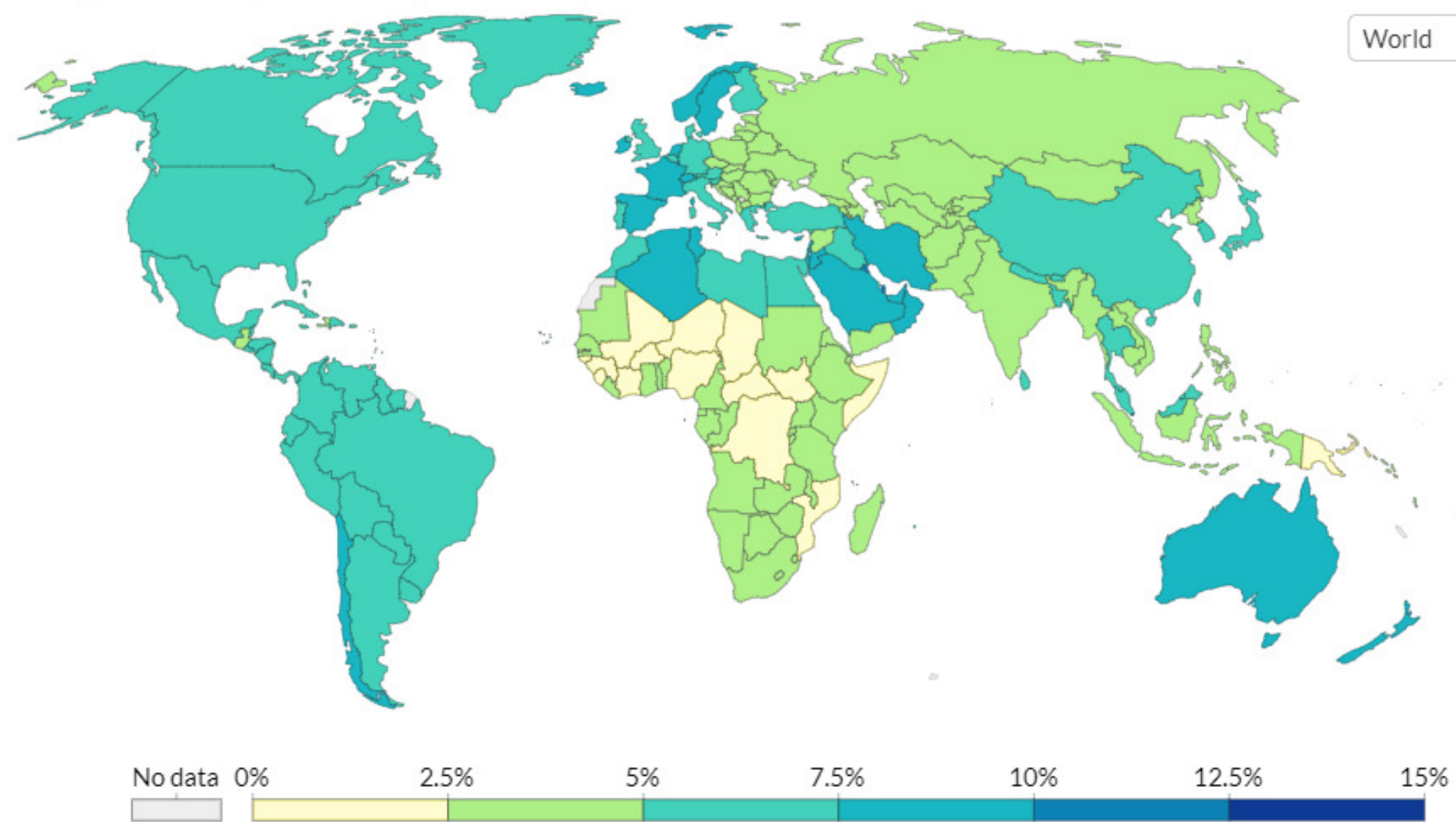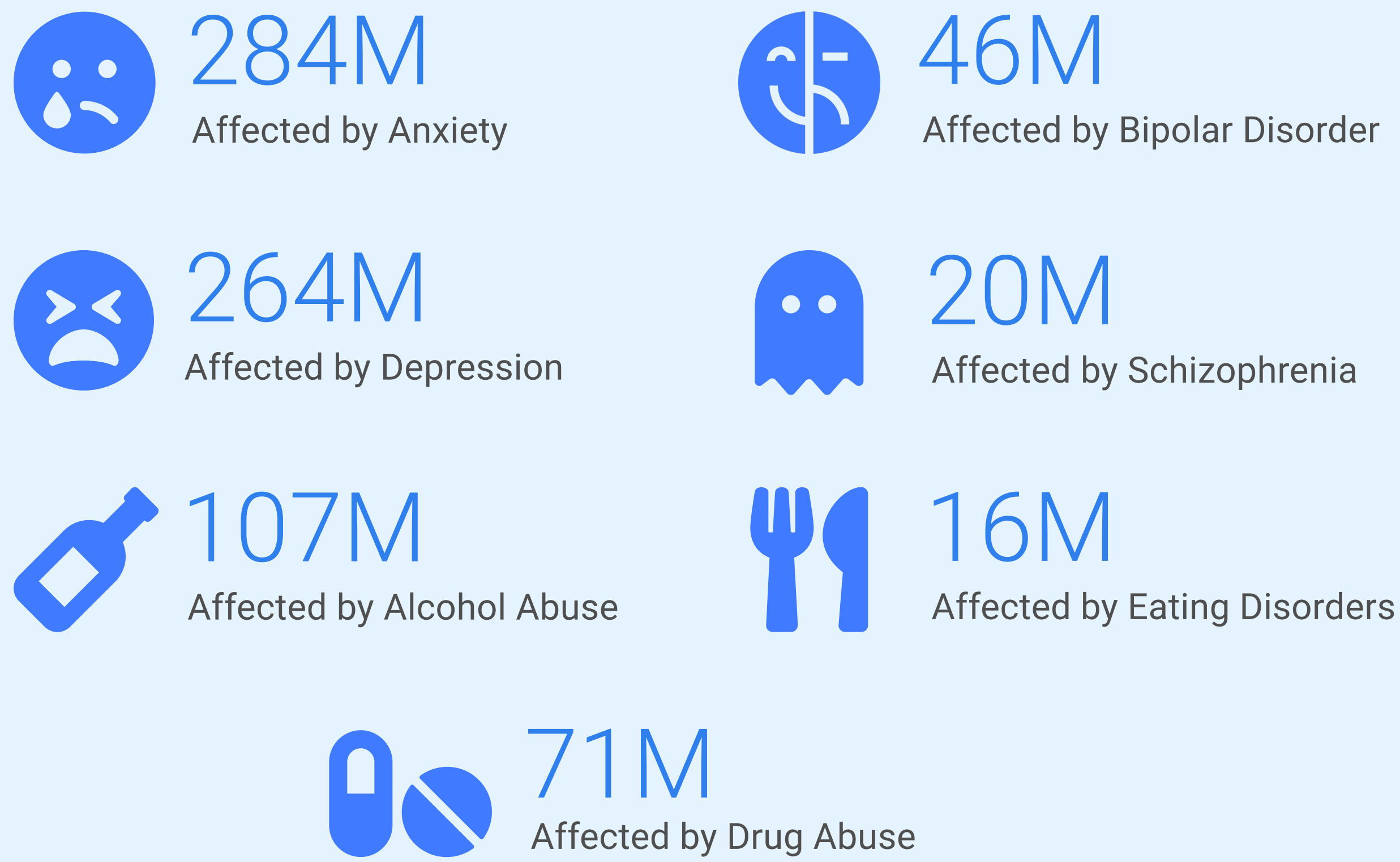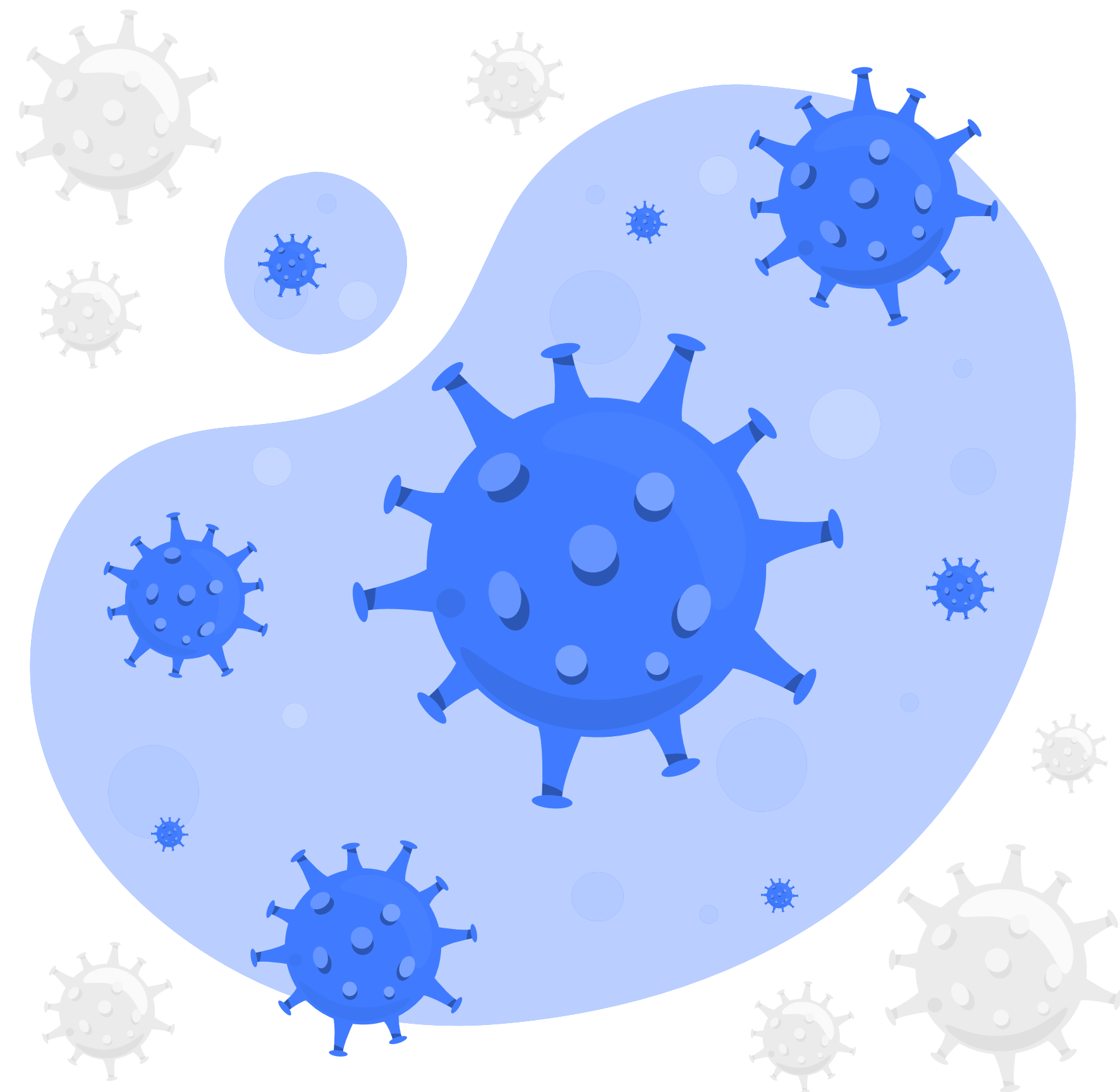# INVICTUS

KOUSIK DUTTA

ADITYA RAJPUT

Source: IHME, Global Burden of Disease

CC BY

Today, nearly **1 Billion** people live with a mental disorder and in low-income countries, more than **75% of people** don't recieve treatment.

