AidBrain

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55 Million

Dementia in numbers

What is Alzheimer's?

The most common form of **dementia**.

A population health issue

55M
cases globally

10M
new cases each year

By 2050
150M
cases

Economic and human cost

7th
leading cause of death

Caregiver burnout and financial burden

Annual cost to Canada's economy & healthcare system
$10.4B

Current diagnosis

Neuropsychological tests

B2B Apps

Brain scans

Solution

Objective Drive scalable assessment & management of cognitive health

Opportunity Sensory and motor fluctuations as biomarkers for Alzheimer's

aidBrain

Speech

Analyze intonation, rhythm and stress

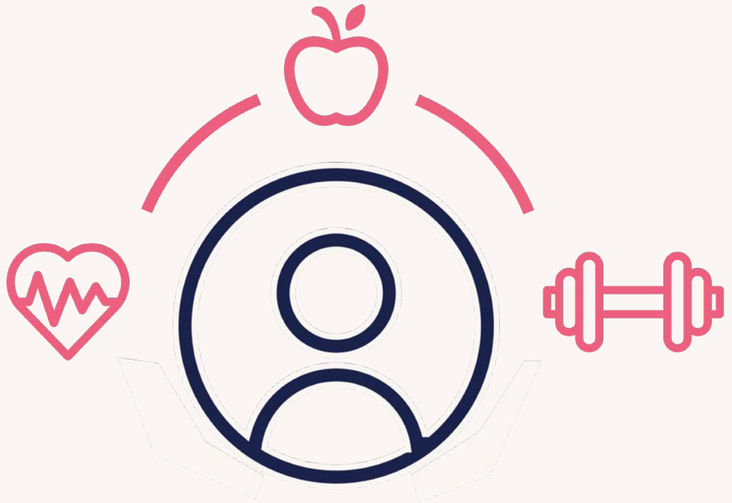
Vision

Shaky drawing, loss of muscle control

Dexterity

Follow an object as it moves around the screen

Assess



Reccomend

Business model

Customer segments

7.7M

Primary

50-65 “at risk”

7.8M

Secondary

30-45 “educators”

Value proposition

Early diagnosis of Alzheimer’s

Improved quality of life

Family support

Competitive advantage

Key activities

Add social interaction features for additional support, connection, and motivation

Support

Connect with a therapist to relieve distress and improve overall outlook

Business model

Cost

Externally outsourced
47% = $200,000

Outsourced for marketing
11% = $47,000

Channels

15%
Health associations

35%
Digital channels

10%
Health expo

20%
Email Campaigns

5%
Medical community

15%
TV/Radio

Revenue streams

Subscription fees

Free

- ✓ **Alzheimer's prediction**

Starter | **$9/mth** | **$99/yr**

Everything in free plus:

- ✓ **Recommendation**

Aid plus | **$12/mth** | **$119/yr**

Everything in free starter:

- ✓ **Community**
- ✓ **Support**

Design thinking

	Empathize	Define	Ideate & prototype	Deliver
Goals	Understanding the user	The problem	Potential solutions	Iterate and improve
Insights	◆ Consumers aren't aware that reducing their risk of Alzheimer's is possible ◆ Alzheimer's affects 10 million people every year	◆ **How might we** empower individuals to take control of their cognitive health through a series of assessments that can be completed on their mobile device?	◆ Mobile application that helps in recognizing the biomarkers associated with Alzheimer's, including voice recognition, dexterity, and eye tracking	◆ Incorporate feedback from consumers in order to continue expanding product offerings ◆ Strategic partnerships
Action items	Background research, competitive analysis, user interviews, user persona generation, empathy map	Feature prioritization, journey map, identifying challenges	Mid-fidelity, high-fidelity, and prototypes iteration	Product usage insights, expansion opportunities

User interviews

Through conducting in-depth user interviews with **3 participants**, we were able to identify **pain points** that would help us in creating our final solution.

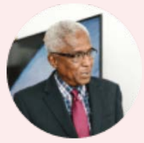
Accessibility

I always thought that I'd have to go see my doctor who would then send me off to go see a bunch of different specialists.

Susan, 47
Registered Social Worker

Easy-of-use

I'm not the most technologically advanced person. I can get by using simple features of a mobile phone but need help with certain things.



