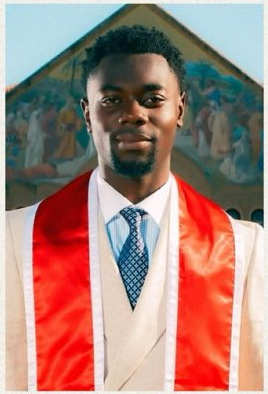
Defining & Prototyping

Group 6 (“Roland in the Deep”)
Joshua T, Benjamin K,
Roland ML, Fadumo J

01

Intro

Team



Joshua T

Coterm
CS (HCI) + B.A. Econ
London, UK



Fadumo J

Senior
Design + CS Minor
San Diego, CA



Benjamin K

Undergrad
Computer Science
Walnut Creek, CA



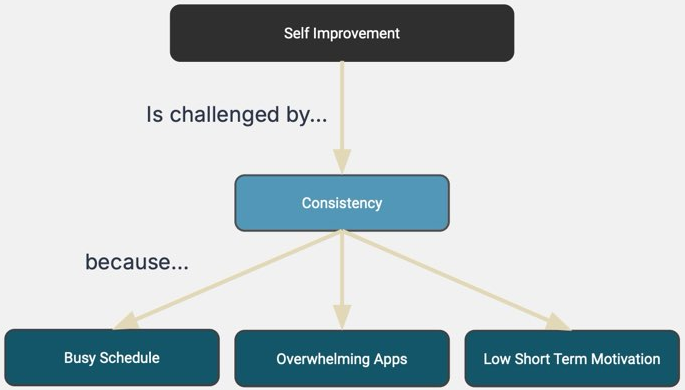
Roland ML

Senior
Computer Science
East Palo Alto, CA

Problem Domain



Last Week



This Week

02

New Results

“Adam”

28 year old, Unemployed, ex-Apple Retail

Average User

- Male, 28 Years Old
- Lives in San Mateo
- ADHD
- Going Back to School Next Year
- Semi-pro dancer, graphic designer
- Uses Alarmy App to Wake Up

"That is a goal of mine is have a more firm structure...to have a routine."