According to the "ourworldindata.org",

284M
Affected by Anxiety

264M
Affected by Depression

107M
Affected by Alcohol Abuse

71M
Affected by Drug Abuse

46M
Affected by Bipolar Disorder

20M
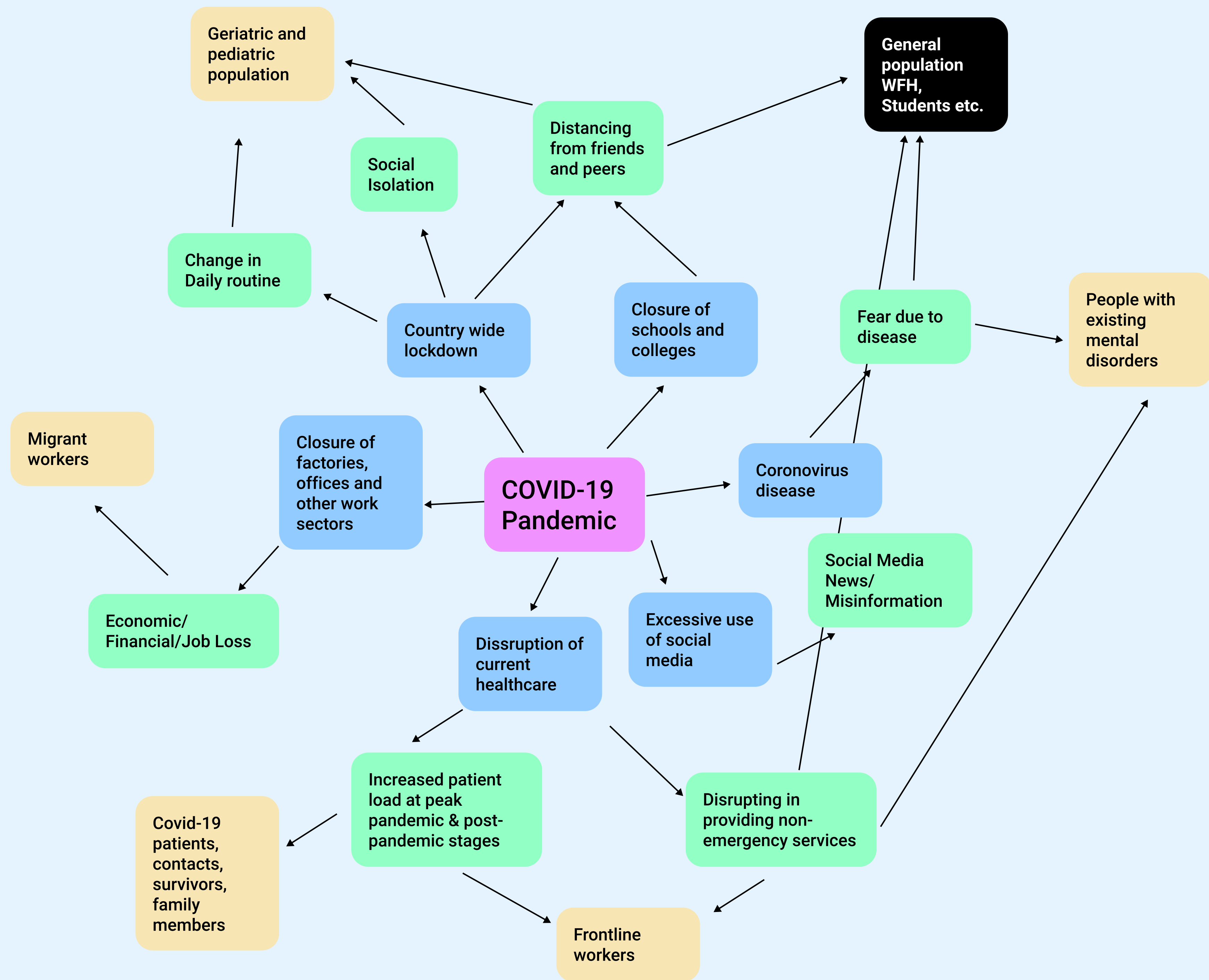Affected by Schizophrenia

16M
Affected by Eating Disorders

According to the World Health Organization (WHO),

COVID-19 pandemic has disrupted or, in some cases **halted critical mental health services in 93% of countries** worldwide, while the demand for mental health is increasing.

Problem identification & choosing space

- Geriatric and pediatric population
- General population WFH, Students etc.
- Distancing from friends and peers
- Social Isolation
- Change in Daily routine
- Country wide lockdown
- Closure of schools and colleges
- Fear due to disease
- People with existing mental disorders
- Migrant workers
- Closure of factories, offices and other work sectors
- COVID-19 Pandemic
- Coronovirus disease
- Economic/ Financial/Job Loss
- Dissruption of current healthcare
- Excessive use of social media
- Social Media News/ Misinformation
- Increased patient load at peak pandemic & post-pandemic stages
- Covid-19 patients, contacts, survivors, family members
- Disrupting in providing non-emergency services
- Frontline workers

Problem Statement

How might we **improve the micro-environment of Indian Work-from-Home professionals** & study from home students to **keep them mentally & psychologically healthy** during & post COVID-19?
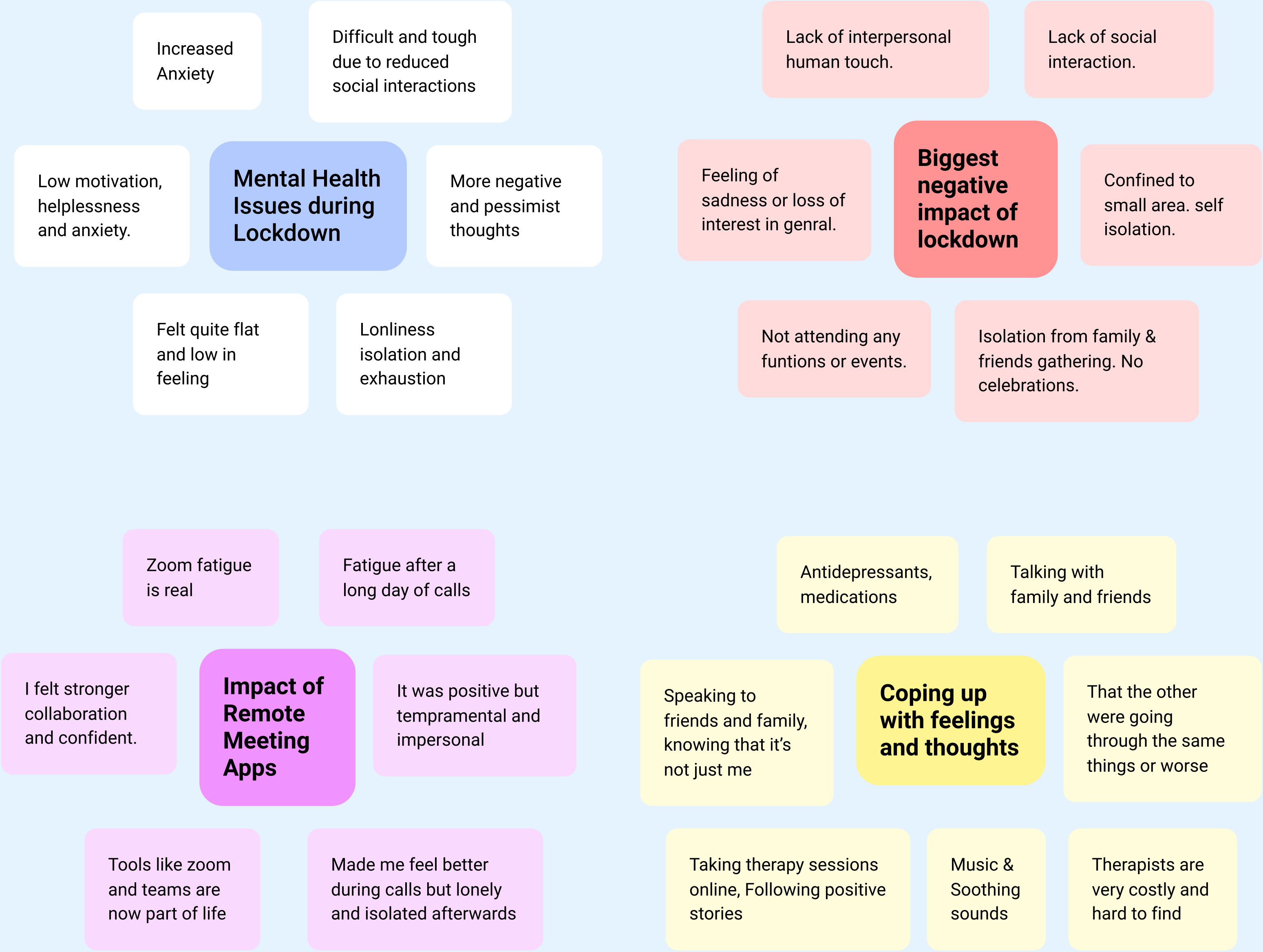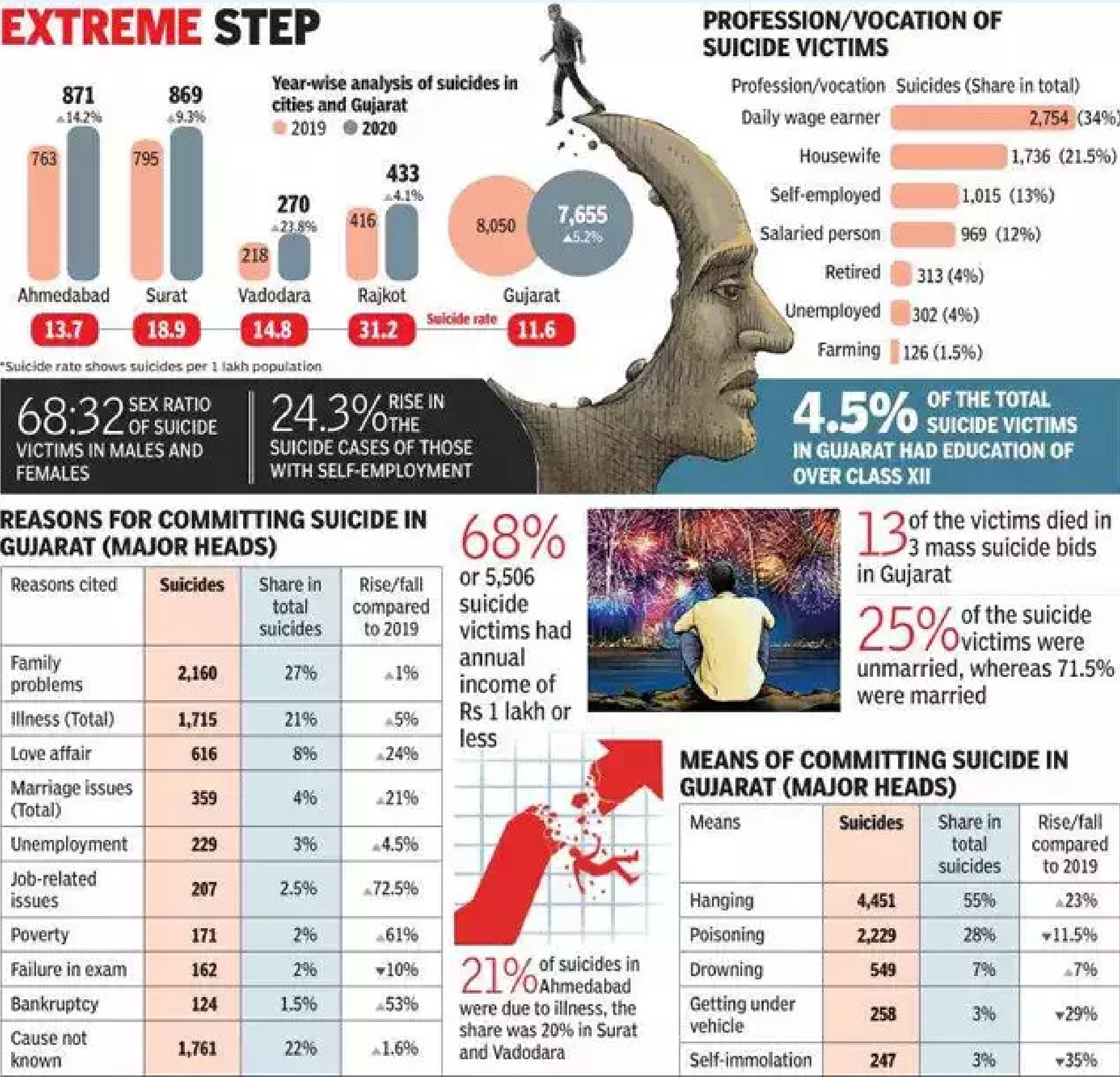
Research

