

# DESIGN RESEARCH

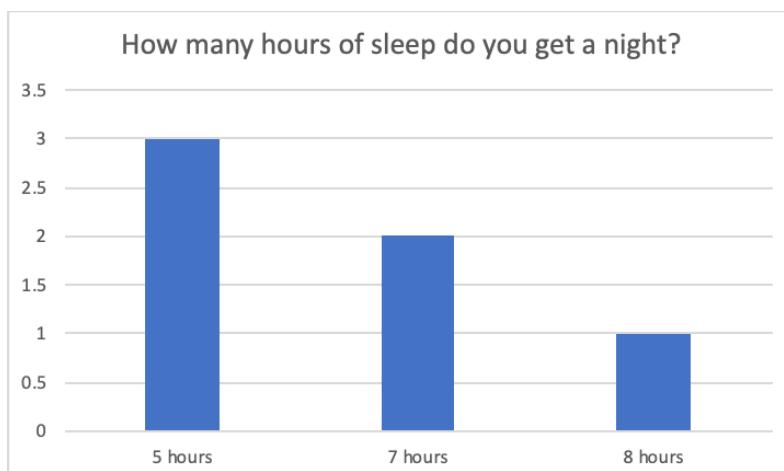
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## 1:1 Interviews

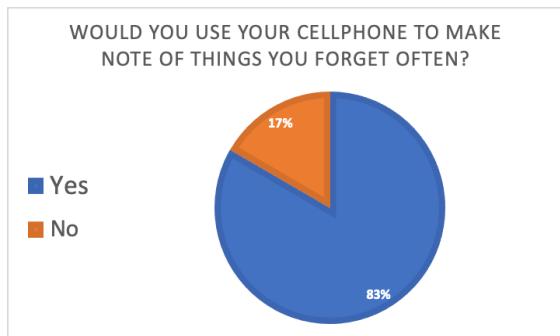
### Erika Bailon

- **Who on your team conducted the research**
  - a. Nimra and I, both conducted 1:1-interviews, and we conducted one focus groups that consisted of 4 people.
- **Who you conducted the research with (describe the demographics of the people but not their names), where you conducted the observation, etc.**
  - a. I conducted the 1:1 interviews with 2 CU Boulder students, 2 Community College of Denver Students, and 2 full time employees.
    - i. Boulder students - Conducted the interview at the Engineering Center:
      1. 30 year old female who lives on her own place and owns a car(Race-White). Born and raised in the United States. Full time student who sleeps in average 5 hours a night and finds school very stressful. Uses an agenda and mental notes to remember tasks.
      2. 21 year old female who lives off campus with roommates and does not own a car. Born and raised in the United States (Race-African). Full time student, part time employee, who sleeps 5 hours a night and finds school really stressful, work not too much. Uses agenda but rarely remembers that she wrote things down so the agenda is kind of empty.
    - ii. CCD students - Conducted the interview in Aurora. One student came to my house the other I met in a coffee shop:
      1. 29 year old male who lives on his own place and own his own car. Born and raised in the United States(Race-Hispanic). Full time student, part time employee

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- who sleeps 5 hours a night and finds both work and school stressful. Uses agenda but also does mental notes.
2. 20 year old male who lives at his parents. Born in Mexico, raised in the United States (Race - Hispanic). Full time student, part time employee who sleeps 7 hours a night and finds school stressful. Do not uses agenda.
- iii. Full time employees - Conducted interviews in Aurora at a coffee shop.
1. 30 year old male who lives at his own place and owns his own car. Born and raised in the United States (Race-Hispanic). Full time worker who sleeps 7 hours a night and does not find work stressful. Do not uses an agenda.
  2. 29 year old male who lives at his parents and own his own car. Born and raised in the United States (Race-White). Full time worker who sleeps 8 hours a night and finds work stressful sometimes. Do not uses agenda.
- **Present some data that you collected (such as a chart of responses, interesting quotes that you wrote down, images made during a culture probe, etc.)**
    - a. One of the questions we make was about how much sleep these people get at night because it is important to know if it's related to forgetting things like locking your car. These are the average of the answers:

