CS 147, Autumn 2026

Team Pendo A4

Market Research, User Tasks & Concept Video

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Pawse & Pages

VALUE PROPOSITION

A pause outside. A page for you.

WHERE THE NAME CAME FROM

“Pawse” sounds like “paws” and “pause,” referencing both the walking and reflection aspect, simultaneously. “Pages” refers to both personal reflections and external stories.

See more brainstorming process (Miro) in Appendix 1

Stressed, isolated people struggle to step away for themselves; we give them a reason to go outside and a page to reflect.

I	Primary user	Stressed, isolated individual like busy students, remote workers who anyone who feels stuck inside.
II	Problem	They value nature but rarely goes outside for themselves due to lack of motivation and time.
III	Solution	An interactive story gets you outside, personalized to your time and place. Each outing ends at a quiet spot where you write a page of your own to reconnect with nature and self-reflect.

Pawtner is the only one that does all 4

FEATURE	Pawtner	Geocaching	Naturetales	SoundMap	Luminary	Fantasy Hike
Engaging Storytelling	[●]	[○]	[●]	[○]	[○]	[●]
Nature-related	[●]	[●]	[●]	[●]	[○]	[●]
Gamification	[●]	[●]	[○]	[●]	[○]	[●]
Self-reflection	[●]	[○]	[○]	[○]	[●]	[○]

● STRONG ○ WEAK OR MISSING

Fantasy Hike does nature-related storytelling well but leaves self-reflection open



STRENGTHS

A fantasy world where your steps progress you through the story. They offer nature-related stories and gamification.

HOW WE DIFFER

Our solution offers accountability through companionship and self-reflection for deeper personal engagement with nature.

Stakeholders

DIRECT STAKEHOLDERS

Nature person who struggles to find engagement and novelty in short walks

Busy city people who struggle to find walks that fit their time and location

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INDIRECT STAKEHOLDERS

Neighbors, landowners

Park rangers, land managers

Indigenous communities, local wildlife

THE SMASH HIT: What if 100M people use this?



ETHICAL IMPLICATION 1

Quiet spots to reflect stop being quiet. Users turn the story ends into a disturbing place not suitable for quiet self-reflection

OUR REFLECTION

Be cautious of tension between access to nature vs. protecting it. To protect our indirect stakeholders (park ranger, land managers, local wildlife) we will use multiple endpoints per story and rotate them.

ETHICAL IMPLICATION 2

100M private notes is sensitive data as self-reflections reveal emotional states, mental health and routines.

OUR REFLECTION

To avoid this data being exploited by advertisers, employers, insurers, we will keep notes local-first or paper by default, promise no analytics on note content.

THE SIREN: What if someone uses this “too much”?



ETHICAL IMPLICATION 1

Extra motivation to go outside and disconnect from life/work can become addictive procrastination and detachment that hinders someone’s life instead of helping.

OUR REFLECTION

We should be careful about use of notifications, and avoid addictive choices like streaks or daily rewards. It would also be helpful to add natural stopping points (ie. summaries or reflection at the end of a route/story) to make sure people understand when to stop using the app.

ETHICAL IMPLICATION 2

While reflection can be helpful, it is also possible for reflections to be negative, self-critical, or anxiety-inducing, which is only amplified by the solitude of walks.

OUR REFLECTION

We can provide some scaffolding for positive self-reflections into our app, and encourage users to build confidence and mental resilience, possibly informed by techniques used in therapy.

There is evidence that suggests self-reflection is correlated with anxiety and depression (see here), so we should tread carefully and help users build a safe space for themselves instead of a negative echo chamber.