07 Students

05 WFH Professional

19 Research Papers

40+ Newspaper & Articles

Increased Anxiety

Difficult and tough due to reduced social interactions

Low motivation, helplessness and anxiety.

Mental Health Issues during Lockdown

More negative and pessimist thoughts

Felt quite flat and low in feeling

Lonliness isolation and exhaustion

Lack of interpersonal human touch.

Lack of social interaction.

Feeling of sadness or loss of interest in genral.

Biggest negative impact of lockdown

Confined to small area. self isolation.

Not attending any funtions or events.

Isolation from family & friends gathering. No celebrations.

Zoom fatigue is real

Fatigue after a long day of calls

I felt stronger collaboration and confident.

Impact of Remote Meeting Apps

It was positive but tempramental and impersonal

Tools like zoom and teams are now part of life

Made me feel better during calls but lonely and isolated afterwards

Antidepressants, medications

Talking with family and friends

Speaking to friends and family, knowing that it's not just me

Coping up with feelings and thoughts

That the other were going through the same things or worse

Taking therapy sessions online, Following positive stories

Music & Soothing sounds

Therapists are very costly and hard to find

Newspaper Articles

EXTREME STEP

Year-wise analysis of suicides in cities and Gujarat
2019 / 2020

City	2019	2020	Suicide rate
Ahmedabad	763	871 (▲14.2%)	13.7
Surat	795	869 (▲9.3%)	18.9
Vadodara	218	270 (▲23.8%)	14.8
Rajkot	416	433 (▲4.1%)	31.2
Gujarat	8,050	7,655 (▲5.2%)	11.6

*Suicide rate shows suicides per 1 lakh population

PROFESSION/VOCATION OF SUICIDE VICTIMS

Profession/vocation	Suicides (Share in total)
Daily wage earner	2,754 (34%)
Housewife	1,736 (21.5%)
Self-employed	1,015 (13%)
Salaried person	969 (12%)
Retired	313 (4%)
Unemployed	302 (4%)
Farming	126 (1.5%)

68:32 SEX RATIO OF SUICIDE VICTIMS IN MALES AND FEMALES

24.3% RISE IN THE SUICIDE CASES OF THOSE WITH SELF-EMPLOYMENT

4.5% OF THE TOTAL SUICIDE VICTIMS IN GUJARAT HAD EDUCATION OF OVER CLASS XII

REASONS FOR COMMITTING SUICIDE IN GUJARAT (MAJOR HEADS)

Reasons cited	Suicides	Share in total suicides	Rise/fall compared to 2019
Family problems	2,160	27%	▲1%
Illness (Total)	1,715	21%	▲5%
Love affair	616	8%	▲24%
Marriage issues (Total)	359	4%	▲21%
Unemployment	229	3%	▲4.5%
Job-related issues	207	2.5%	▲72.5%
Poverty	171	2%	▲61%
Failure in exam	162	2%	▼10%
Bankruptcy	124	1.5%	▲53%
Cause not known	1,761	22%	▲1.6%

68% or 5,506 suicide victims had annual income of Rs 1 lakh or less

21% of suicides in Ahmedabad were due to illness, the share was 20% in Surat and Vadodara

13 of the victims died in 3 mass suicide bids in Gujarat

25% of the suicide victims were unmarried, whereas 71.5% were married

MEANS OF COMMITTING SUICIDE IN GUJARAT (MAJOR HEADS)

Means	Suicides	Share in total suicides	Rise/fall compared to 2019
Hanging	4,451	55%	▲23%
Poisoning	2,229	28%	▼11.5%
Drowning	549	7%	▲7%
Getting under vehicle	258	3%	▼29%
Self-immolation	247	3%	▼35%

Anxiety over COVID-19 leads to Phagwara woman's suicide
Didn't want her family to get it, says daughter

COVID-19: Man commits suicide after being quarantined in Madhya Pradesh

Corona scare drives youth to suicide, third in UP
24 March 2020 Last Updated at 2:06 pm | Source: IANS

Suicide leading cause for over 300 lockdown deaths in India, says study

Coronavirus in India: Suspected Covid-19 patient who committed suicide in UP hospital tests negative

Unable To Care For Family, UP Man Commits Suicide, Blames Lockdown

COVID-19 has exacerbated India's hidden mental health pandemic

Competitors	Calm	Minddoc	Wysa	Moodfit	Talkspace	Headspace	Sanvello	Happify	Dr. Mind
Guided Theraphy	○	●	○	○	●	○	●	●	○
Anti-Depression	○	●	●	○	○	○	○	●	○
Personalization	○	○	○	●	○	●	●	●	○
Mood Tracking	○	●	●	●	○	○	○	○	○
Anti-Anxiety	●	●	●	●	●	●	●	●	●
Meditation	●	○	○	●	○	●	●	●	○
Gamification	○	○	○	○	●	●	○	●	●
Emergency Service	○	○	●	○	●	○	○	○	●
Podcasts	●	●	●	○	○	●	○	●	○
Community	○	○	●	○	○	○	●	○	○
Anti-Stress	●	●	●	●	●	●	●	●	●
AI Friend	○	○	●	○	○	○	○	○	○

User Personas

Anmol Garg: Study from home student

Goals

- More **socializing & fun**
- Study with complete focus
- Understand the what teacher saying
- Play more and **explore hobbies**
- Do a variety of things

Demographics

- Anmol, 13
- Bachelor
- Urban
- Student
- On Budget

Pain-Points

- **Feels lonely**
- Poor focus and distracted
- Zoom Fatigue in long classes
- Gets anxious with studies
- **Monotonus and boring classes**
- **All study no play/recreation**

Motivations

- Success
- Fun & Recreation
- Socializing
- Peace

Needs/Wants

- Study with **stress-free peaceful mind**
- Have more interesting social interactions
- Improve learning and remembering
- **Someone to talk to & play with**

Personality

Extrovert	Introvert
Loyal	Fickle
Adventurous	Cautious
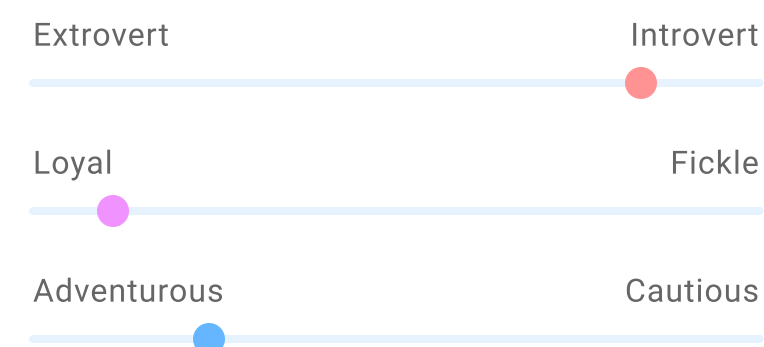
Technology

Suman Rai : Work form home employee
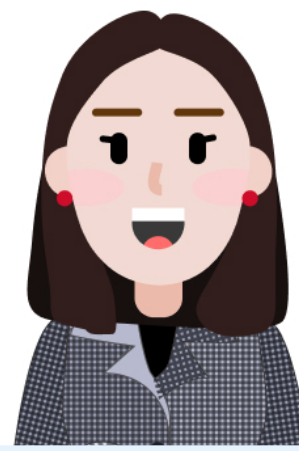
Goals

- Spend **more time with family**
- **Connect** & Enjoy **with Friends**
- **Maintain mental peace** at home
- Increase **productivity**
- Improve **time-management**

Demographics

- Suman, 46
- Married
- Urban
- Working
- On Budget

Pain-Points

- **Work-life Imbalance**
- Difficulty in managing stressful work
- **Poor Quality sleep** and mental health
- Gets irritated and **anxious during work**
- **No time for self-care** & mental health
- Negative & **Pessimistic Thoughts**

Motivations

- Money
- Peace
- Socializing
- Family

Needs/Wants

- **Control** phone & **social media addiction**
- Take care and safety of family
- Maintain calm and peace in stressful day
- Someone to talk to & discuss issues

Personality

Extrovert	Introvert
Loyal	Fickle
Adventurous	Cautious
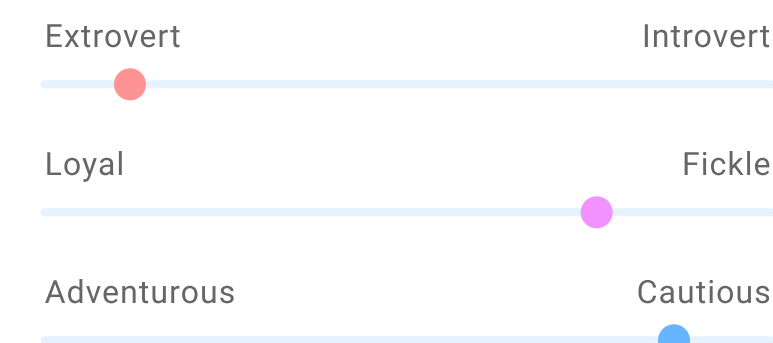
Technology