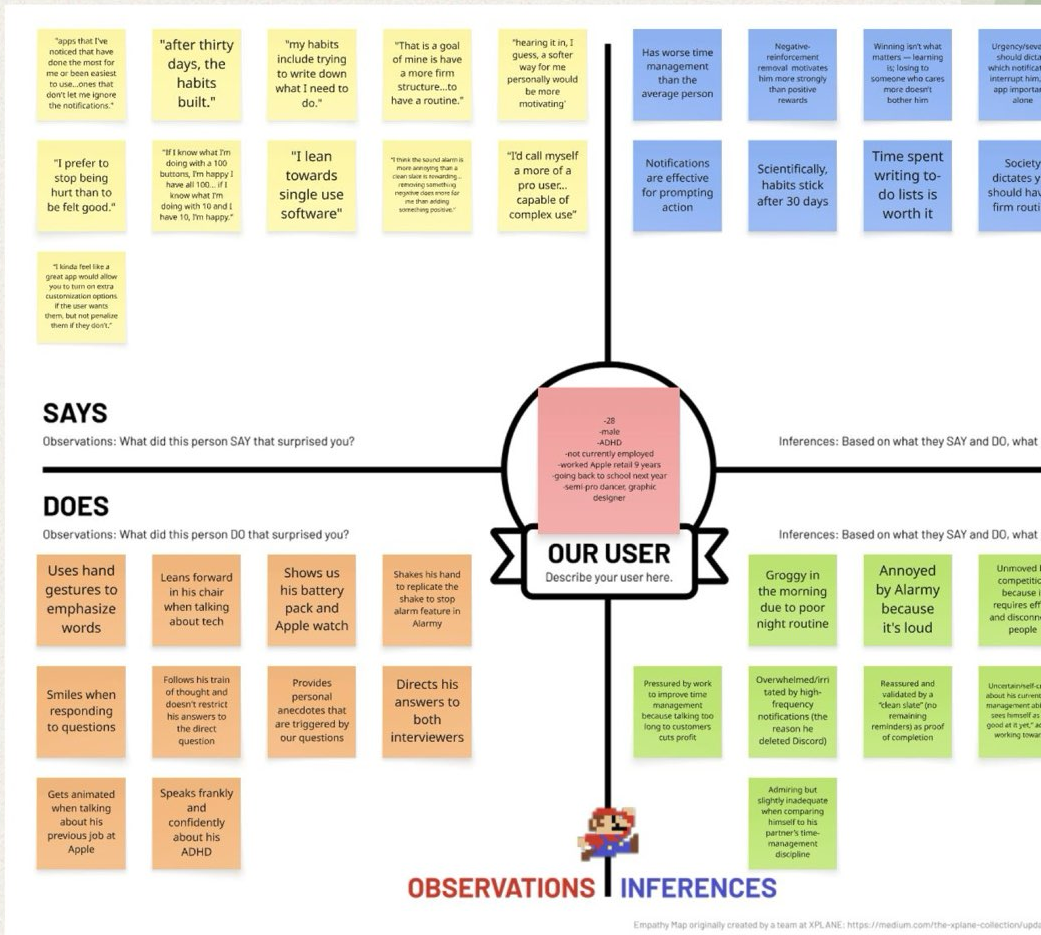
Empathy Map

"That is a goal of mine is have a more firm structure...to have a routine."

Scientifically, habits stick after 30 days

Shakes his hand to replicate the shake to stop alarm feature in Alarmy

Reassured and validated by a “clean slate” (no remaining reminders) as proof of completion



“Emily”

23 year old Audience Insights Analyst

Normal User

- Female, 23 Years Old
- Recent Stanford Grad, CO ‘26
- Works in Audience Insights at a radio station
- Enjoys Yoga, Matcha, and KPop
- Wants to cut down on screen time

“I think it’s the want for consistency in my life that’s not just related to work. There’s a sort of community within the yoga space too. It’s just really fun to talk to people before and after class, and getting to see the same faces every single class. And I feel like there’s an obligation, since they know my face now, that I also have to be there. If I miss it, then it’s kind of obvious someone’s not there.”



Empathy Map

She believes accountability works better when it comes from people, not tools. Her manager keeps her on track at work. The yoga regulars keep her showing up.

fadumoj

Work comes first right now. She'd rather put in time in year one and take a long trip later than a rushed two-week vacation.