Three tasks, from one tap to a full workflow

TASK (SIMPLE - MODERATE - COMPLEX)	WHY THIS LEVEL	IN VIDEO
1, You've been at your desk for hours and need a reason to go outside.	**Why simple:** One clear goal, no real decisions, and the user only has to get started. It’s quick to complete and has no wrong path.	[0:06]
2. You busy and need to find an experience that fits your time and place. You look through different options and choose the one that works for you.	**Why moderate:** The user has to compare options against their own constraints (time, location) and make a judgment call. like picking a route to avoid tolls.	[0:14]
3. During your walk, many ideas and self-reflection have come up. You want to find a quiet place along the way to put these thoughts into words, so you can come back to them later.	**Why complex:** It’s the full journey, with multiple goals chained together: choosing something suited to your mood, getting somewhere physically, finding calm, and capturing a personal thought. It depends on the environment, takes the most time, and has the most room for things to go wrong, like noise, crowds, or not knowing what to write.	[0:36]



1 • Burnt out at the desk



2• Pendo scratches at the door



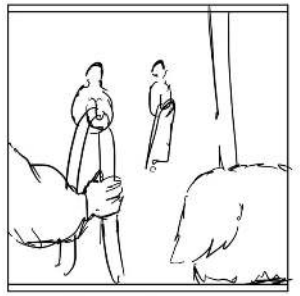
3• Calendar shows limited free time



3.5 • Pendo and user go through different options



4 • Too far, so Pendo brings a closer option



5• user grabs the leash and goes



6• Enoying the walk, inspired



7• Quiet spot and notebook



8• Happy colors , more vivid



9• user wakes Pendo to go out



credits

Watch



APPENDIX

Process Documentation

01	Project Name Brainstorm
02	Market Analysis
03	Tarot Cards (5 total)
04	Storyline
04	Scenes/Shot list

Project Name Brainstorm

1. Project name and value proposition
    a. How did your team land on the name?
    b. One-liner value proposition that conveys what customers get out of your product (e.g., Stripe “Payment infrastructure for the Internet”)
    c. Sanity check: could your value proposition be applicable to many other apps or is it particular to yours? You want the latter.
2. Problem/solution overview
    a. 1-3 sentences total
    b. Who the primary user is
    c. Problem you are tackling
    d. Brief synopsis of your proposed solution



paws & reflect
Pawse - people walk on their "paws" and they can also pause and reflect!!



footnote
tag along
meander



pendo walks
sidekick
walkies
dear me



margins
mindtrail
detour



leaf it- leave it behind and go outside

- Reflecter
- Nature Reflection
- Natureflect
- Reflectature
- Reflect in Nature
- Walk, Reflect, Again
- Reflecting in Nature
- Natural Reflecting
- Strolling Along in Nature
- Reflecting Along in Nature
- Externalize Thoughts
- Break Outside
- Taking a Break
- Finding a Break
- Reflecting a Break
- Natural Reflection
- Outside Thinking
- Think Outside the Box
- Secluded Reflecting
- Meditative Thinking
- Many Meditations
- Must Meditate
- Reflection
- Journalection
- Your Nature Journal
- Natural Journal
- Life Almanac
- Naturalmanac
- Journey More, Journal
- Journey then Journal
- Journey then Just Journal
- Nature's Journey to Natural Journaling
- Breaking Outside
- Outside Nature Breaking
- Breaking Natural Outside
- Nature's Breaking Point
- Natural Phenomena



- Renature
- Stories of Revival
- Doggone it!
- Furry Fables
- Meadows & Meandering
- Golden ReTREEver

- Final Page - The final chapter where you write
- Endpaper -
- P.S. - The afterthought added at the end of a letter? (highlighting note to self)
- Pocket Walk - small walk to fit spare windows
- Little Loop - Small things count? access



- Little Pages
- Pocket Chapter Go
- Sitting Spot
- Nature Chapters

Market Analysis

Solution: A story told on cards leads you outside, chapter by chapter, and the last chapter ends at a quiet spot where you write a note to yourself.