User Story: Before using "Poised"
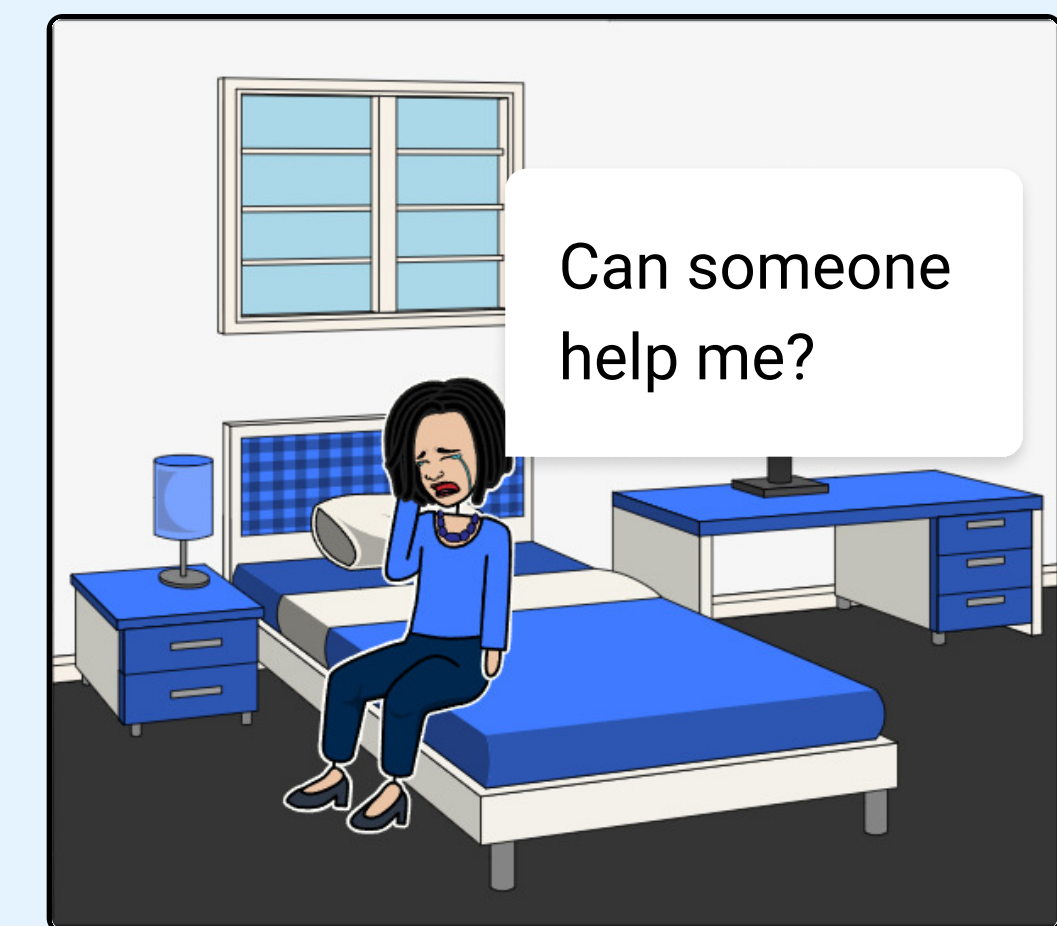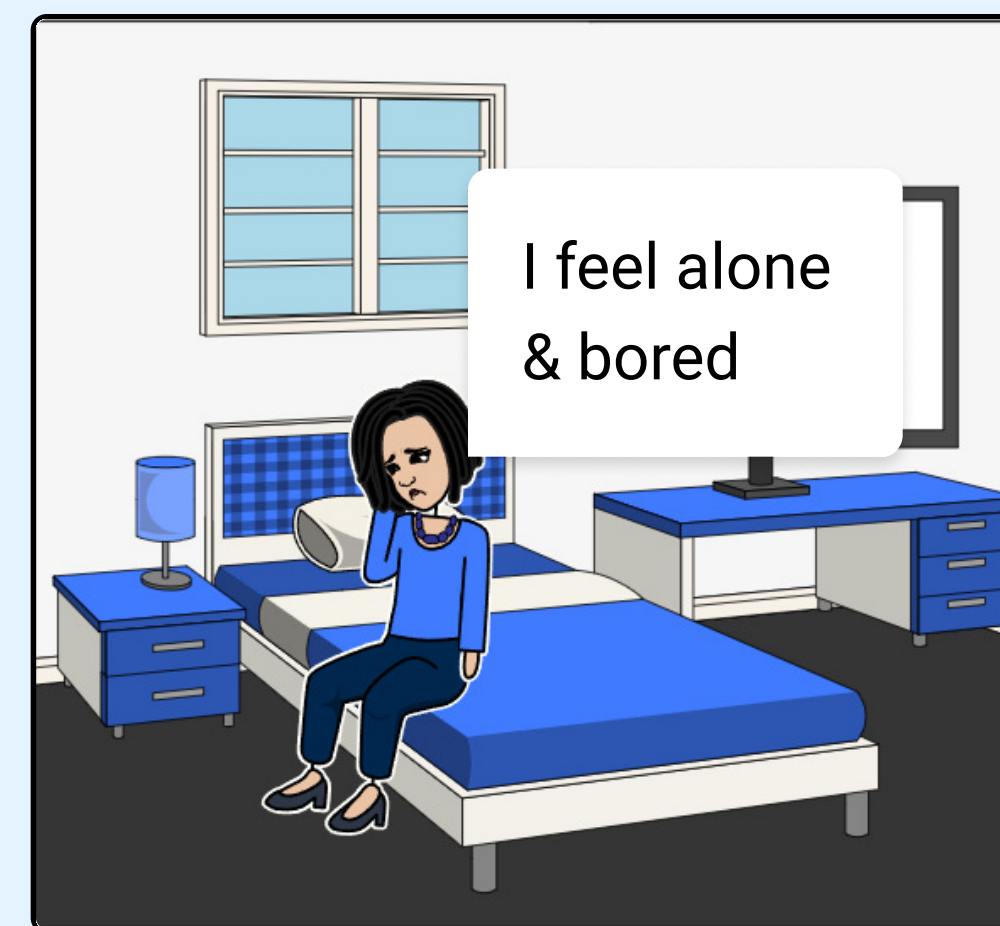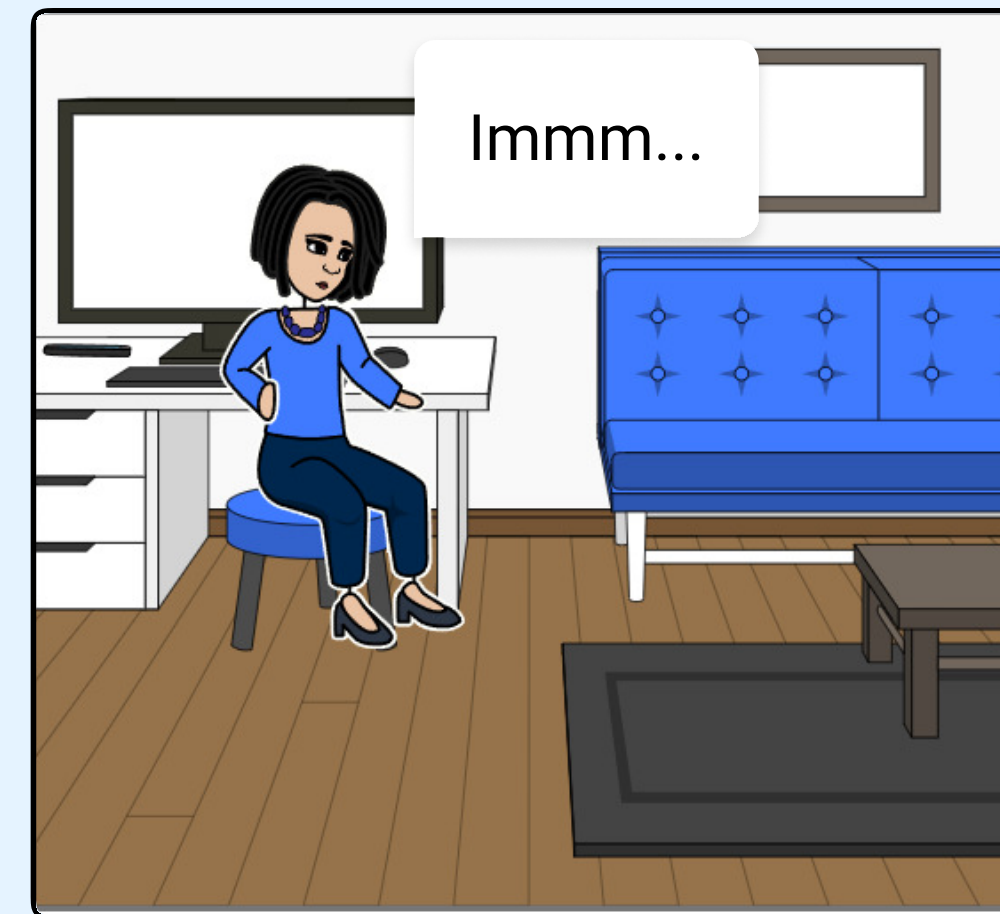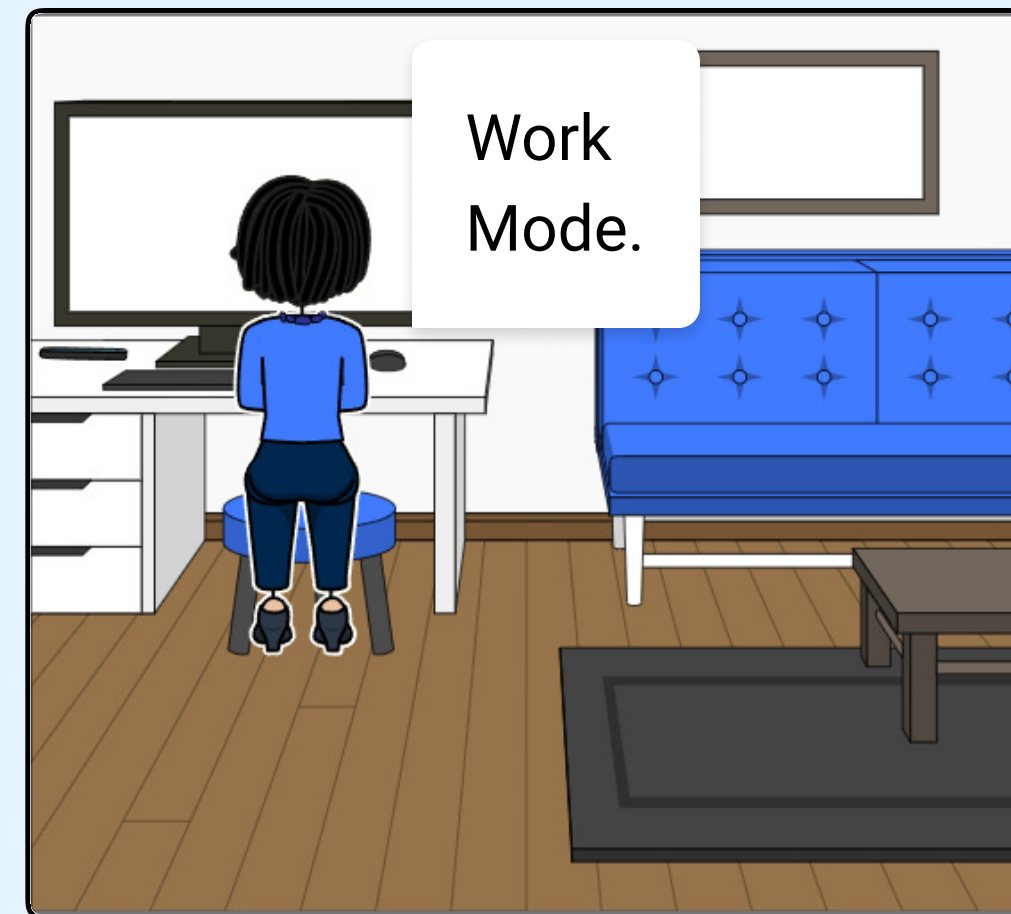
Poised