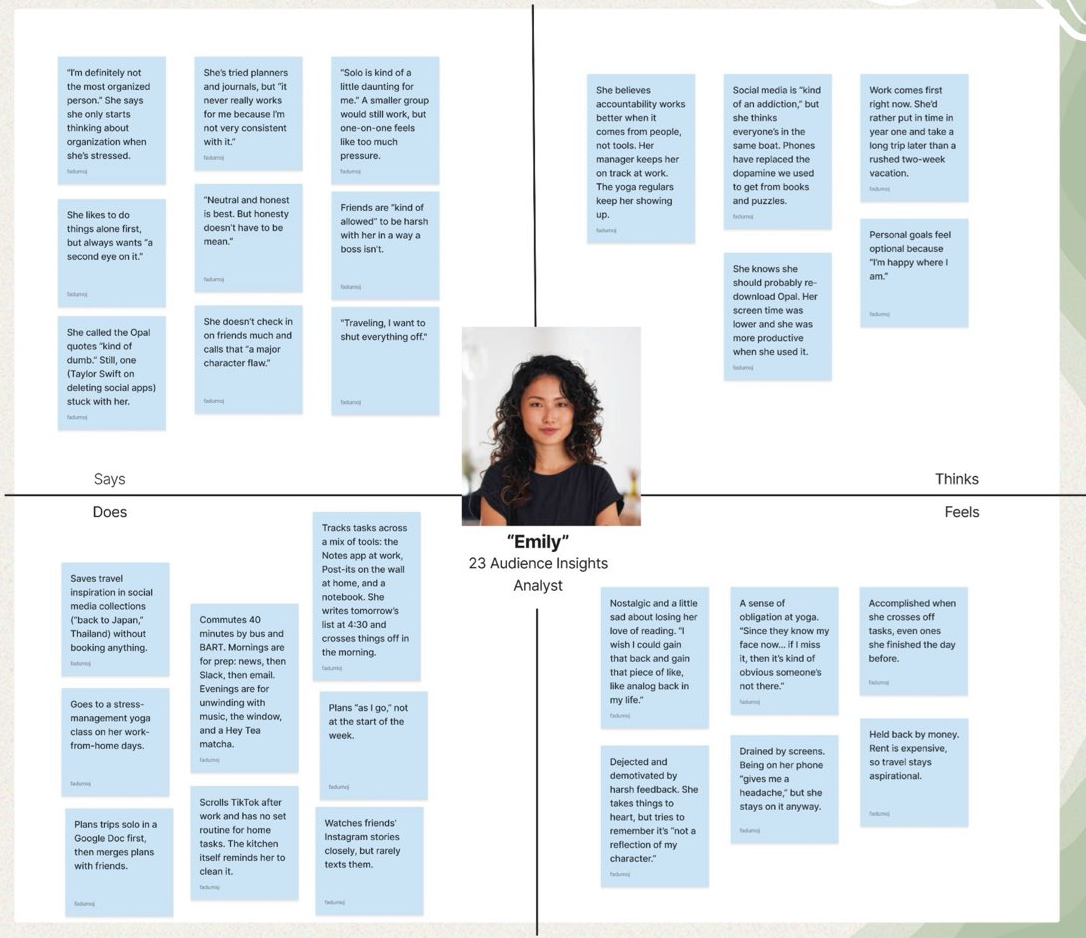
fadumoj

"Neutral and honest is best. But honesty doesn't have to be mean."

fadumoj

"Solo is kind of a little daunting for me." A smaller group would still work, but one-on-one feels like too much pressure.

fadumoj



03

POV Development

Initial POV

We met Bob, a licensed family and marriage therapist who is working on improving his own physical health and nutrition.

We were surprised to realize although Bob says he prefers soft love, he also recognizes that tough love is more effective for him.

We wonder if this means Bob would respond best to a combination of soft and tough love.

It would be game changing if he could receive tough love for any of his goals.

Revised POVs

We met Bob, a 34 year old licensed marriage and family therapist who has a partner and is working on nutrition and fitness. We were surprised to notice Bob likes to use simple to-do lists in the notes app but observed scheduled habits were more likely to be done. We wonder if this means Bob would like to schedule his tasks, but the friction of doing so with current apps dissuades him. It would be game changing for Bob to schedule his habits with the same amount of work as adding it to a todo list.



Revised POVs

We met Peter, a 34 year old mental health therapist who has a partner and is working on fitness and nutrition improvement. We were surprised to notice that Peter stated setting personal rewards was most effective for accomplishing his goals, because his expressed greatest challenge was having energy after work and socializing. We wonder if this means that lack of energy can be overcome by increasing short term motivation through reward setting. It would be game changing if Peter could accomplish his goals even on busy weeks when he has little energy.



Revised POVs

We met Anne, a 43 year old legislative aide and political organizer who enjoys playing video games and travels frequently. We were surprised to notice Anne recognizes she does not get habits done because she does not track them, but feels overwhelmed by tools and apps she has to manage which may traditionally help. We wonder if this means Anne would use a habit tracking app if she did not feel overwhelmed. It would be game changing to help Anne to track her habits without overwhelming her.



04

HMWs

HMW #1

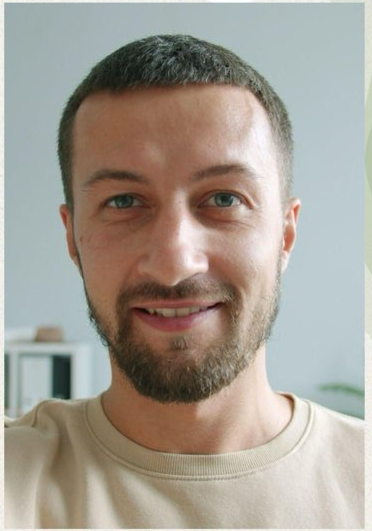
How might we encourage people to do habits that are unscheduled?



We met Bob, a 34 year old licensed marriage and family therapist who has a partner and is working on nutrition and fitness. We were surprised to notice Bob likes to use simple to-do lists in the notes app but observed scheduled habits were more likely to be done. We wonder if this means Bob would like to schedule his tasks, but the friction of doing so with current apps dissuades him. It would be game changing for Bob to schedule his habits with the same amount of work as adding it to a todo list.

HMW #2

How might we make scheduling habits fun?



We met Peter, a 34 year old mental health therapist who has a partner and is working on fitness and nutrition improvement. We were surprised to notice that Peter stated setting personal rewards was most effective for accomplishing his goals, because his expressed greatest challenge was having energy after work and socializing. We wonder if this means that lack of energy can be overcome by increasing short term motivation through reward setting. It would be game changing if Peter could accomplish his goals even on busy weeks when he has little energy.