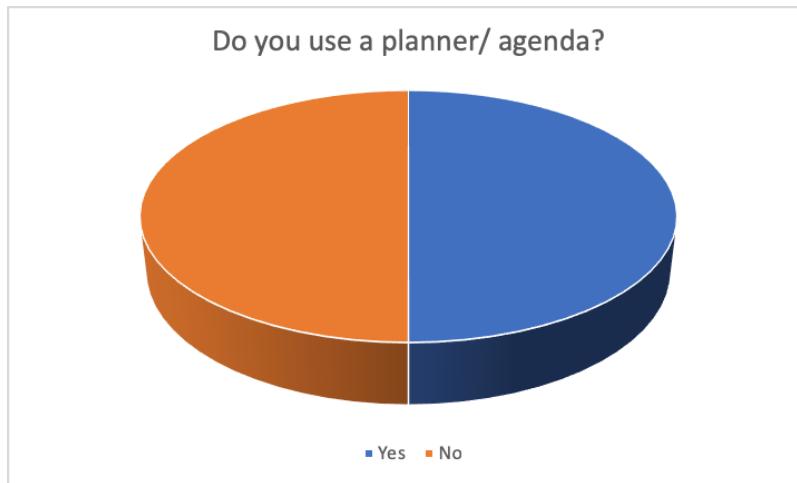


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- b. We also asked if people would like to use an app to log things that they usually forget, and what are things they usually forget. Here are some quotes and a chart of the answers:



- i. "I have to lock my car 3 times to make sure, but at this point, break into my car if I do forget. Every day I think I open my car and then walk up to it and pretty much break the handle off"
- ii. "I used to have an app called habits and make it so that I wouldn't be able to clear my to do list unless it was done. I got annoyed by it and just deleted the whole thing because I couldn't be consistent. It seems like a great idea but I'd uninstall it after a month. It's like that nagging mom. But I did it to myself. So now it's a constant reminder that I'm a failure in life because I couldn't get my tasks done like I wanted to. "
- iii. I've forgot if I picked up my mail and went to check multiple times before.

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- c. We asked people if they use an agenda to know if people are used to writing tasks or not. I found that half of the people use one.



- **Report 3-5 findings from your data collection. What did you learn, and how will this help you with your design?**
  - a. I found that most of the people would like to use an application to be able to keep track of tasks getting done. This will help us make the app with a good easy for users design to add tasks to a list.
  - b. I found that stress is more related to people forgetting things than sleep. However, not sleeping enough make people more stressful, so it is related. This will help us to suggest the user to sleep more or just to target people by what would help them easy their mind so they can be less stressed.
  - c. I found that people who own their own care, all wonder if they closed their car. This is the reason of why I came up with the idea of this app and this helps me see that locking the car is one of the most important tasks that we should build in the app and design it in a way that it will be easy and maybe on the lockscreen of their phone.
- **Images to illustrate the data where appropriate.**
  - a. Please refer to the charts above.

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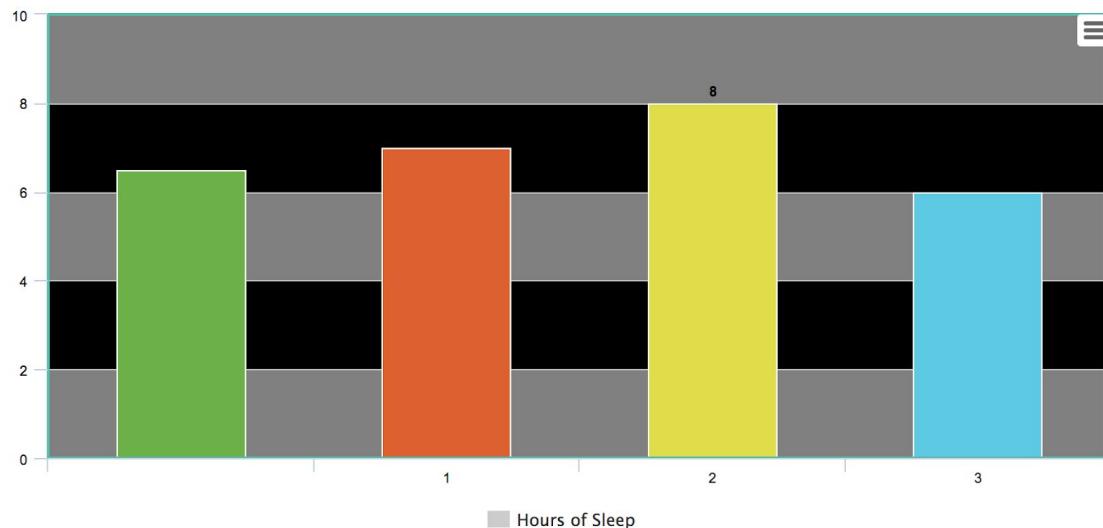
## Nimra Sharnez