Win your mental health back

Poised System Design

Smart watch & Fitness trackers

User wears the watch all the time & it tracks its vitals, stress levels etc. to send it to the AI Pet.
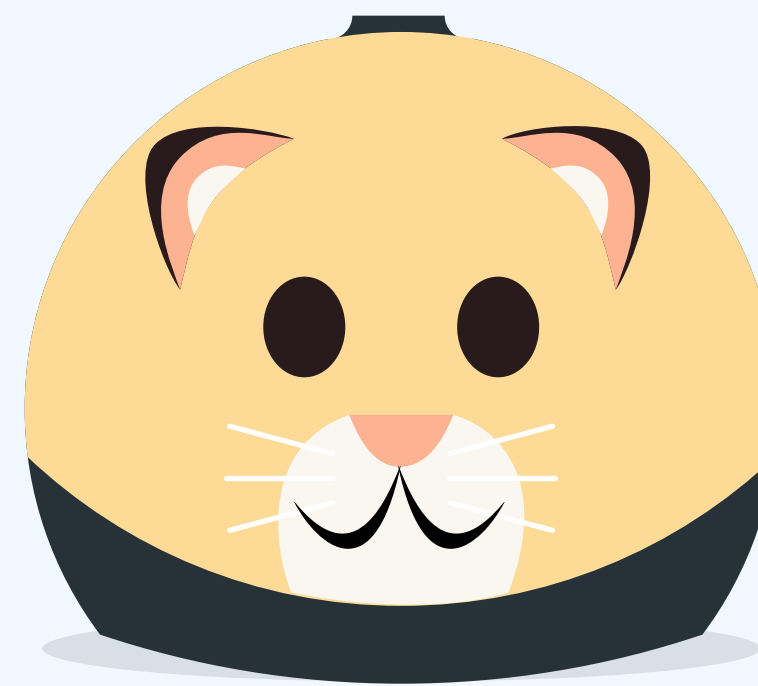
Poised AI pet

AI Pet fetches the user health data from the fitness tracker to provide a specific theraphy.
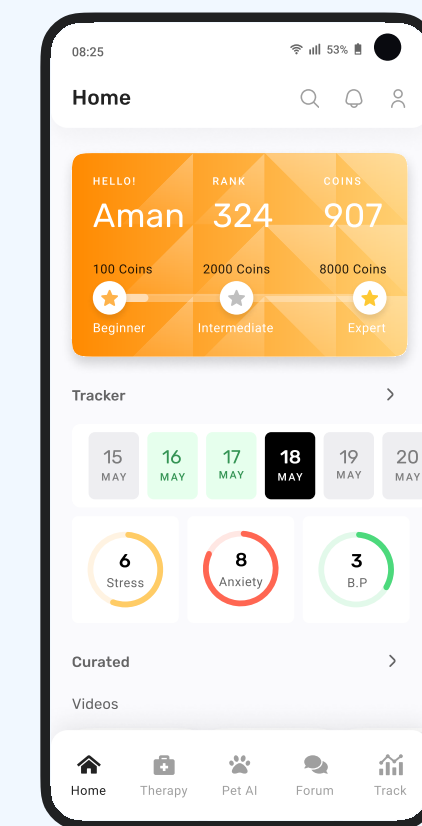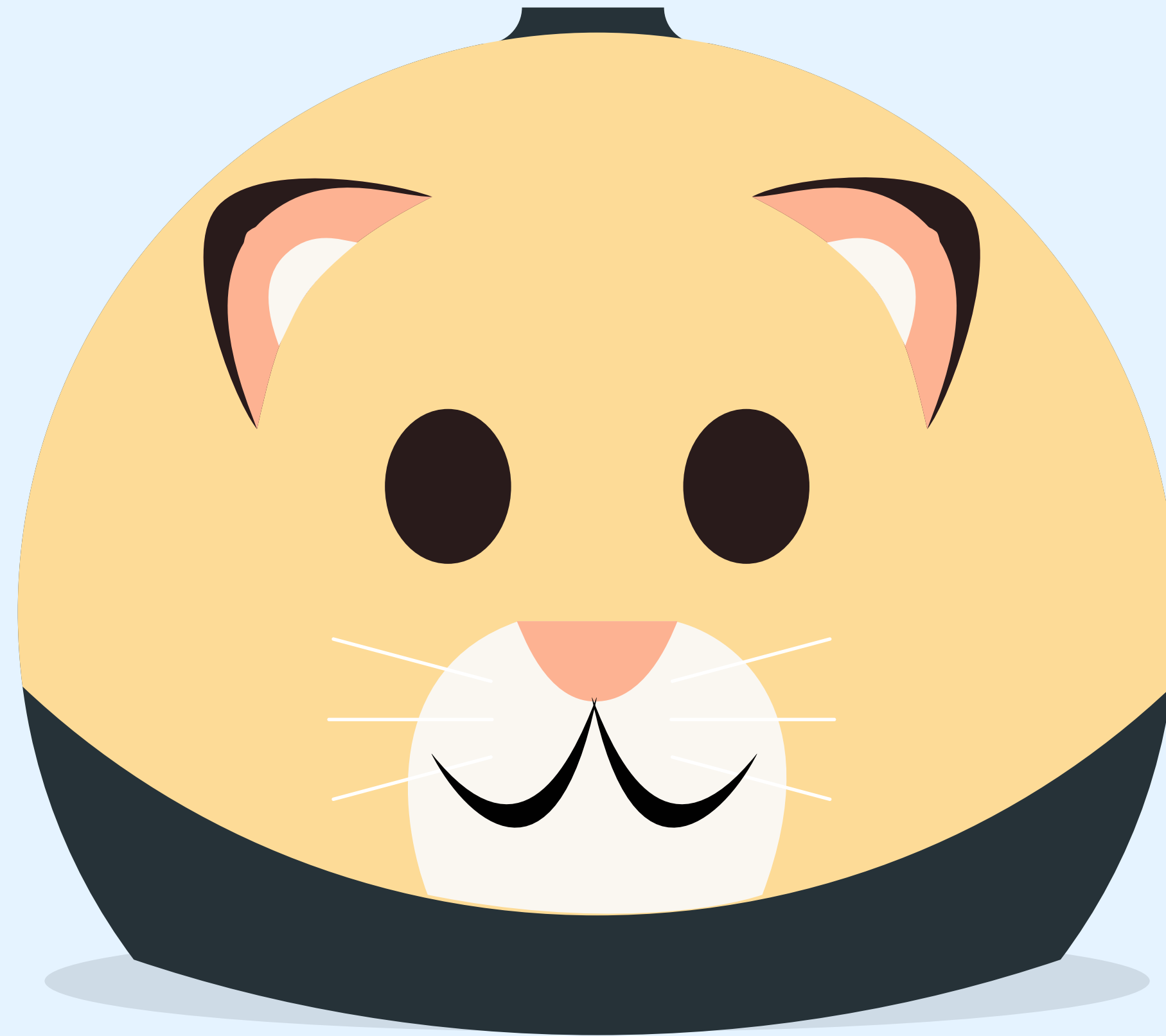

Poised App on smartphone

User can track all his data using this app, control & change settings for the AI Pet, Set Goals & alarms