HMW #3

How might we make tracking habits a reduction of stress, rather than a source of it?



We met Anne, a 43 year old legislative aide and political organizer who enjoys playing video games and travels frequently. We were surprised to notice Anne recognizes she does not get habits done because she does not track them, but feels overwhelmed by tools and apps she has to manage which may traditionally help. We wonder if this means Anne would use a habit tracking app if she did not feel overwhelmed. It would be game changing to help Anne to track her habits without overwhelming her.

04

Solutions

Solutions

1. App that connects you to Anonymous accountability partners for your goal.

2. App where you give it your goal and it breaks goal down step by step, sends notifications to prompt and check in.

3. App where every time you complete a habit, you gain minutes of social media time.

Solutions

1. App that connects you to Anonymous accountability partners for your goal.

Ethics:

- Accountability partners without proper moderation could be rude or inappropriate, which may impact marginalized communities
- Requires access to technology, specifically, mobile phone

Community Impact:

- Implicitly leaves out people less likely to feel comfortable socializing with strangers
- Explicitly leaves out those with visual impairments who are unable to successfully use iPhone’s accessibility features

Solutions

2. App where you give it your goal and it breaks goal down step by step, sends notifications to prompt and check in.

Ethics:

- Notifications may cause user to feel less confident or shameful about their progress
- Without limits, notifications may encourage unhealthy behavior

Community Impact:

- Implicitly leaves out those who do not own a phone
- Explicitly leaves out those with visual impairments who are unable to successfully use iPhone’s accessibility features

Solutions

3. App where every time you complete a habit, you gain minutes of social media time.

Ethics:

- App may encourage social media usage, which is known to adversely impact mental health in some cases

Community Impact:

- Implicitly leaves out those who do not own a phone, those who do not use social media
- Explicitly leaves out those with visual impairments who are unable to successfully use iPhone’s accessibility features

05

Experience Prototypes

Critical Assumptions

1. App that connects you to Anonymous accountability partners for your goal.	People will respond to accountability received from anonymous sources.
2. App where you give it your goal and it breaks goal down step by step, sends notifications to prompt and check in.	If we tell people how to accomplish a goal, they are more likely to accomplish it
	People will want to spend time reading the goal breakdowns
3. App where every time you complete a habit, you gain minutes of social media time.	People are willing to do work to gain a quick dopamine boost
	People are willing to do work to gain social media time

First Experience Prototype

Participant Criteria: ambitious Stanford student, busy schedule → ambition makes them a likely user

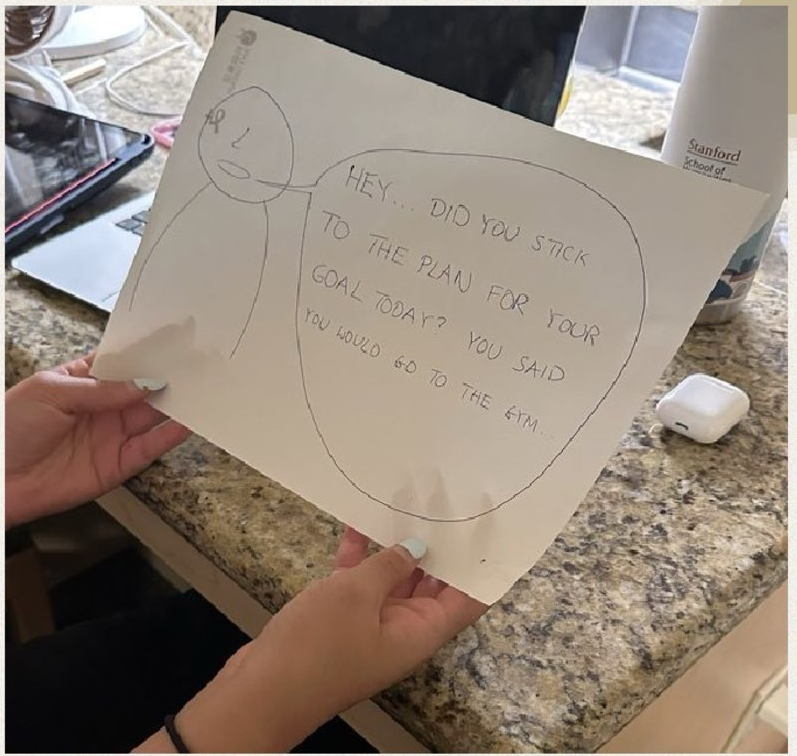
People will respond to accountability received from anonymous sources.