- who on your team conducted the research
  - a. Both Erika and I conducted four interviews and 1 focus group of 4 people each.
- who you conducted the research with (describe the demographics of the people but not their names), where you conducted the observation, etc.
  - a. For the interview I contacted 4 busy and full time students each who attend CU Boulder to perform 1:1 interviews, ages ranging from 21-26 who also have part time jobs. The interviews were conducted in various study rooms in Norlin and the Engineering Center of CU Boulder.
- present some data that you collected (such as a chart of responses, interesting quotes that you wrote down, images made during a culture probe, etc.)
  - a. On average most people who were interviewed slept for 6.83 hours.
  - b. The average response for stress was school causing high stress and job causing low to no stress.
  - c. 75% of the people responded that they are forgetful when it comes to things such as locking their car door, placing their objects etc...
  - d. 75% of the responses also mentioned that they use an agenda either often or only for assignments such as homework.
  - e. Here are some of the responses for things that are often forgotten:
    - i. “I always double check doors to see if they’re locked. Double check to see if I have my cigarette in my pocket and my glasses, wallet, and keys in my bag. And my bus pass in my wallet.”
    - ii. “When I’m outside of my apartment, sometimes I have to run back to check whether I locked my door. At times I also forget whether I turned the stove off or not”
    - iii. “Putting one dog in a separate room for the other dog in case they fight. I have 2 dogs, they usually get along, but sometimes they fight (recently they fought over a toy and I had to separate them). Usually when everyone is gone we separate them just in case.”

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After their most recent fight, I left the house, and went back inside just to make sure I closed the door separating the two completely."

- report 3-5 findings from your data collection. What did you learn, and how will this help you with your design?
  - a. From my findings, I found that most college students are sleep deprived with their main source of stress being school
  - b. Most college student with jobs and school responded they would benefit from a sleep tracker to balance their school, job and sleep.
  - c. Writing things down- although spoken contrary- seemed to not benefit the students interviewed in remembering tasks.
- images to illustrate the data where appropriate.
  - a.



## Focus Groups

### Erika Bailon

- Who on your team conducted the research
  - a. Nirma and I both conducted the group focus interview.

- Who you conducted the research with (describe the demographics of the people but not their names), where you conducted the observation, etc.

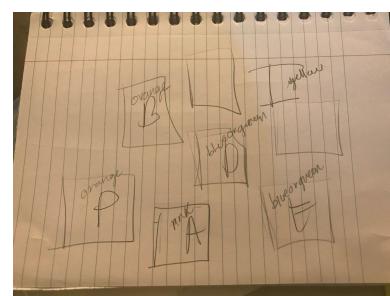
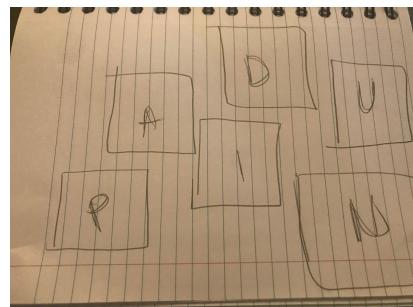
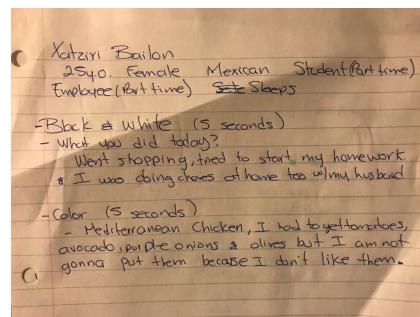
a. For the focus groups I had a mixed group, 3 were students, 2 of those students were working part time, and 1 person was full time employee-no school.