Sight

Smell

Touch

Hearing

QUAD-SENSORY
EXPERIENCE

Poised AI Pet Features
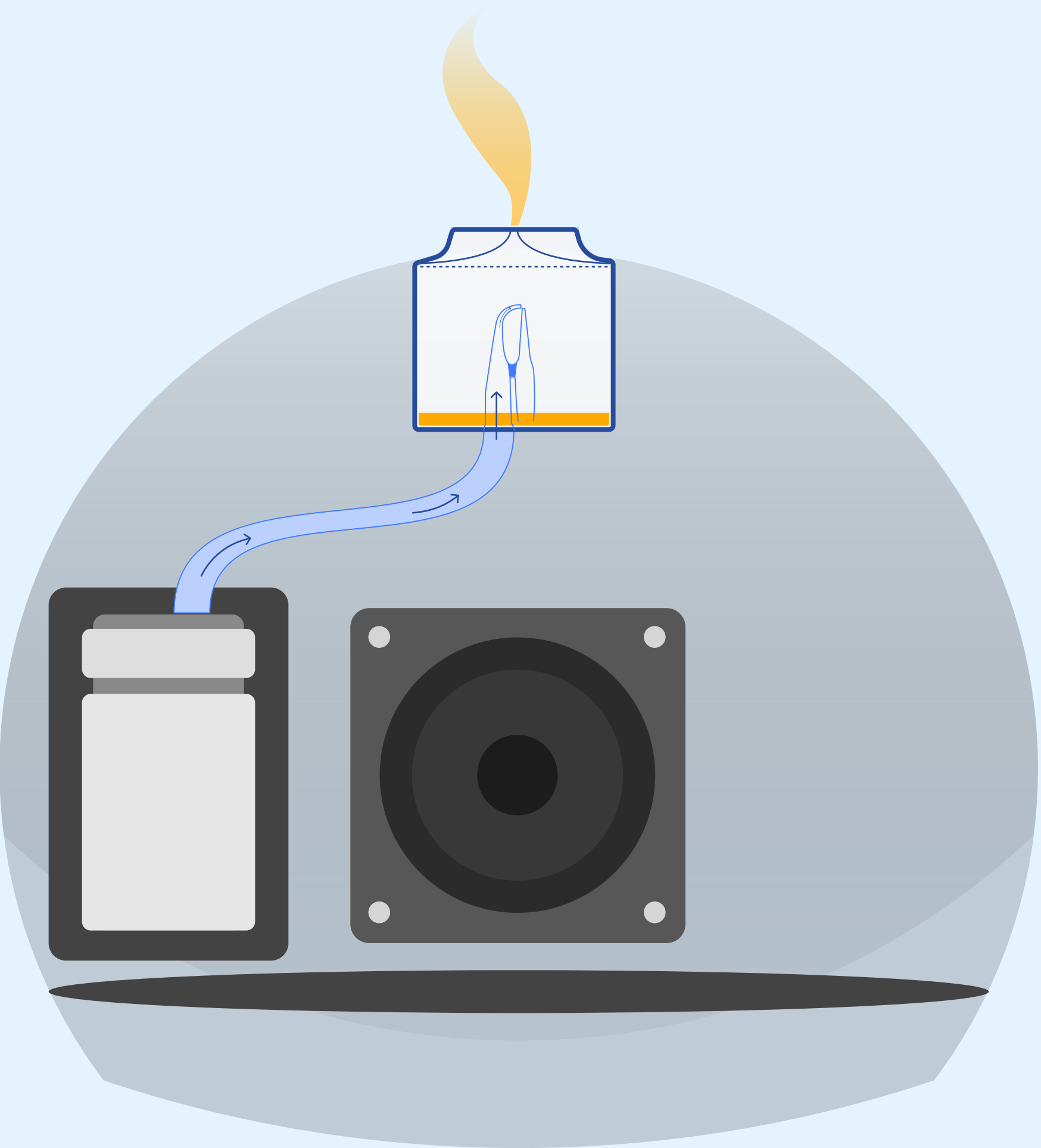
Set
Alarm

Aroma
Therapy

Light
Therapy

Sound
Therapy

Talkative
AI Pet

Soft Touch
Fur

Aroma Therapy
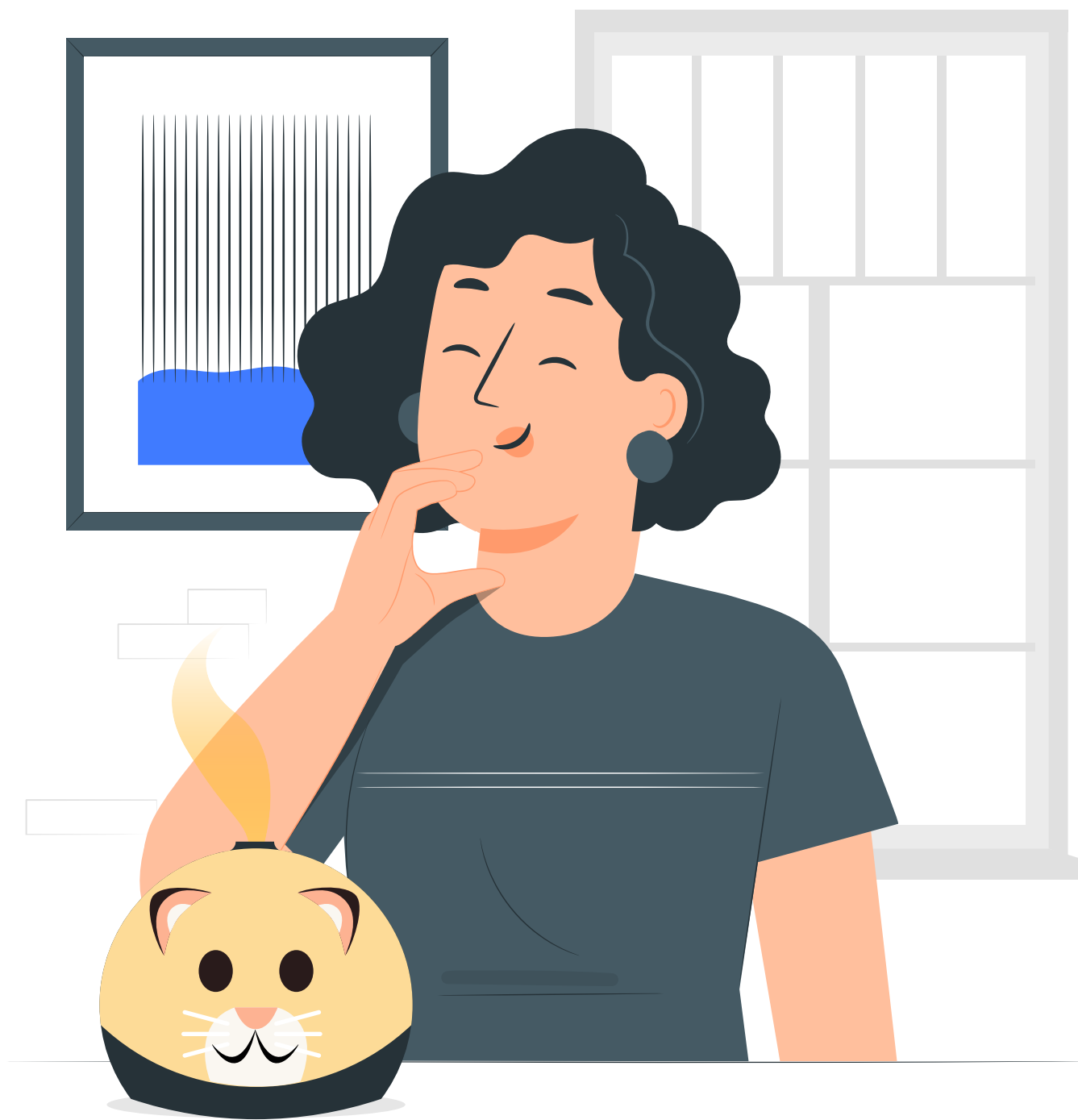
How aromatherapy works?

According to **Asian Pacific Journal of Tropical Biomedicine**, The oils should **activate certain areas of your brain, like your limbic system**, which play a role in your emotions. They could also affect your hypothalamus, which may respond to the oil by **creating feel-good brain chemicals like serotonin**.

https://www.webmd.com/balance/stress-management/aromatherapy-overview

What is aromatherapy used for?

- Ease stress, anxiety, and depression
- Boost feelings of relaxation
- Improve sleep
- Improve quality of life for people with long-term health problems like dementia

https://www.webmd.com/balance/stress-management/aromatherapy-overview

Aroma Therapy: Nebulizer Implementation

Aroma

Outlet Cap

Aroma Chamber

Air Pump Tube

Silencing Foam

Circuit Board

Bernoulli's Principle

Atomized oil Micro-particles

Vaccum/Suction Created

Essential Oil entering microtube

Pressurized Air

Air Pump
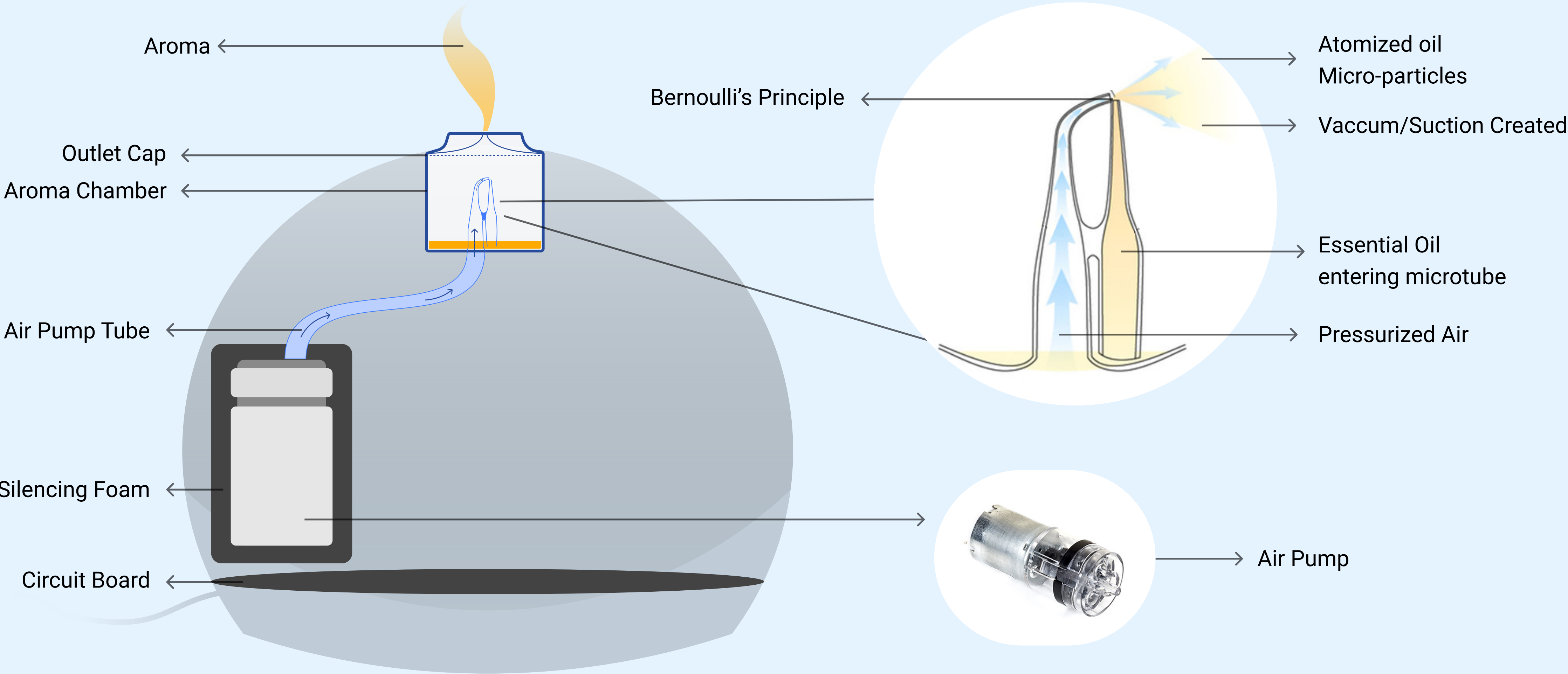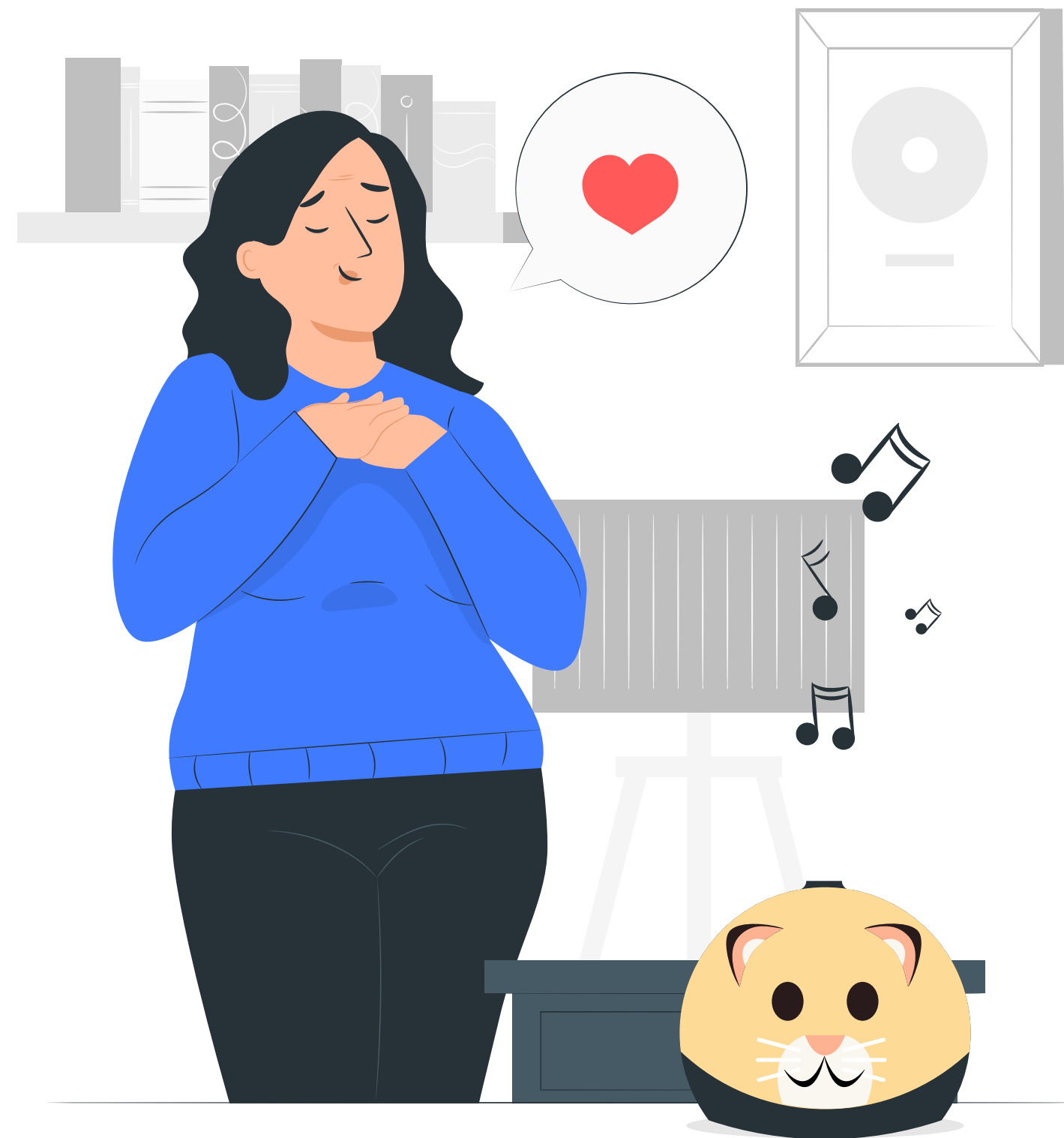
Sound Therapy

