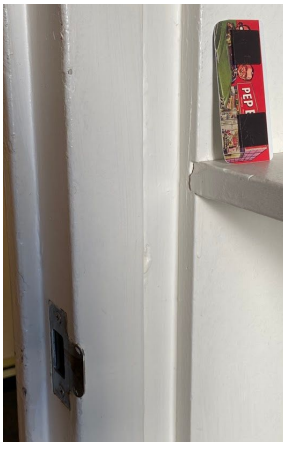
Now having an idea of what I was working with in terms of the environment, I sat down and did some crude digital sketches on my computer. Below I sketched out the area needing to be addressed, an initial idea for a hanging blocker piece, and my newest iteration of a blocker using magnets to adhere to the strike plate.



3. Quick Prototyping -

Because my design was extremely simple and I had all of the parts, I made a crude prototype to test the concept. I cut an old gift card that I had in my wallet to size, and attached two adhesive magnets according to the strike plate's flat faces. The design works well and has now informed me that I should probably use stronger magnets and a sturdier blocking surface for a future design.



Arch 24 : Major & Minor Planning → Deciding

- Current Major: EECS → this will be my main focus in college
- Intended Minor → Astrophysics (still undecided)
- Other majors/minors of interest: Astrophysics (as a double-major), Economics, Ethnic/Chicano Studies

Should I go for a Double Major or just a minor?

↳ Ideally I would want a double major but there are many factors that I need to take into account...

Double Majoring

Pros:

- Expand areas of knowledge and experience
- A lot of my lower division requirements overlap so I could pull it off if I plan adequately
- EECS isn't the only thing I would like to focus on (not my favorite thing)
- I can do Economics (only offered as a major)

Cons:

- EECS already consumes most of my time and units
  - countered by: I could get a similar experience with just a minor
- None of my desired interests fall into the college of engineering so I would have to complete the requirements for 2 colleges
  - even out: I might end up only using 1 major and it most likely will be EECS (salary is very good $$)

Personal Behavioral Observations:

- I'm already struggling a bit w/ EECS because I procrastinate
  ↳ an added heavy workload will make me or break me
- I do best in STEM related courses
  ↳ a Double Major that requires too much involvement in humanities will make me struggle more and won't be enjoyable
- I have an average of 5 free hours a day (excluding required personal time: eating, sleeping...)
  ↳ Would have to be a major with lots of overlapping

lower divisions or a light workload

Conclusion: A double major would be very difficult to pursue at this given time. I think that based on facts like unit caps and what I know about myself obtaining a minor instead of a double major would be the best choice

- If I want a minor, which one should I go for?
  Current Candidates: Astrophysics, Chicano/Ethnic Studies

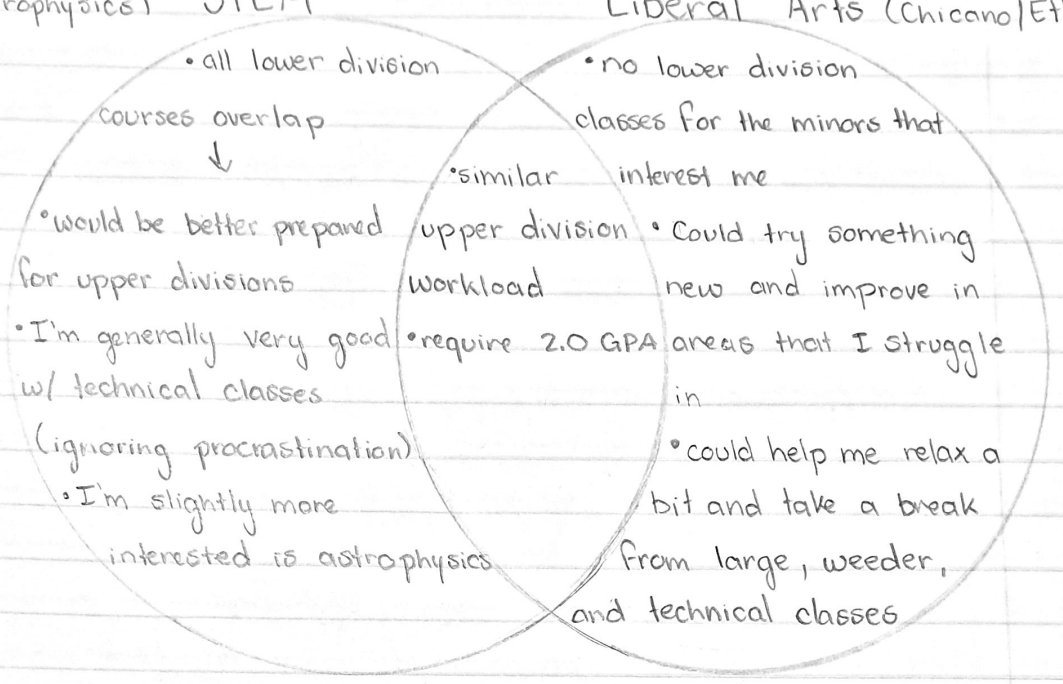
Data about each based on guide.berkeley.edu