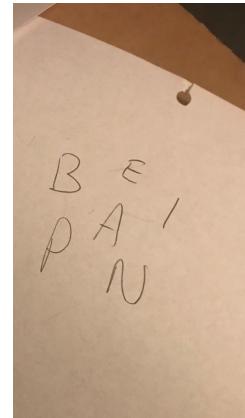
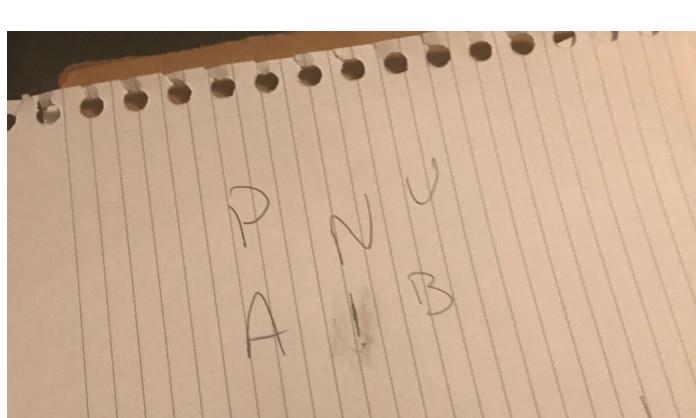
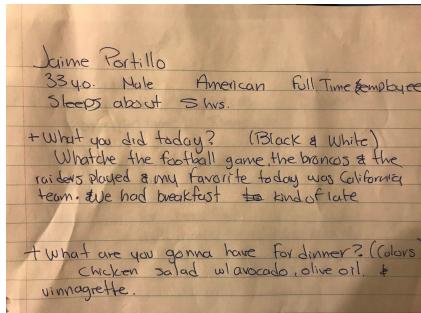
- 1st student, male, 20 years old, hispanic
- 2nd student, female 25 years old, hispanic
- 3rd student, male, 26 years old, hispanic and white
- Full time employee, male, 33 years old, white

Focus groups was conducted in Aurora, each participant had a notebook

- Present some data that you collected (such as a chart of responses, interesting quotes that you wrote down, images made during a culture probe, etc.)

a. I will attach the information of 2 person who were willing to disclose their identity.





- **Report 3-5 findings from your data collection.** What did you learn, and how will this help you with your design?
  - a. We did not do a good job picking the design of this test, so it was not really useful since people were able to find patterns and words and re create it easily. However, the answers I got from people when asking them what color they remembered, it was orange and yellow.
  - b. I found that the person who slept the least hours, was not able to write down the letters after I asked what was the day about or what food was planned for dinner. So this is helpful to know the target we are going to build for.
  - c. I found that most people were able to remember the same letters, which was “P” and “N” (in the black one), which makes me remember about how people remember the first thing they see and the last one. This will help build the order of information, tasks, asks in our application.

**Images to illustrate the data where appropriate.**

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- d. Please refer to the pictures above.

## Nimra Sharnez

- Who on your team conducted the research
  - a. Both Erika and I conducted focus groups on separate occasions.
- Who you conducted the research with (describe the demographics of the people but not their names), where you conducted the observation, etc.
  - a. For the focus group there was a larger demographic than just college students. I figured this was okay because this test was used to see the association between color and memory rather than what a user would like out of the application catered towards busy-scheduled people. Ages ranged from 18-47, two full-time employees, one part-time employee and one gap year recent high school graduate. This focus group was in the house of a family on the kitchen table.
- Present some data that you collected (such as a chart of responses, interesting quotes that you wrote down, images made during a culture probe, etc.)
  - a. An interesting quote that may have skewed the results was someone mentioning how the black and white image actually spelled our a word.
  - b. Some other findings were the people with the colored images mentioned how they remembered the yellow colors more than the other colors:

