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Phase 1 Report

Introduction:

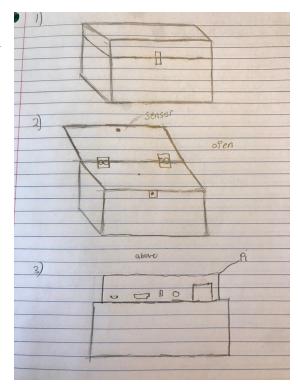
Our concept, SupportBox, would be a personal growth tool that uses both social computing and creative building to help aid in a person's decision making. This app and physical box combination will be an aid to help in a person's battle with addiction.

Extended Introduction:

SupportBox will be a physical box and app combination that will be used synonymously. There will be 4 full parts to this project. The design will feature a created physical box with built in sensor, a frontend app, a box-server connection, and an app-server connection.

The created physical box will feature a built in sensor that sends a output to a Raspberry Pi type computer when it's opened. This will send a signal to the server which switches the state of the box within the server. The box could be built out of wood, 3D printed with plastic, or be some type of metal box. The box potentially could have more features, but we will put those on the backburner.

The frontend app (tech not yet decided), will check the signal of the box. Any time the box is opened, the app will notify a significant other/good friend, send an inspirational message, or do something to assist the user in avoiding whatever was in that box. This is an example of aiding the user in their fight against addiction, while not restricting the user. This is not meant to be a rehab tool, but instead an aid to assist in their fight against addiction.



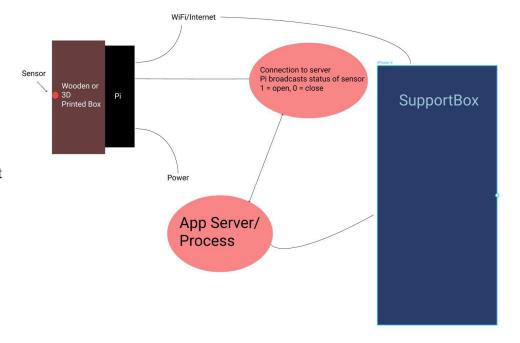
The project will have two server connections. One from the Raspberry Pi type computer on the box, and one coming from the backend of the app.

Contextual Inquiry/Background Research:

Our initial studies were focused on building, DIY, crafting, and social computing. We learned a lot about social computing and data collection during this process. While we couldn't come up with a full social computing idea, this current design does use social computing as it is more like a private social media which we hope will foster social and emotional support and improve user health. Researchers have found that through social support, there has been a measurable decrease in risk of mortality and increase in overall health in comparison to those that have low quality or no social support^[2].

Bridging technology and addiction treatment/aid is a promising field with many opportunities^[1]. Focusing on this idea gives us a simple product with a simple idea and design.

The box uses social computing to alert someone of your relapse, who can try and stop the relapse sooner, rather than after it has happened. This box will **not** stop people who are not onboard 100%. Anyone can open their box and take what they want, or go to the store. It is meant to be used as an aid for 100% willing people who want to make a change, not a drug addict with more addictive tendencies



Transcripts From Interviews:

User Interview 1:

User: Our user interview was of an individual who is very goal driven. He is an Associate Banker in charge of financing for millions of dollars in wine businesses as well as a competitor in pentathlons, cross country mountain bike races, marathons, and horse shows.

Setting: In person interview at a coffee shop after work

Ouestions:

1) To start off, would you consider yourself a goal driven person?

Answer: Yes. I use goals to see results, without goals you don't have any direction, you aren't able to track/measure/and evaluate performance. My goals are life, relational, monetary, career, and physical.

2) Do you organize your goals? If yes, how?

Answer: Yes, near term, mid term, long term, bhag(long over-reaching goals), Jim Taylor books are a great resource for organizing goals.

3) Have you ever been apart of teams or groups that have similar interests?

Answer: Yes, relating to my job. At work we have monetary goals, referral goals, and team goals.

- 4) Outside of work do you have any groups you are apart of that share similar interest? **Answer:** Yes, we just bought a mustang to train in 364 days. And as you know on Facebook there is a large community of followers that serve as motivation.
- 5.) Who do you think would benefit from being in a group that is geared towards mutual support?

Answer: Anybody, everybody, lack of motivations, lack of self discipline, those who need secondary sources of positive reinforcement.

6) for people that have the above mentioned qualities? Have you noticed a strong attendance in mutual support groups?