Geocaching
- Treasure hunting across the world and outdoors

Pokemon Go
- Capture creatures and explore locations in AR world

Ingress
- Go to IRL points of interest that are portals in a game with a science fiction background story

SoundMap
- popular location-based mobile game where you walk around the real world to collect, trade, and curate song drops (similar to *Pokémon Go*

StoryWalk
- Combine reading and the great outdoors with StoryWalk®! StoryWalk® promotes early literacy, physical activity, and family time together in nature. It's a fun and educational family activity that you can bring to your community! Take a stroll and enjoy successive pages from a children's story along your path.

walk to learn
- a schoolwide instructional model where students temporarily leave their homeroom classes to work in flexible, skill-based groups across grade levels

luminary -walk and reflect
- mindfulness and walking iOS app that turns daily walks into guided reflections.

Story:
- naturetales - location-bound stories for children-friendly routes in nature
- simmr - story-driven cooking app that transforms everyday meal prep into an engaging, guided experience

New grid

App	Description	Similarities	Differences
Brainrot: Screen Time Control	A digital companion that holds you accountable for the amount of screen time you expose yourself to.	· Companion · Holds you accountable · Gamifying	· Not a story · Not nature-related
Encounter Nature	Encounter is a guided nature journal that lives on your phone. Create beautiful diary entries complete with images, your location, and the weather. Find inspiration and ideas specific to your area and the time of year. Tag the things you see to help monitor how the natural world is faring, and make the app smarter over time.	· Guided reflection · Nature	· No companion · No story · No accountability · No gamification
Fantasy Hike	A fantasy world where your steps progress you through the story.	· Story · Nature-related · Gamification · Companion(?)	· No accountability · No reflection
Pikmin Bloom	AR game where walking and exercise help you find Pikmin	· Nature · Gamification · Companion(?)	· No reflection · No story

Self-reflect:
- reflection.app - journal app that talks back for coaching, turns journal entries into insights
- Mirror - mental health journaling app for different journal formats (voice, video)

Companion:
- Lentopet - virtual pet
- Meta Muse - companion charm
- mirumi

APPENDIX 3

Tarot Cards



APPENDIX 4

Storyline

Start by defining the context, actors, and conflict/resolution that will demonstrate your problem and showcase the power of your solution. Think about how your narrative will weave together the 3 key tasks

context

dying laptop battery

new to the area person, only walked the route to campus, or grocery store, have no "nature spot"

burnt out from work, checking emails or remote, just working inside for days, haven't seen anyone

midterm week/ long days in the library

actor

remote SWE, has a dog but goes on walks as chores

grad student: rarely goes outside just themselves (unless with friends)

first-year student, new to campus, finds trail apps intimidating

conflict/resolution

no permission: they feel that taking a break just for themselves is a luxury

no reason/motivation: going outside just for a walk feels aimless, so it never happens

foggy mind: their thoughts are swirling, have no time/place to sort out where they want to go

ideas slip away: they have a thought during the walk, and without a place to put it, its gone

- midterms burnout- a student is stuck inside during exams scrolling tiktok instead of resting. a story pulls her out of the rut and she comes back with a clear head. drained -> refreshed. strength: relatable to users and its easy to film on campus
- A friend drags a "not a nature person" roommate outside. they roll their eyes at chapter 1, but as they go through chapters, they get hooked, and at the end he sneaks out and secretly does the next one alone. dismissive -> hooked. strength: funny, similar to Ly-type users who go outside out of FOMO
- Someone got rejected from an internship and they run outside crying. they see a story open on the floor off to the side and she finds somewhere to direct the anger to, and a quiet place to let her process it. upset->grounded. strength: conflict, complex task takes priority over significant event
- Parallel screens where one person is living a day doom scrolling while another one follows the story outside. They have very different endings and its shown through contast. strenth: visually appealing and makes the value pretty obvious, but editing will be harder.
- the video opens with someone rereading an old note at a bench outside, and it flashes back to the walk that led them to that spot the first time. strenth: shows long term values.
- a transfer student doesnt know the campus and feels like an outsider. each chapter she reads introduces her to a new spot and by the end it looks more vibrant and bright bc she feels comfortable. lonely-> belonging. strenth: service dog card (isolation) and the story as a guide makes sense.