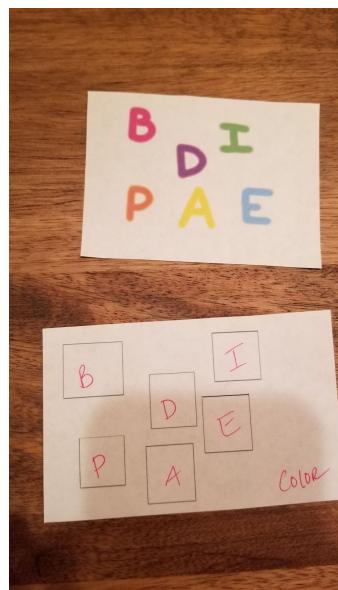
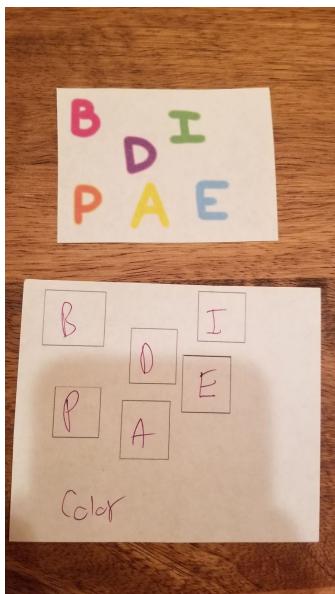


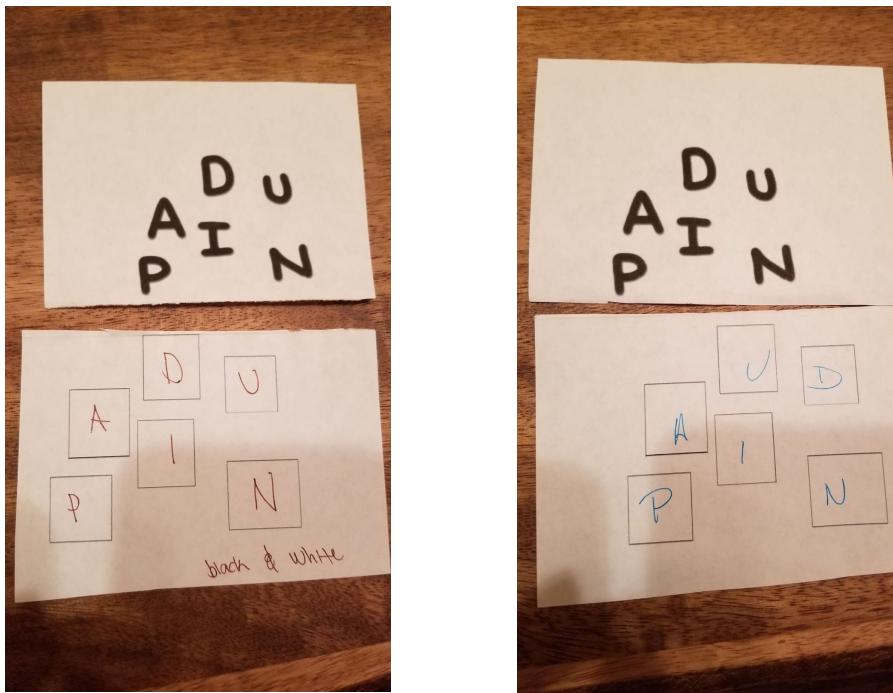
- c. Most mix ups involved two letters that were right next to each other rather than farther apart.
- Report 3-5 findings from your data collection. What did you learn, and how will this help you with your design?
  - a. From the mention of a pattern that was noticed this made me rethink my findings and that there may be some bias because patterns is another

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thing that influences memory. However this may be, we now have learned that the application would benefit with the usage of patterns.

- b. To reconstruct for next time I would consider used patterns rather than letters because less patterns may be drawn in comparison to letters and numbers.
- c. I learned that overall people who had colored images were quicker to remember the letters in comparison to those with black and white photos.
- Images to illustrate the data where appropriate.





## Group Reflection

### Findings:

- We found that most people were not sleeping enough and they were under stress due to school and their job. We agree that people who sleep less hours are most likely to forget things like locking their cars, closing the garage, turning off the stove. In addition we found that most people do not care for having a sleep tracking device, or a feature to track their sleep in an application.

### Decisions:

- We decided that we would not add a feature to track a sleep because they do not find it beneficial.
- Since many people said they often forget if they locked their car/house, we can have a built in tracker for the commonly forgotten tasks like the ones mentioned above.