Larry, 66
Retired, ex-teacher

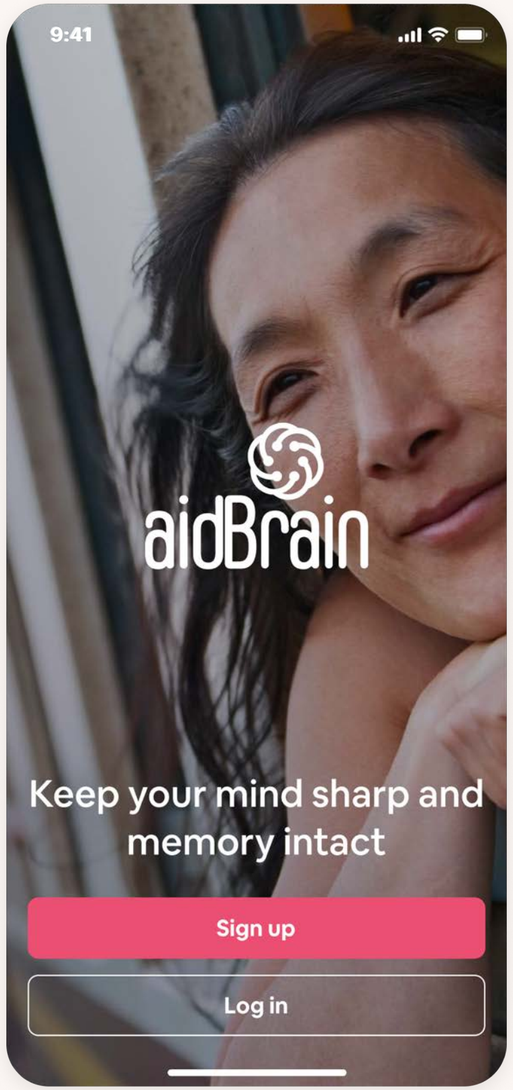
Awareness

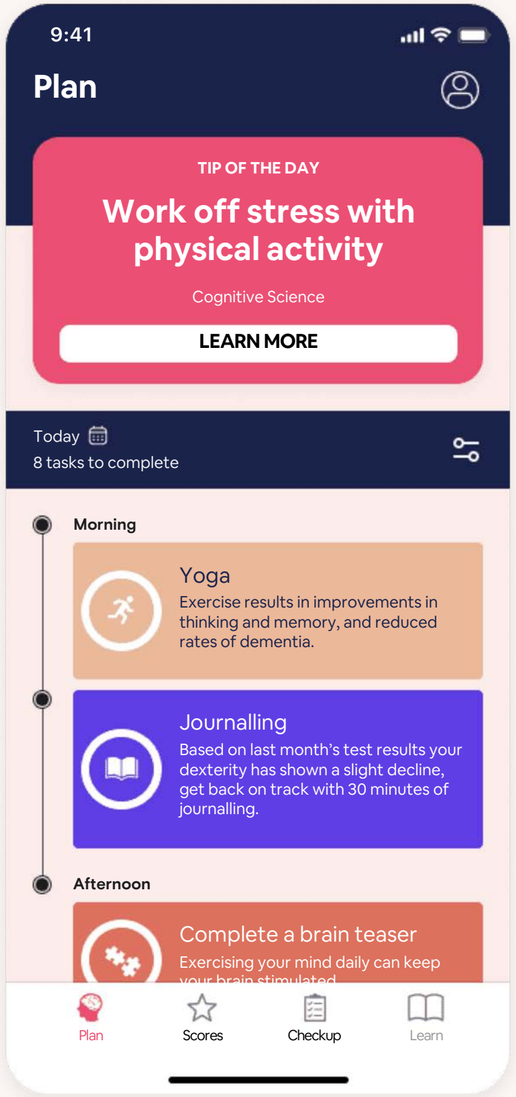
I didn't even know that someone as young as me could get Alzheimer's or that there are preventative measures I could be taking.