Answer: Generally no, the most successful people typically have goals and the people that could use goals and groups to support them typically are the ones that don't bother to have goals or follow through with them; It comes down to laziness too, it takes effort to be apart of a mutual support group.

7) You mentioned effort of being apart of a mutual support group, Can you elaborate on this and other reasons you think people don't use mutual support groups?

Answer: scared of work, it usually requires extra effort, and the individuals don't want to put in the effort, also time conflict, with the internet you could get around that if you wanted to. If they aren't exposed to it or aren't aware of local resources it takes some effort to seek them out.

8.) What qualities of a support group make it effective in your opinion?

Answer: Accountability, when users of the group have similar interests and goals it is easy to stay motivated to reach and attain your goals.

Expert Interview 2:

Expert: A staff nurse who currently works at Santa Rosa Memorial Hospital. In the past, this individual has had to deal with confiscating items, such as cigarettes, from patients who are either addicted or not even supposed to have possession of these items.

Setting: In person interview in a relaxed setting after a 12 hour night shift.

Background:

"We are building an app and a product. This product would look similar to a box and would allow you to store an item in the box (i.e. a phone, cookies, cigarettes, etc). When you place items in the box you can use the designated app to allow you to set personal goals for yourself. For example, say you think you're becoming addicted to your phone and you want to set a personal goal to not use your phone for two hours every evening. You can set a goal on the app that alerts your friends/connections of your goal. It would also alert them and you if the box is opened. In a case of an addict or smoker it could serve as a social support group."

Ouestions:

1. Would something like this make an impact on your job/field?

Answer: As a Staff RN working in a hospital setting, I don't think it would have any use in my job, but it could have some potential in the healthcare field at large.

2. Can you think of an example in your job where this would be useful?

Answer: I wouldn't use this in my job because we have the ability to maintain some control over people's habits while in the hospital.

3. Would you personally use a product like this? (Includes answers for #3, 4, 5, 7, 8, 9, 10)

Answer: I probably wouldn't use it because I don't have anything that could be put in the box. As far as alerting friends about breaking habits, I feel as though the system is only as good as your willingness to be honest. Also, if friends are alerted, in many cases, other people would not care very much if you did break a habit, e.g. using a phone, eating cookies, because most people are not as invested in you improving your own life as you are. It could have use in more intimate relationships where members are more invested in each other, but it's only good when people are honest. It could be useful for addicts in certain situations, such as a support group, but it's only as good as people are willing to be honest, which many addicts are would not be. They would likely just get the substance from another source.

- 4. Would you purchase this for work or personal use? (See above)
- 5. Would you connect this app to allow your friends/connections to motivate you to reach your goal? (Social support group; similar to an Apple Watch or a FitBit) (See above)
- 6. Can you think of a specific use for this in a hospital/medical setting?

 Answer: I'm not sure if the idea would work in a real world setting, but I think with a modification, it could be useful in healthcare. A large problem in healthcare is medication compliance. Patients often neglect to take their medications as prescribed. This could be failing to take psychiatric meds, not finishing a course of antibiotics (which can lead to drug-resistant organisms), or failing to take insulin or other diabetes medications.
- 7. Do you think this would be beneficial for addicts? Smokers? On the other end of the spectrum do you think this could be beneficial for an education setting in confiscating items like phones in the classroom? (See above)
- 8. Do you think having this in someone's life would give them a better opportunity for success? (See above)
- 9. Are there any other fields that you think could benefit as well? If so, what? (See above)
- 10. Can you think of a situation/goal/motivation where this could fit into your personal life? (See above)
- 11. Any further statements to add?

Answer: If the box contained medications and dispensed them, it could alert family or healthcare providers if a patient is not compliant. This could also be useful for patients who are more forgetful or cognitively impaired. It could be linked with other devices, such as a blood sugar monitor. For example, if a diabetic patient does not check their blood sugar, an alert would be

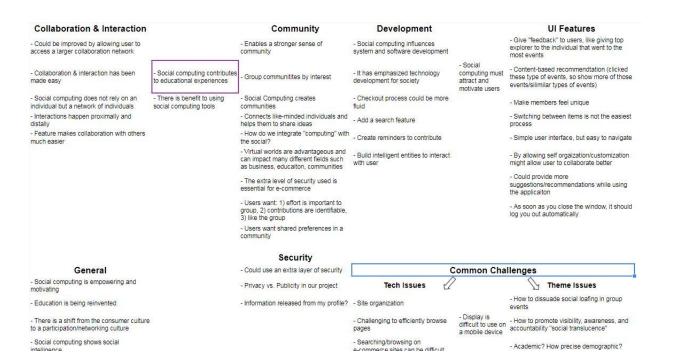
sent out. Then, if the blood sugar is too high, they would need to take their insulin and another alert would be sent if they did not take it from the box.

