Define Documentation

Define Evaluative Criteria (2.1)

We used the SVI scale to rank our ideas by making each member give a number for each rating. After totaling the scores, we ordered our top 4 ideas in the list by svi score ranking. We then eliminated another 2 ideas and we have 2 similar ideas remaining. After consulting Mr.Manning, we decided to go with topic 2.

1. To prevent people from falling asleep without noticing (not intended to do so) (S:19 V:16 I:16) [51]
   a. (S:5 V:5 I:5)
   b. (S:4 V:2 I:4)
   c. (S:5 V:4 I:5)
   d. (S:5 V:5 I:2)
   e. **3 Votes**

2. Waking up without having others to wake you up (S:17 V:16 I:13) [46]
   a. (S:4 V:3 I:4) (Arthur)
   b. (S:4 V:3 I:5) (Shaun)
   c. (S:4 V:5 I:3) (Daniel)
   d. (S:5 V:5 I:1) (Wayne)
   e. **3 Votes**

3. ~~Trying to open car door in tight space~~ (S:14 V:16 I:16) [46]
   a. ~~(S:3 V:4 I:4)~~
   b. ~~(S:3 V:5 I:3)~~
   c. ~~(S:5 V:3 I:4)~~
   d. ~~(S:4 V:4 I:5)~~

e. ~~2 Votes~~

4. ~~People don't know what cryptocurrency is and how to use it~~ <mark>(S:14 V:19 I:12) [45]</mark>
    a. ~~(S:3 V:5 I:5)~~
    b. ~~(S:5 V:5 I:5)~~
    c. ~~(S:3 V:5 I:1)~~
    d. ~~(S:3 V:4 I:1)~~

5. ~~Exercising as a hobby~~ <mark>(S:18 V:14 I:14)</mark>
    a. ~~(S:4 V:5 I:5)~~
    b. ~~(S:4 V:1 I:4)~~
    c. ~~(S:5 V:5 I:4)~~
    d. ~~(S:5 V:3 I:1)~~

6. ~~Designing an ergonomic controller~~ <mark>(S:11 V:14 I:14)</mark>
    a. ~~(S:2 V:4 I:3)~~
    b. ~~(S:2 V:4 I:3)~~
    c. ~~(S:3 V:2 I:3)~~
    d. ~~(S:4 V:4 I:5)~~

7. ~~Ergonomic road bike lever to foster more comfortable and safer downhill riding experiences~~ <mark>(S:17 V:14 I:15)</mark>
    a. ~~(S:4 V:3 I:4)~~
    b. ~~(S:4 V:4 I:3)~~
    c. ~~(S:4 V:3 I:3)~~
    d. ~~(S:5 V:4 I:5)~~

8. ~~The poorly designed college application web page~~ <mark>(S:16 V:7 I:17)</mark>
    a. ~~(S:3 V:4 I:3)~~

b. ~~(S:3 V:-1 I:4)~~

c. ~~(S:5 V:2 I:5)~~

d. ~~(S:5 V:2 I:4)~~

Consider Constraints (2.2)

We came up with a list of rational constraints for our product as well as a rubric to define what is suitable and what is not based on our research (here and here). We will be asking our test users to rate our product/prototype using the rubric that we created to judge the successfulness of our product.

Constraints:

❖ Not wake them up by loud/noisy alarm clocks

❖ Statistics provided by the smartwatches may be inaccurate

❖ Safe/non-lethal products

➢ Electromagnetic waves

➢ Falling off the- bed

➢ Electrical shock

❖ Applicable for targeted group

Criteria:

	Good	**Soso**	**Bad**
Pleasantness	I wake up feeling very satisfied	I wake up feeling fine	I wake up feeling not happy
Usability	I know how to use it straight away	It took me some time to figure out how to use it	I have no idea how this functions
Willingness to use	I would definitely love to continue using this	I can try to continue using this	I don't want this product to appear in my life again

Effectiveness	I wake up before time	I wake up on time	I wake up late
Affordability	Not costly at all and can be accessed by everyone	Need to spend some money, but worth it	Too expensive for just waking up

Define Problem (2.3)

We had a little bit of trouble coming up with our problem statement since we had many topics to talk about, and because 2 members just left so half the opinions are gone. There was a lot of elimination work that I had to do to simplify our topics. Our initial ideas relating to sleep health/hygiene was completely removed to focus on the aspect of either waking up mentally or to physically get someone out of bed. But even that was also 2 different ideas so we did another round of elimination. We decided to focus on the motivational aspect of waking someone up so they can fulfill responsibilities.