How it works?

According to British Association for Critical Care, Sound therapy uses different aspects of sound to improve your **emotional and physical well-being**.

Binaural Beats for Depression

For easing the symptoms of depression, listening to Binaural Beats with alpha, delta, or theta music can offer the following benefits:

- Deep relaxed state
- Improved mood
- Improved motivation
- Improved sleep cycle
- Increased focus
- Reduced anxiety

Modes

δ	α	β	γ	θ
Deep Sleep	Relaxation	Concentration	Alertness	Creativity
0.5 - 4 Hz	7 - 13 Hz	13 - 30 Hz	30 - 50 Hz	4 - 7 Hz

Bright Light Therapy

How it works?

According to University of Michigan Depression Center, Light therapy uses a light box which emits up to 10,000 lux of light at a specified distance for the **purpose of manipulating melatonin hormone (Sleep Regulator) levels & Seratonine (Mood Regulator)**.
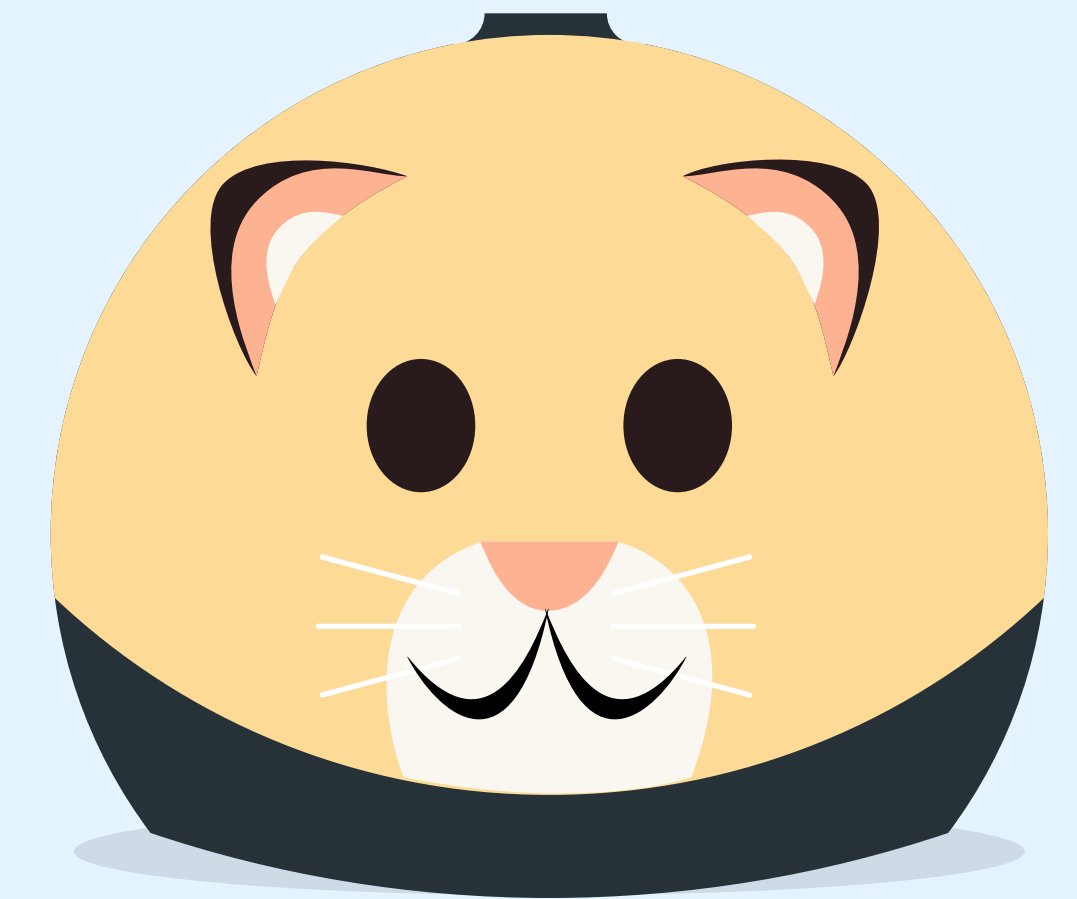
What is light therapy good for?

- Circadian Rhythm
- Non-seasonal Unipolar
- **Uni & Bi polar Depression**
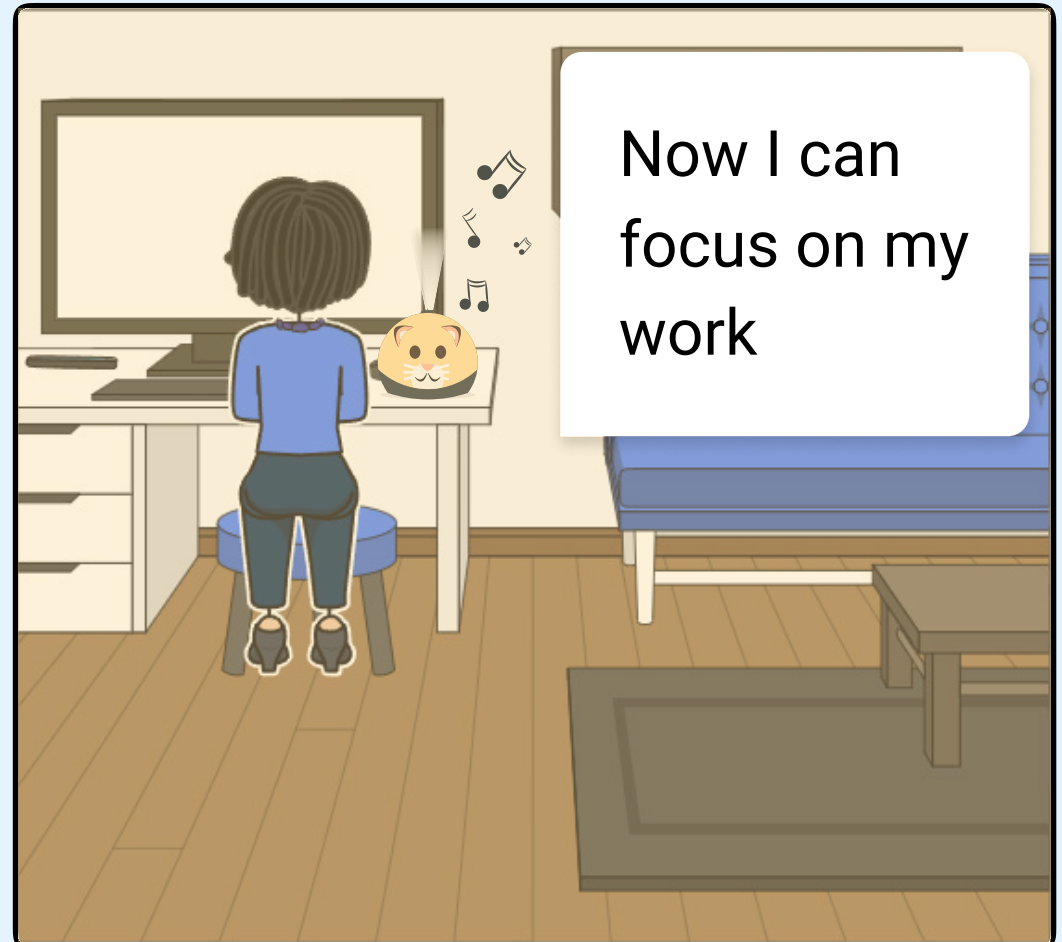- Seasonal Affective Disorder
- **Major Depressive Disorder**
- Hypersomnia