CS major in Coda for 36 hours studying for an exam and gets cooked anyway (they got -5/100 with a 5% margin of error)
--> demoralized, burnt out, need a break
--> Pendo appears and the student follows him outside on a walk (simple task)
--> Student feels refreshed but is disappointed because they only have a small amount of free time in the next few days due to other commitments/tests
--> Pendo barks and suggests short walks that fit the student's schedule
--> student chooses one of them (moderate)
--> student has some insights and records them (complex)

Person reading book feels comfortable and doesn't want to go outside, their step count on their watch or something is really low or says they need exercise; Pendo jumps and grabs their book and runs outside, so the person follows and enjoys a walk

- Pendo appears and user follows him
- pendo barkes and suggests short walks that fits the users schedule and location
- pendo jumps and grabs their book and runs outside
- story pulls user out of the rut
- gets hooked by the story --> sneaks out and secretly does the next story alone
- see storybook open on the floor
- each chapter user reads introduces them to a new spot
- connecting to nature and self makes user feel belonging in the world even in social isolation
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1. Context: some one stressed, demoralized, burnt out, need a break
2. Simple task: Pendo appears and asks to go outside
    a. User wants to but is worried because they only have limited time and doesn't know where to go
3. Moderate Task: Pendo barks and suggests sl walks that fit the users' schedule and locatio
    a. User chooses one of them
4. Complex task: User has insights along the w records them (talk to pendo)
    a. User feels refreshed and
5. in the future, proactively wants to pick up pe go outside

Outline

1. **Context: some one stressed, demoralized, burnt out, need a break**
2. **Simple task: Pendo appears and asks to go outside**
    a. **User wants to but is worried because they only have limited time and doesn't know where to go**
3. **Moderate Task: Pendo suggests short walks that fit the users' schedule and location**
    a. **User chooses one of them**
4. **Complex task: User has insights along the walk and records them (talk to pendo)**
    a. **User feels refreshed**
5. **In the future, user proactively wants to pick up pendo to go outside**

Scene 1: from outside the window, user looks tense, stressed, the dirty and empty coffee cups and dying computer battery shows how he is overworked
Scene 2: dog wants to go outside, he is standing and scratching on the door, bringing a leash
Scenes 3: show calendar and close up shot of free time block, looks at dog, looks at map (paper), doesn't know where to go
Scene 4: Pendo barks and brings the map, points his paw at a place in the map. User expresses that it's too far, so Pendo brings a different map
Scene 5: Finally, reluctantly user agrees, takes the leash
Scene 6: users starts enjoying the walk, sees something that inspires them,
Scene 7: Pendo brings notebook
Scene 8: User looks happy, video colors become vibrant, music swells
Scene 9: Pendo is asleep, but user forces Pendo to go outside.

APPENDIX 5

Scenes/Shot list

#	Shot	What happens	Approx. time	sounds
1	Wide, through window	He's hunched at the desk, with dirty cups and a laptop battery warning. Colors are muted.	0:00-0:07	
2	Medium, low angle	Pendo scratches at the door and drops the leash at his feet.	0:07-0:13	
3	Insert + POV	Calendar close-up with one small free block. He glances at Pendo, then at the paper map and shrugs.	0:13-0:21	
3.5	Split or alternating shots	Pendo paws a spot on the map, he shakes his head ("too far"), and Pendo tries another.	0:21-0:30	
4	Close-up	Pendo holds out the Chapter 1 "Campus Loop" card, and he nods.	0:30-0:35	
5	Over-the-shoulder	He reluctantly takes the leash and heads out.	0:35-0:40	
6	Tracking shot	He walks, loosens up, and notices something small (a leaf, a light patch).	0:40-0:50	
7	Medium, then close-up	He finds a quiet bench or corner. Pendo settles, and he opens the notebook and writes.	0:50-1:05	
8	Wide, then close-up	Colors turn vibrant and the music swells. He smiles, with Pendo beside him.	1:05-1:12	
9	Close-up	Later, Pendo is asleep, and he gently wakes him to go out again.	1:12-1:20	
End	Title card	Credits.	1:20-1:25	