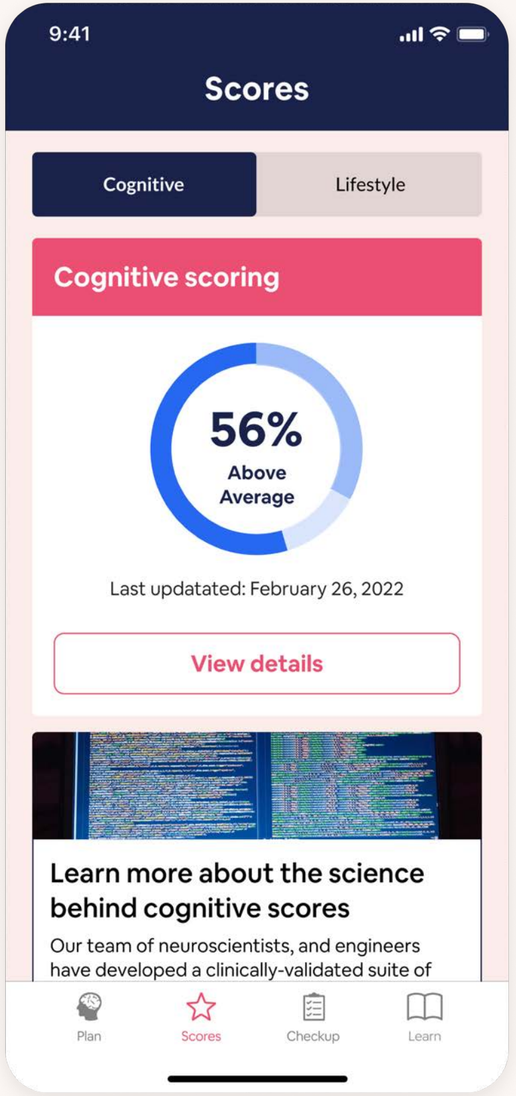
Michelle, 34
Marketing Manager

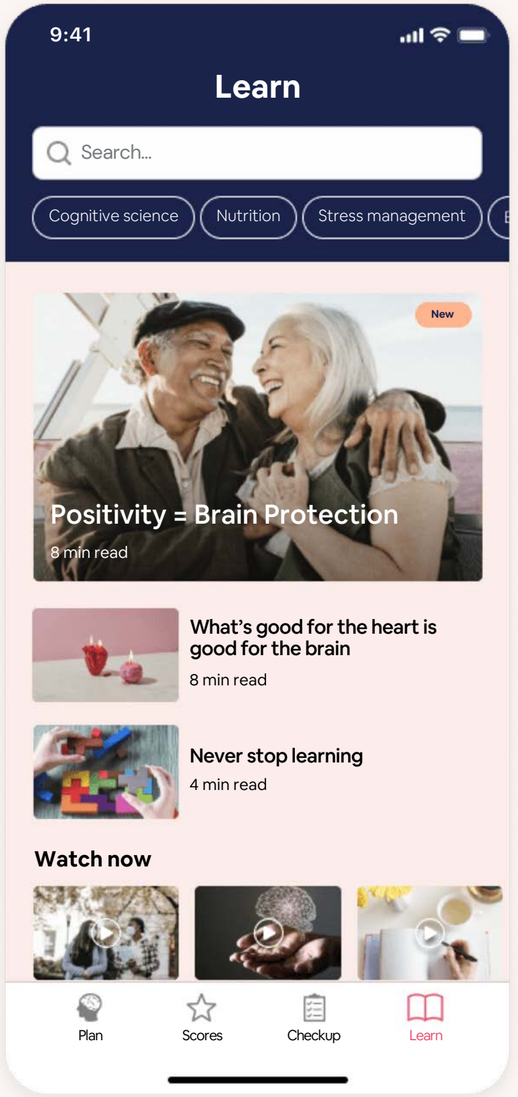
Participants real picture has not been used for privacy reasons.

Building an MVP









Building an MVP

9:41

AidBrain

Take regular assessments to monitor your brain health and lifestyle changes

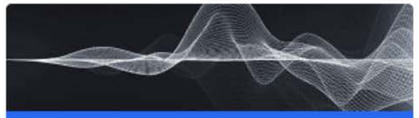
Cognitive assessments

We recommend taking these assessments every month, it should take you no more than 20 minutes.

Eye tracking

Domains measured: Ocular functions

5 min



Audio recording

Domains measured: Intonation, rhythm and stress

3 min

Handwriting

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Plan Scores Checkup Learn

9:41

Eye tracking test

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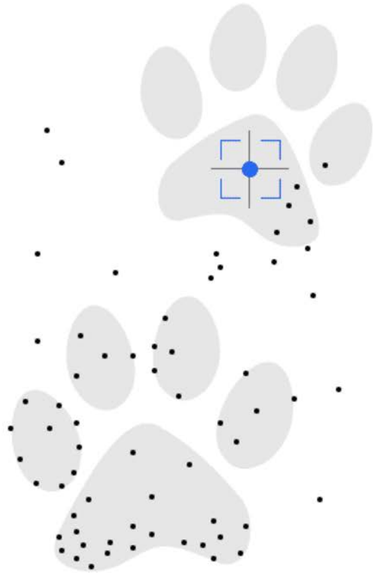

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Read the following 3 sentences out loud. Click next to go to the next sentence.

Mary and Samantha arrived at the bus station early but waited until noon for the bus.

Next

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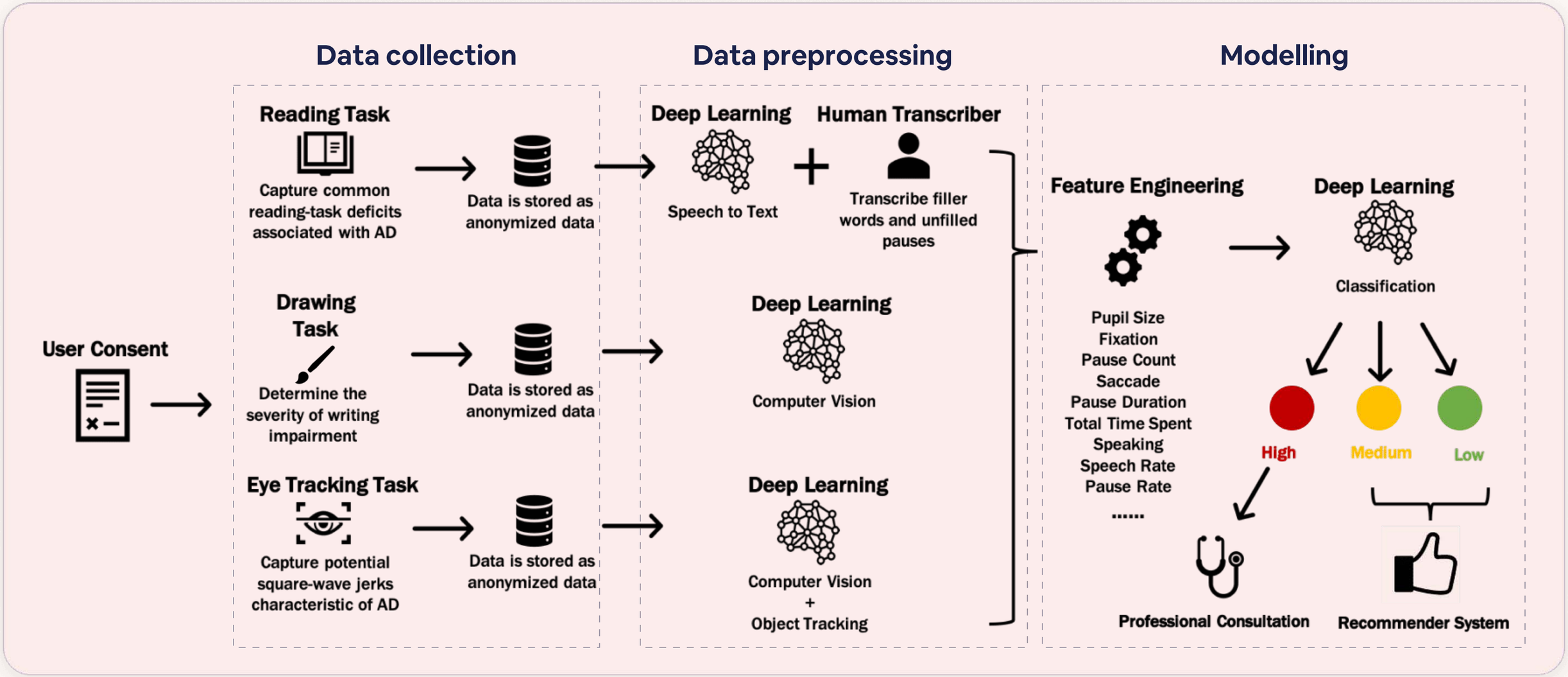
Handwriting