Contextual Analysis:

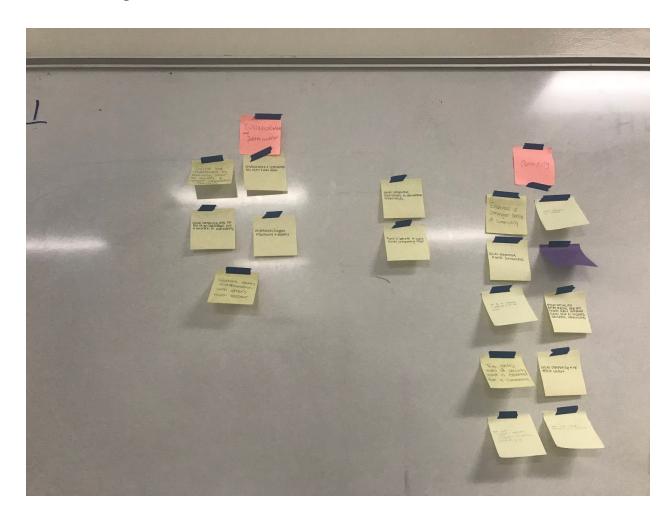
Final version of the WAAD:

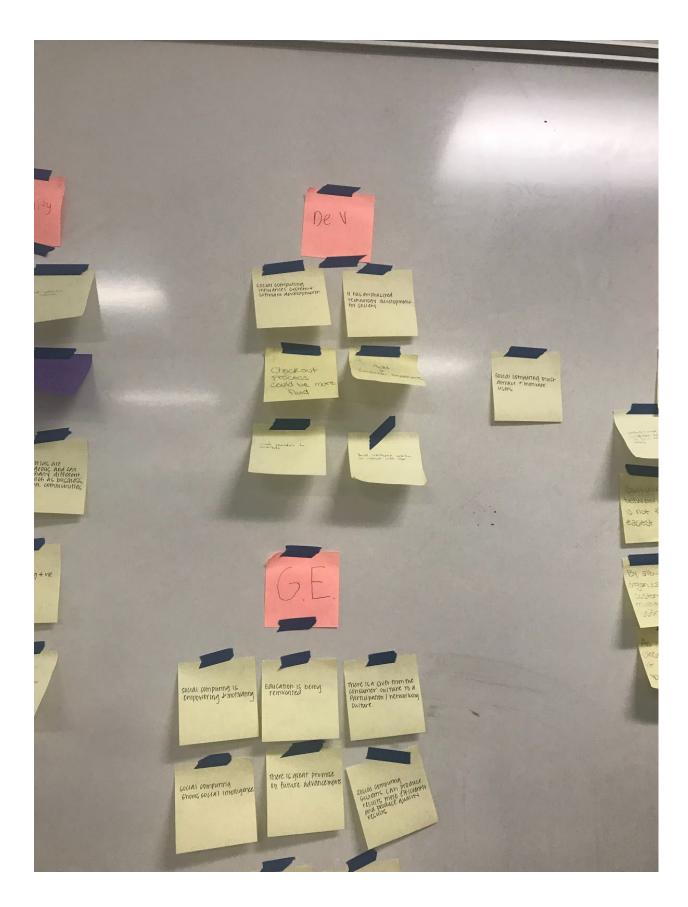
Collaboration & Interaction	Community	Development		UI Features
Could be improved by allowing user to access a larger collaboration network	- Enables a stronger sense of community	- Social computing influences system and software development		 Give "feedback" to users, like giving top explorer to the individual that went to the most events
- Collaboration & interaction has been made easy	- Group communitites by interest	- It has emphasized technology development for society	- Social computing must attract and motivate users	- Content-based recommendtation (clicked these type of events, so show more of those events/silimilar types of events)
 Social computing does not rely on an individual but a network of individuals 	 Social Computing creates communities 	- Checkout process could be more fluid		- Simple user interface, but easy to navigate
 Interactions happen proximally and distally 	- Connects like-minded individuals and helps them to share ideas	- Add a search feature		- By allowing self orgaization/customization might allow user to collaborate better
- Feature makes collaboration with others much easier	- How do we integrate "computing" with the social?	- Create reminders to contribute		- Could provide more suggestions/recommendations while using the application
 Allowing interactions between locals as well as anyone else who feels that they need support and that this app would assist them in their journey to sobriety 	- Users want: 1) effort is important to group, 2) contributions are identifiable, 3) like the group	- Build intelligent entities to interact with user		- As soon as you close the window, it should log you out automatically
- Section to add what type of treatment they received/mathods used	 Users want shared preferences in a community 	 able to find treatment facilities, support nearby 		- information on recovery
- Get support and give support				- competitions/motivation
General	Security	Common Challenges		
- Social computing application support	2,55	Tech Issues		^
	- Could use an extra layer of security	rech issues		Theme Issues
decision making - Social computing requires different types	Could use an extra layer of security Privacy vs. Publicity in our project	- Site organization		Theme Issues - How to dissuade social loafing in group events
- Social computing application support decision making - Social computing requires different types and amounts of user participation - Facts on technology and addiction/why this app would benefit them and showing them that it will work for them	0.000	[7	- Display is difficult to use on a mobile device	- How to dissuade social loafing in group
decision making - Social computing requires different types and amounts of user participation - Facts on technology and addiction/why this app would benefit them and showing	- Privacy vs. Publicity in our project	- Site organization - Challenging to efficiently browse	difficult to use on	- How to dissuade social loafing in group events - How to promote visibility, awareness, and
decision making - Social computing requires different types and amounts of user participation - Facts on technology and addiction/why this app would benefit them and showing them that it will work for them	- Privacy vs. Publicity in our project	- Site organization - Challenging to efficiently browse pages - web app or phone app? which	difficult to use on	- How to dissuade social loafing in group events - How to promote visibility, awareness, and accountability "social translucence"
decision making - Social computing requires different types and amounts of user participation - Facts on technology and addiction/why this app would benefit them and showing them that it will work for them	- Privacy vs. Publicity in our project	- Site organization - Challenging to efficiently browse pages - web app or phone app? which would have a larger user base? - How to make people (users)	difficult to use on	- How to dissuade social loafing in group events - How to promote visibility, awareness, and accountability "social translucence" - Challenge to find what im looking for - What are challenges in making a social
decision making Social computing requires different types and amounts of user participation Facts on technology and addiction/why this app would benefit them and showing them that it will work for them	- Privacy vs. Publicity in our project	- Site organization - Challenging to efficiently browse pages - web app or phone app? which would have a larger user base? - How to make people (users)	difficult to use on	- How to dissuade social loafing in group events - How to promote visibility, awareness, and accountability "social translucence" - Challenge to find what im looking for - What are challenges in making a social support community? - Being able to efficiently communicate in ar