Problem statements version 1

PAS high school students who cannot wake up independently needs a way to regulate a better sleep hygiene in order to achieve a better sleeping quality with the same amount of time allowed and to feel more energized in the morning.

PAS high school students who cannot wake up independently needs a way to find a new way of waking up that intrigues their specific, individual motivation to get out of bed because they lack motivation to do so now.

Our users need a way to wake up (or maybe wakes up) efficiently because normal alarm clocks aren't efficiently waking them up.

Pas hs students who can't wake up autonomously need a way to be more aware of their own sleeping habits so as to improve their sleeping quality and wake-up situation.

Problem statements version 2

| |
|---|
| **Problem Statement (Working)**

PAS high school students who cannot wake up independently needs a way to find a new way of waking up that intrigues their specific, individual motivation to get out of bed because they lack motivation to do so now. |
| **Revised Statement (Revised)**

PAS high school students who struggle wake up independently needs to find a new method (or combination of methods) for waking up that intrigues their specific, individual motivation to get out of bed because they lack motivation to do so and keep on hitting snooze button now. |

Problem Statements version 3
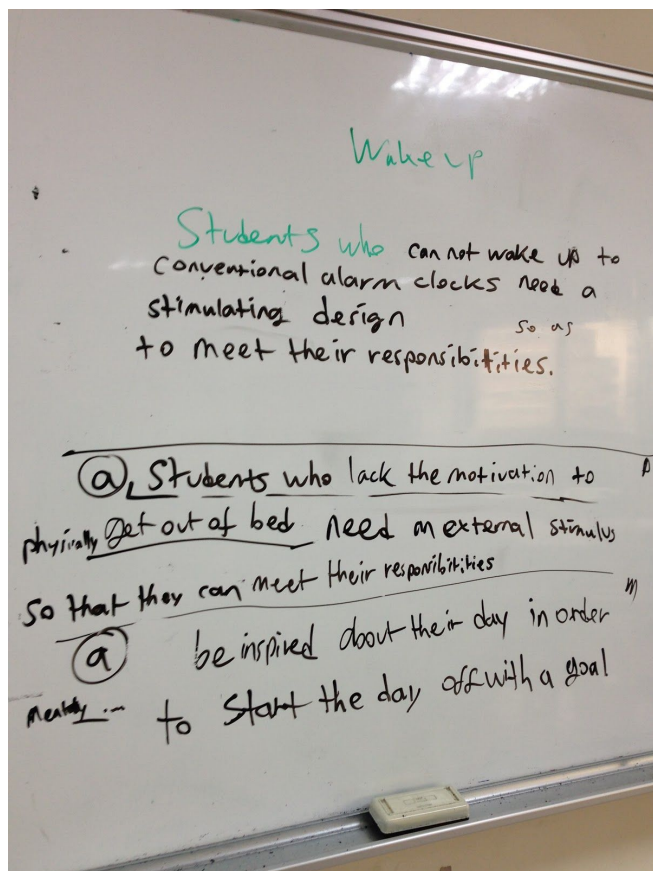
Problem Statements version 4

A. Students who can not wake up to conventional alarm clocks need a stimulating design so as to meet their responsibilities.
B. Students who lack the motivation to physically get out of bed need an external stimulus so that they can meet their responsibilities.
C. Students who lack the motivation to physically get out of bed need to be inspired about their day in order to start the day off with a goal.

(final version highlighted in yellow)