Using your finger, trace the image below.

Done

Plan Scores Checkup Learn

Data journey



Product roadmap

Prototype

Proof of concept

Target date: Q2’2022

- Build a proof of concept that leverages AI with digital biomarkers – eye movement, dexterity, and audio to diagnose Alzheimer’s disease

MVP

Support early diagnosis of Alzheimer’s

Target date: Q3’2022

- Digital mobile app (iOS, Android) roll out to limited users
- Product with enough features to meet early detection of Alzheimer’s disease and get user feedback

Core-product

Customer subscription & enhanced features

Target date: Q1’2023

- Partnerships with “Memory and Brain Health Program”
- Incorporate user experience issues and feedback
- Integrate with voice assistance apps

Full scale product

Expansions into NA market & localization

Target date: Q3’2023

- Gamification: Brain challenges & games to improve cognitive ability
- Localization of app in French, Spanish and other languages

Risks & ethics

Misdiagnosis

- We can ensure up to 80% confidence
- Not a replacement for doctors - encourage users to seek medical attention when required
- Encourage lifestyle changes to reduce exposure to risks

Accessibility

- Promote equitable access to high-quality care
- Accessible to diverse populations with disabilities
- Disability Accommodation for an end user through customer support

Data security

- Only authorized users with Admin privileges can access production data
- Data is stored in a secure environment and transmitted through secured protocol methods (SFTPS's)
- Data encryption and recovery methods

Commercial

- Incentives on monthly subscription plans to low-income families.
- Add new features and provide continuous improvement in quality and service for customer retention
- Review KPI's on monthly basis 's to gauge future targets

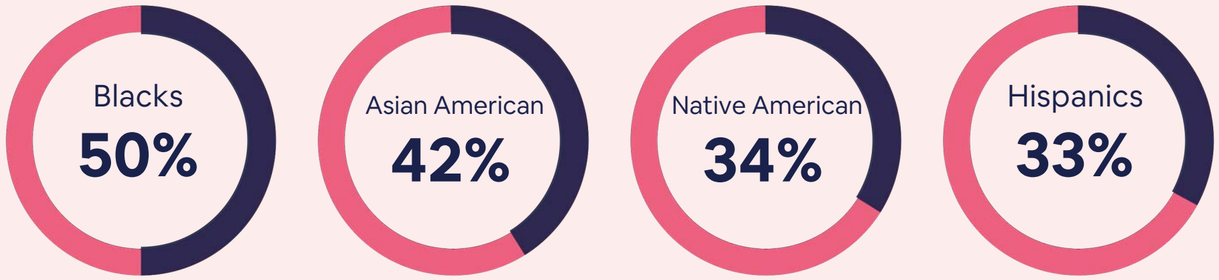
Data privacy

- Collect minimum amount of personally identifiable information
- Enforce policies and procedures that promote good practices for Data collection and use to respect the rights of individuals
- Breach and incident management protocols are in place

Impact

Discrimination

These populations reported discrimination when seeking health care:



Reduce burnout & economic burden

- 30% of people taking care of people with Alzheimer's report mental exhaustion
- Labor market missed days
- $12 Billion in costs today

Awareness

- 56% of Canadians are concerned about being affected by Alzheimer's disease
- 46% of Canadians admit they would feel ashamed if they had dementia
- 87% of caregivers wish that more people understood the realities for caring for someone with Dementia