Astrophysics:
→ All lower division requirements overlap with my EECS lower division classes (would work nicely in terms of workload
→ Would only have to take 4 classes (upper division) outside of my current major; can take CS 169, 188, and others as an upper division for both EECS and astrophysics

Ethnic Studies:
→ no lower division requirements are needed for the minor program
→ No upper divisions overlap but only 5 of them are needed (would be similar workload to astrophysics number wise)

Chicano/Latino Studies:
→ no lower division requirements (same as ethnic studies)
→ 6 upper division courses needed & none overlap with current major

→ STEM minor or Liberal Arts minor?



Overall Conclusion: I've mostly eliminated the idea of double majoring due to the amount of work and stress that would put on me. As a consequence I can't do Economics. In terms of obtaining a minor I will most likely stick to astrophysics. I've always leaned more towards STEM courses and since the Chicano/Latino Studies minor programs don't require lower division courses I would feel unprepared.

Future Planning that's needed:

- 4 year plan
  - ↳ need to make sure I have enough time to complete all my courses and take part in extracorriculars (internships and clubs)

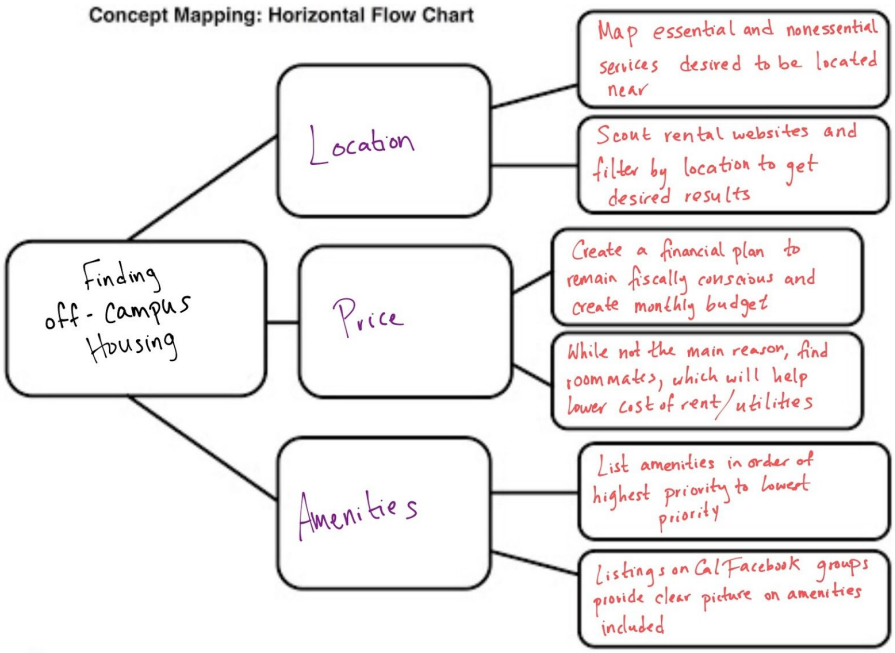
Challenge: Finding off-campus housing of future college semesters