What we did...
- Participant scrolled on TikTok
- Conversed with her for around 5 minutes until she relaxed
- Put a piece of paper with a message on it saying “Hey, did you stick to your plan today? You said you would go to the gym...”

What worked?
- She felt “light shame” at it was one of her goals
- The content of the message was what she considered, not who wrote it
- The author didn’t concern her if the advice/accountability she received was relevant and productive to her.

What didn’t work?
- Uncertain of how starting emotional state will affect result

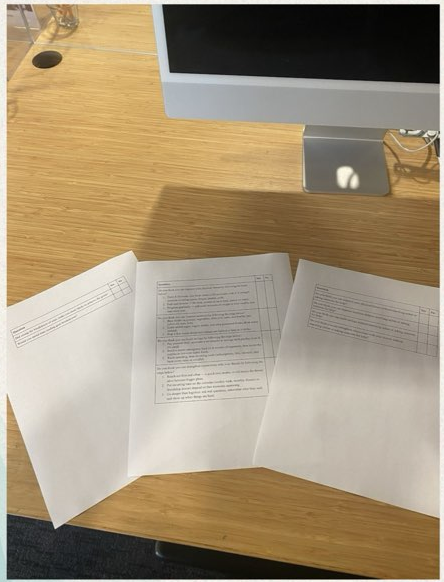
Key learnings...
- We can assume people will respond to accountability received from anonymous sources

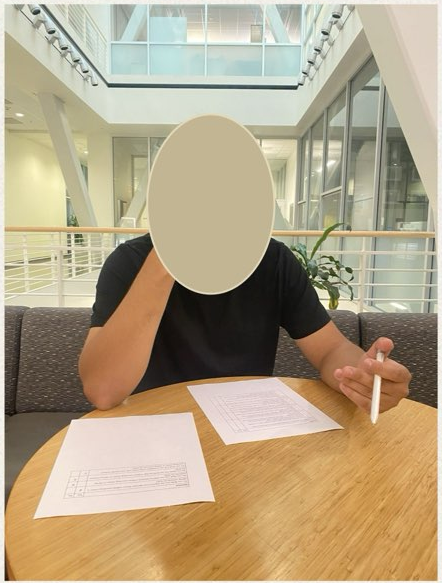


Second Experience Prototype

If we tell people how to accomplish a goal, they are more likely to accomplish it

People will want to spend time reading the goal breakdowns





Participant Criteria: busy and tired Stanford ‘25 lab technician → tired so likely to only spend time doing important things and age puts them in our target user range

What we did...
- Yes/No Quiz:
  1. Can you do this goal without help? (4x)
  2. Given AI-generated breakdowns to achieve the same goal can you achieve it? (4x)
  3. Did reading the breakdowns make you more likely to accomplish the goal?
  4. Would you spend time reading the breakdowns?

What worked?
- Results proved assumption

What didn’t work?
- Uncertain of effectiveness of the phrasing “without looking online or asking someone”

Key learnings...
- We can assume breakdowns help achieve goals and people are willing to spend time reading them

Second Experience Prototype pt. 2

Page 1

Question	Yes	No
Do you think you can improve your physical fitness without searching online or asking someone for help?	X	
Do you think you can improve nutrition without searching online or asking someone for help?		X
Do you think you can build savings without searching online or asking someone for help?		X
Do you think you can strengthen connections with your friends without searching online or asking someone for help?	X	

Page 2

Question	Yes	No
Do you think you can improve your physical fitness by following the steps below? 1. Train 4–5x/week: mix brisk cardio (150 min total) with 2–3 strength sessions covering squats, hinges, pushes, pulls. 2. Fuel and recover: 7–9h sleep, protein at each meal, plenty of water. 3. Progress gradually — add small amounts of weight or time weekly, and rest when sore.	X	
Do you think you can improve nutrition by following the steps below? 1. Base meals on protein, vegetables, fiber-rich carbs, and healthy fats (olive oil, nuts, fish). 2. Limit added sugar, sugary drinks, and ultra-processed foods; drink water instead. 3. Prep a few meals ahead and change one habit at a time so it sticks.	X	
Do you think you can build savings by following the steps below? 1. Pay yourself first: automate a set transfer to savings each payday, even if it's small. 2. Build a starter emergency fund (3–6 months of expenses), then invest the surplus in low-cost index funds. 3. Track spending, trim recurring costs (subscriptions, fees, interest), and bank every raise or windfall.	X	
Do you think you can strengthen connections with your friends by following the steps below? 1. Reach out first and often — a quick text, meme, or call keeps the thread alive between bigger plans. 2. Put recurring time on the calendar (weekly walk, monthly dinner) so friendship doesn't depend on free moments appearing. 3. Go deeper than logistics: ask real questions, remember what they said, and show up when things are hard.	X	