Lives saved

4 Million over 10 Years

Success metrics

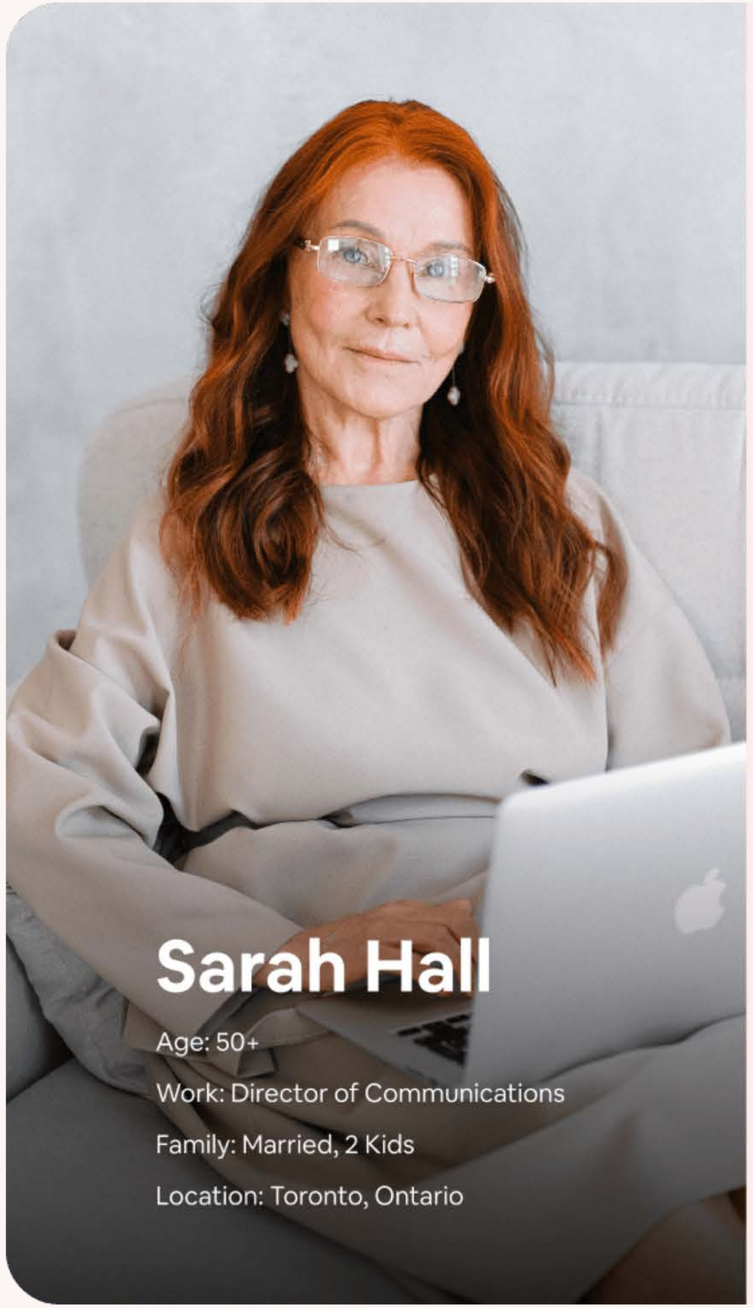
downloads in the first year

monthly active users

Questions?

Appendix

User persona



Sarah Hall

Age: 50+

Work: Director of Communications

Family: Married, 2 Kids

Location: Toronto, Ontario

GOALS & NEEDS

- She needs something that allows her to monitor and improve her health that isn't too time consuming or hard to use

- Her goal is to identify any changes that she can make in her lifestyle in order to continue living a life without Alzheimer's. She wants to enjoy the latter years of her life with her husband, children, and grandchildren without being a burden.

HESITATIONS & PAIN POINTS

- Is hesitant about the potential of being told what to do by an app
- She's not overly tech saavy and fears using an app that is complex and difficult to use
- She doesn't want to spend countless hours visiting her doctor or being sent to multiple specialists

BIO

Sarah, a highly sought-after communications professional is nearing the end of her professional career and looking forward to retirement. Throughout her life she has tried to maintain a healthy lifestyle, but the demands of her career, as well as her family have often come at the sacrifice of her own self-care.

She's looking to take more control of her cognitive health especially considering that she will have much more free time after she retires. She has always been action-oriented and feels like she needs tangible next steps that she can easily implement in her life. She doesn't want to spend too much time using technology, as she sometimes struggles and can get easily frustrated.