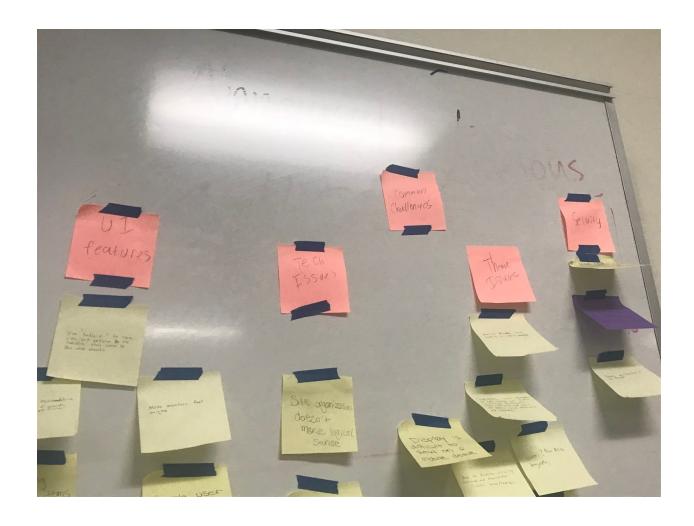
WAAD Class Version:



WAAD In Progress Photos:







References:

- 1. Marsch, Lisa A. "Leveraging Technology to Enhance Addiction Treatment and Recovery." *Current Neurology and Neuroscience Reports.*, U.S. National Library of Medicine, 10 May 2013, www.ncbi.nlm.nih.gov/pmc/articles/PMC3650640/.
- 2. Reblin, Maija, and Bert N. Uchino. "Social and Emotional Support and Its Implication for Health." Current opinion in psychiatry 21.2 (2008): 201–205. PMC. Web. 17 Sept. 2018.