If we tell people how to accomplish a goal, they are more likely to accomplish it

People will want to spend time reading the goal breakdowns

Page 3

Question	Yes	No
Did seeing the breakdown of steps make you more likely to achieve the goals?	X	
Would you spend time reading goal breakdowns?	X	

Third Experience Prototype

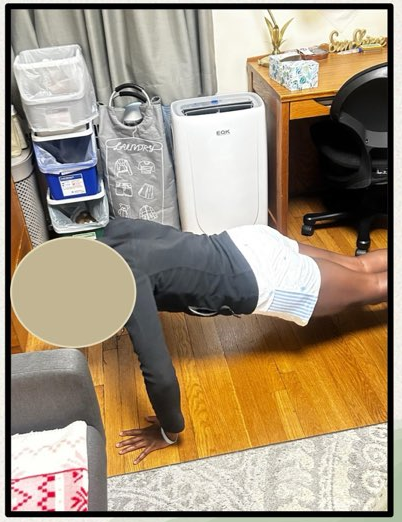


Assumptions

1. People are willing to do work to gain a quick dopamine boost.
2. People are willing to do work to gain social media time

Participant Criteria: Someone motivated by quick rewards (snacks, notifications, streaks) → candy is a fair stand-in for the dopamine hit they chase

Experience Prototype



Actors: Passersby who choose whether to do pushups for candy. We track how many pushups they do and how many pieces they earn.

Data: After the challenge, participants mark a poster answering:

- How worth it was the candy? (1–5)
- Would you do 10 pushups for 5 min of social media? (yes/no)
- What's the most you'd do for 5 min of social media? (open-ended)

Third Experience Prototype

4/6

did the challenge, earning an average of 2 pieces

4.1/5

average rating of how worth is the candy was

3/4

would do 10 pushups for 5 mins of social media

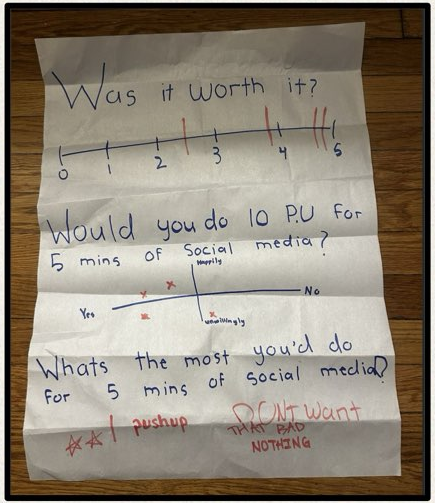


WHAT DIDN'T WORK

The enthusiasm wasn't there. Only **2** said yes happily, **1** yes reluctantly, **1** no reluctantly. On the most they'd do, **2** were unenthusiastic.

ASSUMPTIONS

1. **Validated.** Most people chose to work for the reward and felt it was worth it.
2. **Partially validated.** People said they'd work for social media time, but their reluctance suggests it might not stick long term.



06

What’s Next

Chosen Solution

App where user gives it your goal and app breaks it down step by step, sends notifications to prompt and check in.

Breaking down goals improved confidence in ability to complete goals from 2/4 goals to 4/4 goals. Participant also validated willingness to read goal breakdowns. Both critical assumptions were supported by the experience prototype.

The solution aligns with supporting two out of three of our POVs. Specifically, it would support Anne by making apps less overwhelming through breakdown of tasks and Bob by helping notifications support completion of his unscheduled tasks.

Ethical Implications & Communities

App where user gives it your goal and app breaks it down step by step, sends notifications to prompt and check in.