MOTIVATIONS

Maintaining her health

Changing her lifestyle

Being able to live a quality life

Not being a burden on her family

PERSONALITY

Introvert — Extrovert

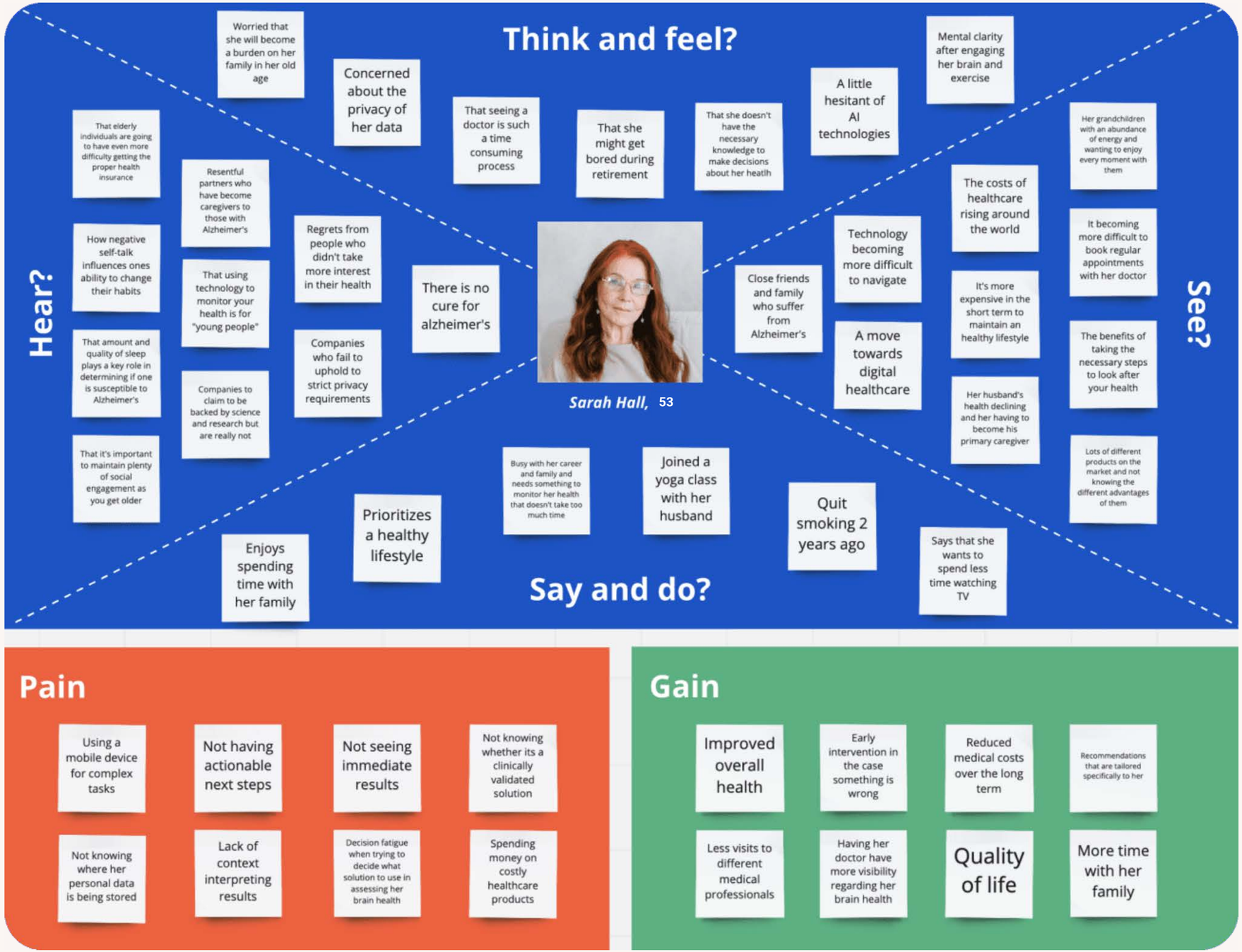
Sensing — Intuition

Thinking — Feeling

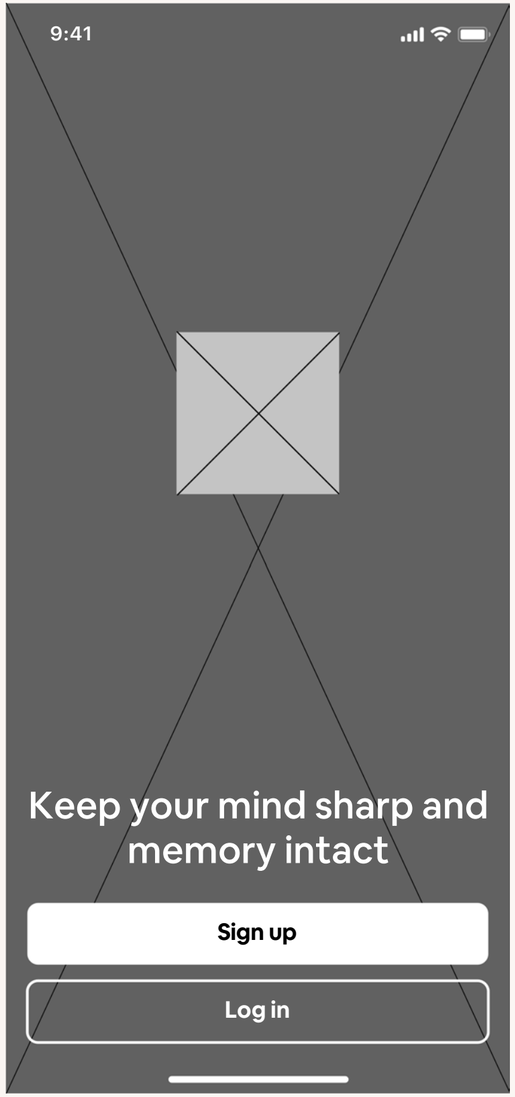
Judging — Perceiving

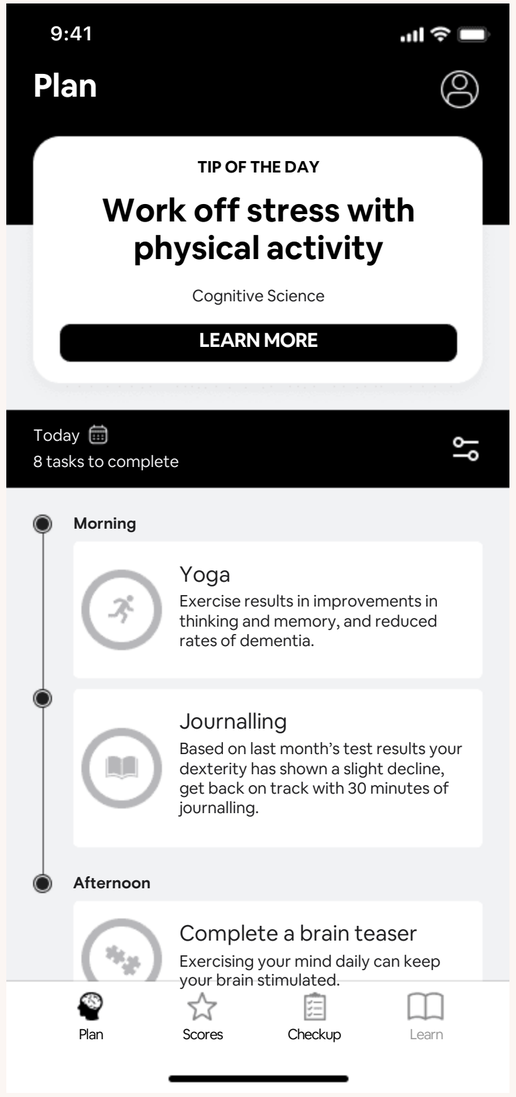
FAVORITE BRANDS

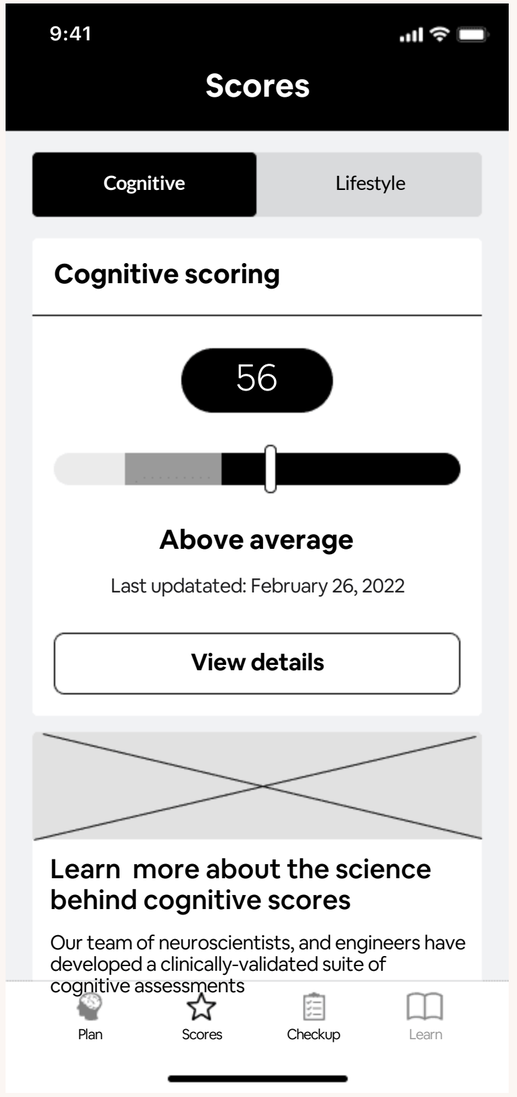
Empathy map

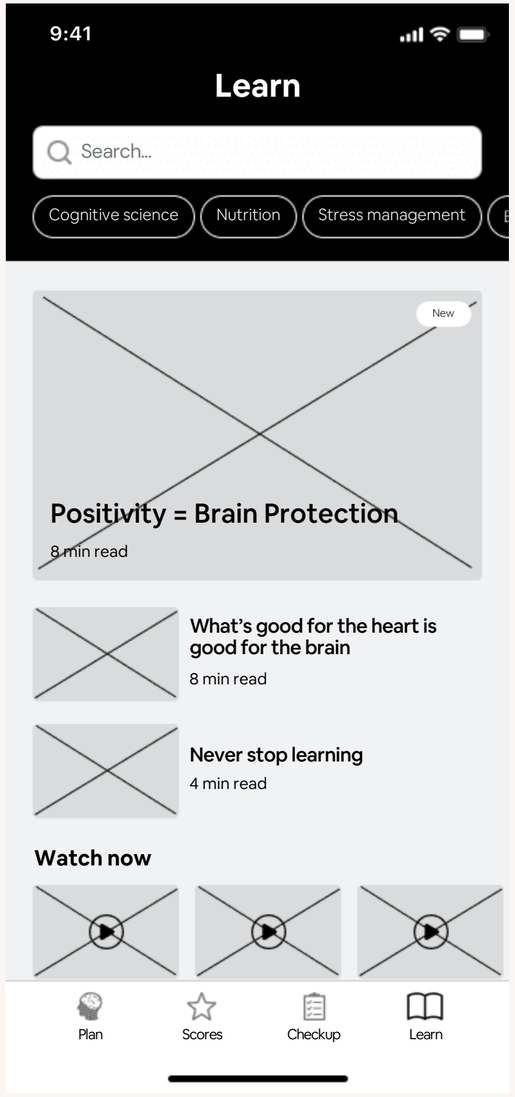

Think and feel?
Worried that she will become a burden on her family in her old age
Concerned about the privacy of her data
That seeing a doctor is such a time consuming process
That she might get bored during retirement
That she doesn't have the necessary knowledge to make decisions about her health
A little hesitant of AI technologies
Mental clarity after engaging her brain and exercise
Hear?
That elderly individuals are going to have even more difficulty getting the proper health insurance
How negative self-talk influences ones ability to change their habits
That amount and quality of sleep plays a key role in determining if one is susceptible to Alzheimer's
That it's important to maintain plenty of social engagement as you get older
Resentful partners who have become caregivers to those with Alzheimer's
That using technology to monitor your health is for "young people"