Ideation Tool 1: *Cognitive Task Analysis*

Performing a cognitive task analysis is a great first step in determining a solution to the problem, as it gives the person who is undertaking the challenge a preliminary idea of what he or she wants to factor in when attempting to find off-campus housing. There are two parts in creating the task analysis:

- Summarizing major decision points in finding off-campus housing. Some examples of decision points include the following, in no particular order of priority.
    - location and/or proximity (to campus or other essential or leisure services such as grocery stores, restaurants, Greek life, etc.)
    - price: More affluent students might not consider this a restricting factor when determining places to live; however, with expensive housing becoming an occurrence in the Bay area, others might prioritise cost
    - amenities: Students have an extensive list of amenities to choose from and whether or not they would like to have them, including separate laundry facilities, which could be important to those preferring privacy; parking for those that bring cars to campus and would rather use their own transportation to go to places such as downtown Berkeley or San Francisco; gas or electric stoves for those that elect to cook food rather than opt for campus meal plans such as the Blue or Ultimate Plan.
- Summarizing major points of action. Now that a decision list has been made, an important piece of information is knowing what tasks to undertake in order to resolve the task. Some examples of potential action taken include:
    - Looking at rental sites: Places such as Zillow or Apartments.com offer options on exploring available apartments off-campus. Additionally, one can filter between factors such as pricing in order to fit options to his or her individual preferences.
    - Venturing to Craigslist or Facebook groups: In order to decrease one's monthly share of utilities and rent, one might consider finding roommates. In addition to finding people that one already knows from previous on-campus experiences, one can also look on these sites or even UC Berkeley Facebook groups to find additional roommates.

- Creating a financial plan: This includes planning a monthly budget for the time living off-campus. In order to stay price-savvy and avoid overspending, creating and keeping track of financials ensures that one is able to live comfortably while also being cost-effective.



Ideation Tool 2: *Secondary Search*

In order to narrow down options, it is important to get firsthand accounts of subletters or former tenants to the living spaces that are being considered. In the case of off-campus housing located in Berkeley, subletters were former students who have experience in navigating the complexities of balancing university work with independent living. The purpose of utilizing secondary search as an ideation tool provides adequate context in what to expect when living in a particular off-campus apartment complex. Sources of secondary searches include: the subletter him or herself, reviews from apartment websites, or even upperclassmen that lived in other off-campus complexes. This last source is important because even though the location described by the upperclassmen might be different, he or she will paint an adequate picture of what the necessities

are in off-campus housing, and one can make a determination on whether his or her apartment candidates meet the criteria. A particular way to organize all information from the secondary sources is the following: One can make a list for each potential apartment, and separate good reviews from the bad. This gives an overall perspective of what to expect from potential candidates.

Ideation Tool 3: *Photographic Analysis*

Photographic analysis is a tool that is not as thought of when determining a place to live, but especially in times where in-person contact is heavily regulated, such as COVID-19, photographic analysis is a necessity. This tool is generally saved for last, as it does not factor in abstract essentials such as price. Whether it is visualizing whether a space is right for a tenant, taking note of the features shown in visual photos, or taking note of how furniture looks in certain angles, photographic analysis is important in figuring out whether an apartment fits the bill visually. Additionally, photographic analysis also includes the surrounding location, not just the physical interior of the apartment room. Photographic analysis gives answers to questions that can be better answered visually rather than through the written word. This type of analysis can also help account for additional information such as measurements, as photographic analysis does not just include the photo; it also includes accompanying footnotes. Photographic analysis might not be the final step either; one can use them make detailed visual plans, such as floor plans (Note: the below apartment view and floor plan are independent of each other):