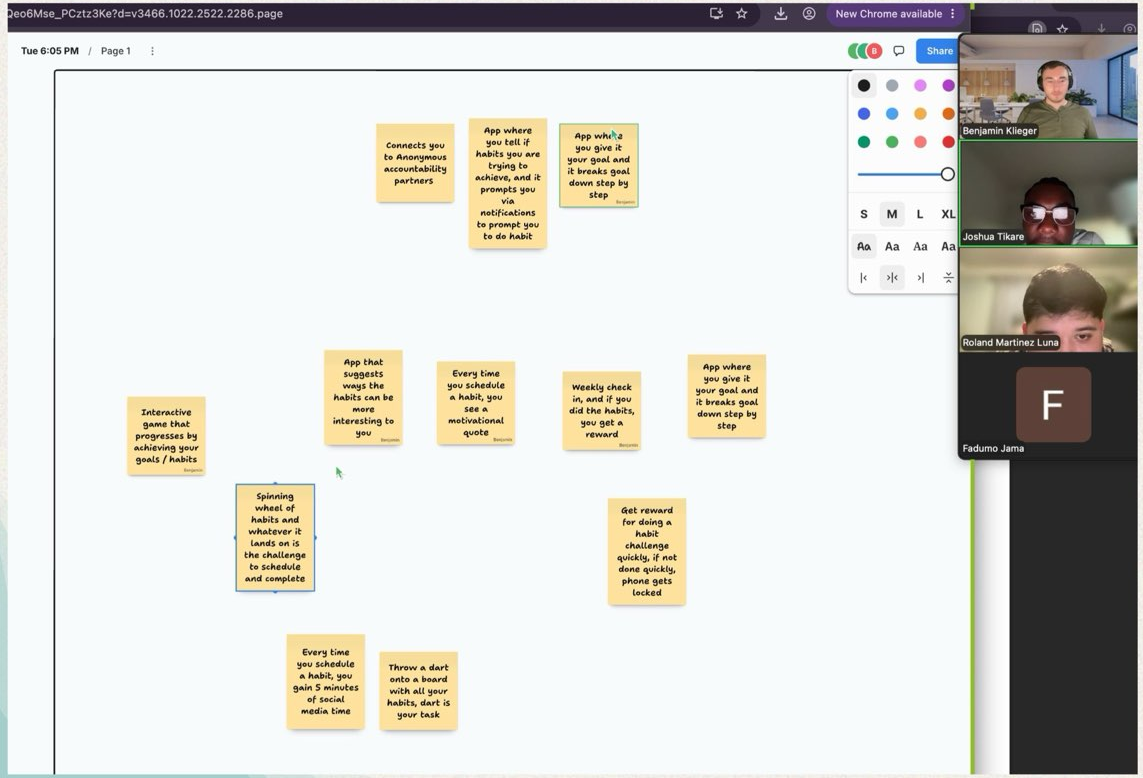
Serves communities of busy professionals and students who have self-improvement goals they want to accomplish. It leaves out communities without access to a mobile phone or lack physical, mental, or financial means to accomplish specific goals.

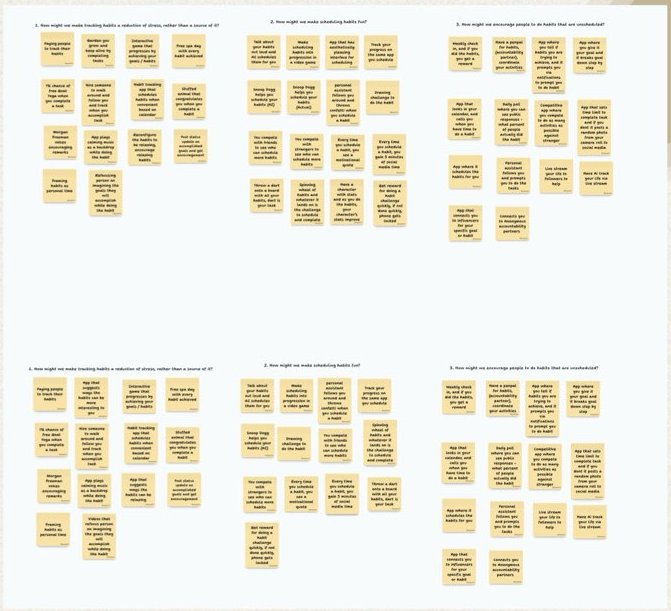
While the app is intended to be constructive, and give the user control over notifications, it is possible for reminders to have a negative effect on the user’s self image or progress towards the goal. Providing control over notifications gives the user the ability to moderate this impact.

0X

Appendix

Brainstorming





Thank you!

CREDITS: This presentation template was created by **Slidesgo,** and includes icons by **Flaticon** and infographics & images by **Freepik**