Companies to claim to be backed by science and research but are really not
Regrets from people who didn't take more interest in their health
Companies who fail to uphold to strict privacy requirements
There is no cure for alzheimer's
Sarah Hall, 53
Close friends and family who suffer from Alzheimer's
Technology becoming more difficult to navigate
A move towards digital healthcare
The costs of healthcare rising around the world
It's more expensive in the short term to maintain an healthy lifestyle
Her husband's health declining and her having to become his primary caregiver
Her grandchildren with an abundance of energy and wanting to enjoy every moment with them
It becoming more difficult to book regular appointments with her doctor
The benefits of taking the necessary steps to look after your health
Lots of different products on the market and not knowing the different advantages of them
See?
Say and do?
Enjoys spending time with her family
Prioritizes a healthy lifestyle
Busy with her career and family and needs something to monitor her health that doesn't take too much time
Joined a yoga class with her husband
Quit smoking 2 years ago
Says that she wants to spend less time watching TV
Pain
Using a mobile device for complex tasks
Not having actionable next steps
Not seeing immediate results
Not knowing whether its a clinically validated solution
Not knowing where her personal data is being stored
Lack of context interpreting results
Decision fatigue when trying to decide what solution to use in assessing her brain health
Spending money on costly healthcare products
Gain
Improved overall health
Early intervention in the case something is wrong
Reduced medical costs over the long term
Recommendations that are tailored specifically to her
Less visits to different medical professionals
Having her doctor have more visibility regarding her brain health
Quality of life
More time with her family

Mid-fidelity wireframes









Mid-fidelity wireframes

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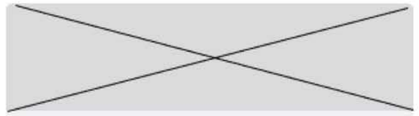

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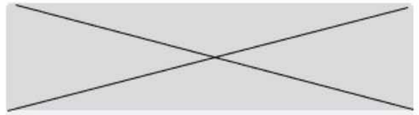

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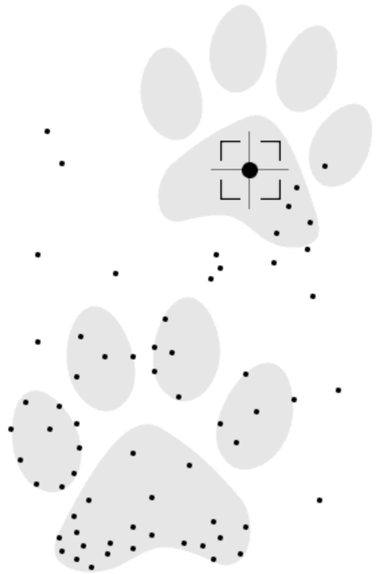

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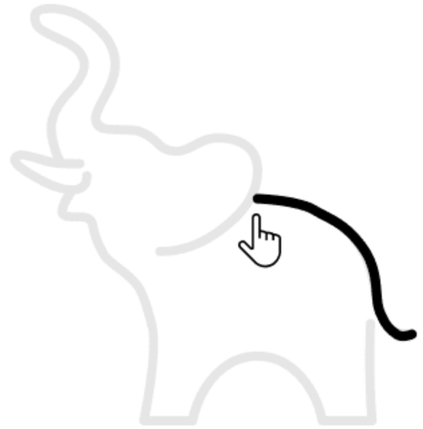

Done

Plan Scores Checkup Learn

Revenue

			500,000.00	
			# of Users	
0	$0.00	60%	300,000	$0.00
1	$9.99	30%	150,000	$1,498,50(
2	$12.00	10%	50,000	$600,000.(
			Total Sales	$2,098,50(

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