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### **Useful method:**

- We conducted 4-6 1:1-interviews, however, we asked some of our friends to fill out the questionnaire via google survey rather than writing down their responses. We found this method more efficient because it organized our data and allowed for us to have exact quotes and not miss any details of their responses.
- Between the interviews and focus groups, it is inconclusive to say which was better because the interviews were used to gain an understanding of the users where the focus group was used to have an understanding of how to build the application itself with the gimmick of colors.

### **More data collection:**

- We would like to conduct another focus group to collect information about the colors we should use in our application because we did not notice that the letters we used form a pattern and formed some words, so the difference of the results between the black letters and the color letters, were not significant. However, when we asked people which colors they remembered and orange, red, and yellow were the most remembered.
- One important thing we forgot to ask, was which device they use the most to annotate tasks or do research to plan tasks or activities. This could be useful to know if we would have to build an application that can be compatible with computers or if a website would be useful in certain way.

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## Summary

The meeting took place at 7pm in the Engineering Center on Saturday 27, 2018. All members of the group attended the meeting (Erika and Nimra). We had a long discussion about the findings of our data and talked about what we would like to have on the application. We also analyzed how long we took to do the research. From the time between developing the questions and focus group and then picking which ones we will use to finally conducting interviews and focus group, the total process took around four days. The date the interviews took place was 10/26/2018 ranging from 1:30pm-6:00pm. The focus groups were conducted on 10/27/2018 at 2:00pm. The location for the interviews took place on CU Boulder's campus with some college students, and in the city of Aurora. The focus groups happened in the households of some participants. Both interview and focus groups were conducted by Erika Bailon and Nimra Sharnez on separate occasions.

From the results of the interview we saw many commonalities between the students. Most students were not receiving a sufficient amount of rest. The average sleep time for overall students was 6.27 hours and people agreed they were not sleeping as much as they would like to. Another commonality was the high stress affect school had on them as well as frequently forgetting small things. One of the most forgotten objects/ tasks people shared was locking their car/house doors or where they last put their keys. We found this data very interesting and discussed about adding a built-in door lock checker where users can check mark whether they locked their car/house door or not along with a key placer checker where they can add where they last placed their keys. From the results it seemed people typically used their phone often and would indeed benefit from a sort of 'virtual agenda'.

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From the results of our focus group we saw that there was a difference in the results of people who had to remember alphabets in color versus in black and white. We figure it would be best to use colors in our application because it will allow for users to better remember things. Another surprising found we discovered was the memory of certain colors over others. People tend to remember the brighter more vibrant yellow hues compared to the more blue hues. We will take this into consideration as well when coming up with a color scheme. This made us think about the colors of sticky notes and how that they are mostly pink, orange and yellow. We will be using this information in our application as a result of the study.

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## Appendice

### 1:1 Interviews

#### DEMOGRAPHICS|

- Where were you born?
- Where did you grew up?
- How old are you?
- Do you live at home with your parents? Your own place off/on campus?
- Do you have your own car?
- Are you full time/ part time student?
- Are you full time/ part time employee?

#### ELABORATED QUESTIONS (Please elaborate the best you can)

1. How many hours of sleep do you get a night?
2. Do you consider your job/ school stressful?
3. Do you forget things often? (if applicable answer questions below)
  - a. What are the kind of "short-term" things you forget?
  - b. Are there things you are doubtful/ forget about on a *daily* basis?
    - i. (e.x. Locking your car, placing your keys or wallet etc...)
4. Do you use a planner/ agenda? (if applicable answer below)
  - a. How often?
5. Tell me a time where you had to keep checking if you did something or not.  
(e.x. You didn't remember if you locked a door and went back to check twice)
6. Would you benefit from a sleep tracker?
  - a. What would you like to know about your sleeping?
    - i. (e.x. Consistency, length, naps etc...)
7. On a busy day, do you make a mental note of all the things you have to do, or do you write them down?
  - a. Does writing down what you have to do help you to remember?
8. Would you use your cellphone to make note of things you forget often?  
(ex Where you last left your wallet? Did you lock your house door?).

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## Focus Groups Material

Focus group subjects will look at the letters for a brief 5 seconds, then we ask a question about personal things such as: "What are you having for dinner tonight?" "What did you do today?". Lastly they fill out the empty boxes based off memory of the letters, and if possible, the colors. (One image at a time, first black letters then color)

A D U  
I  
P I N

B I  
D  
P A E