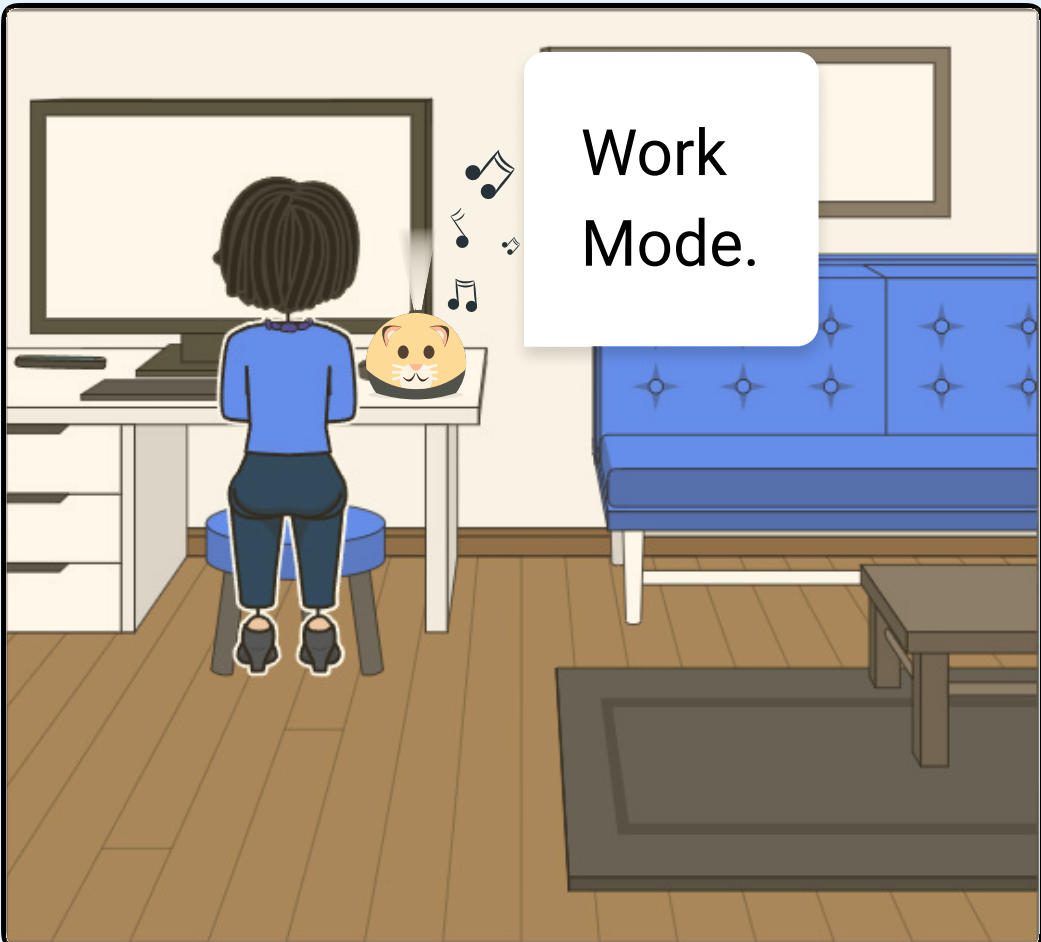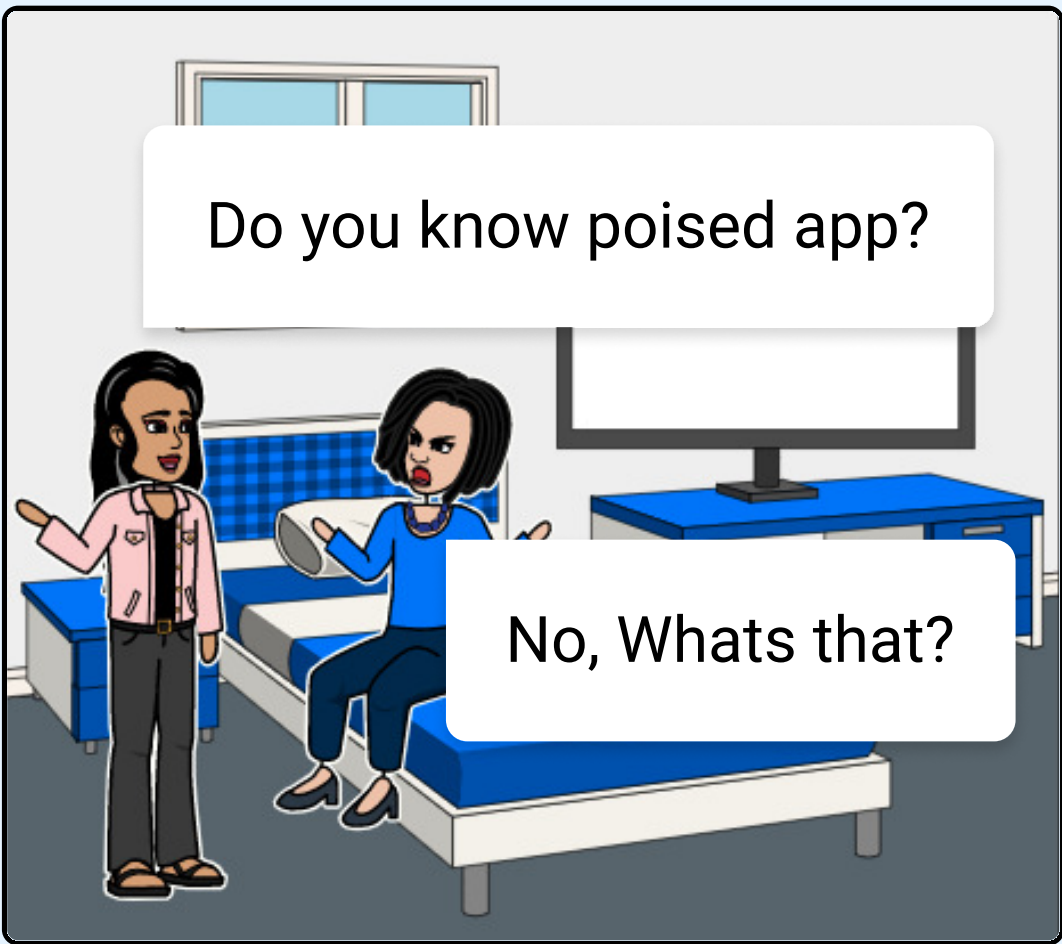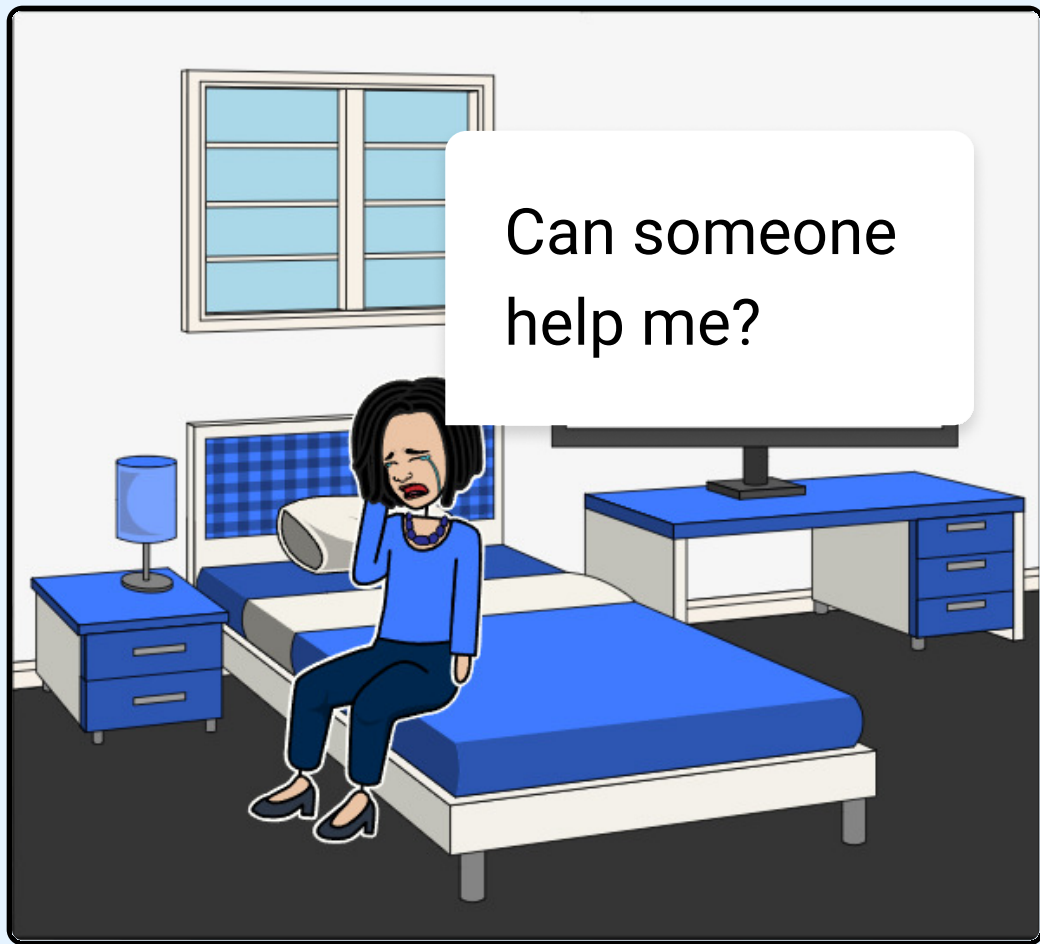# AI Pet & Soft Touch Fur

Haptic Actuator
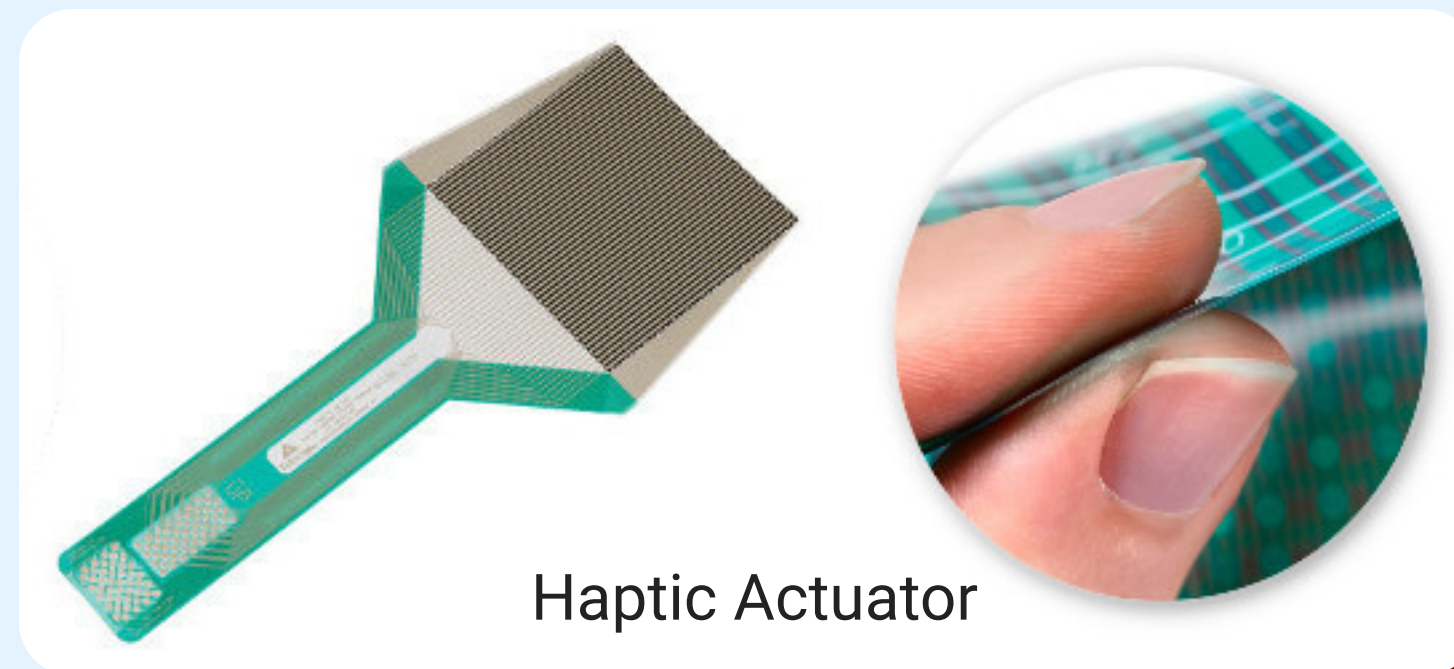
According to National Center for Biotechnology Information, **pets at the workplace can have a positive influence on individual and collective well-being** of organizational members.
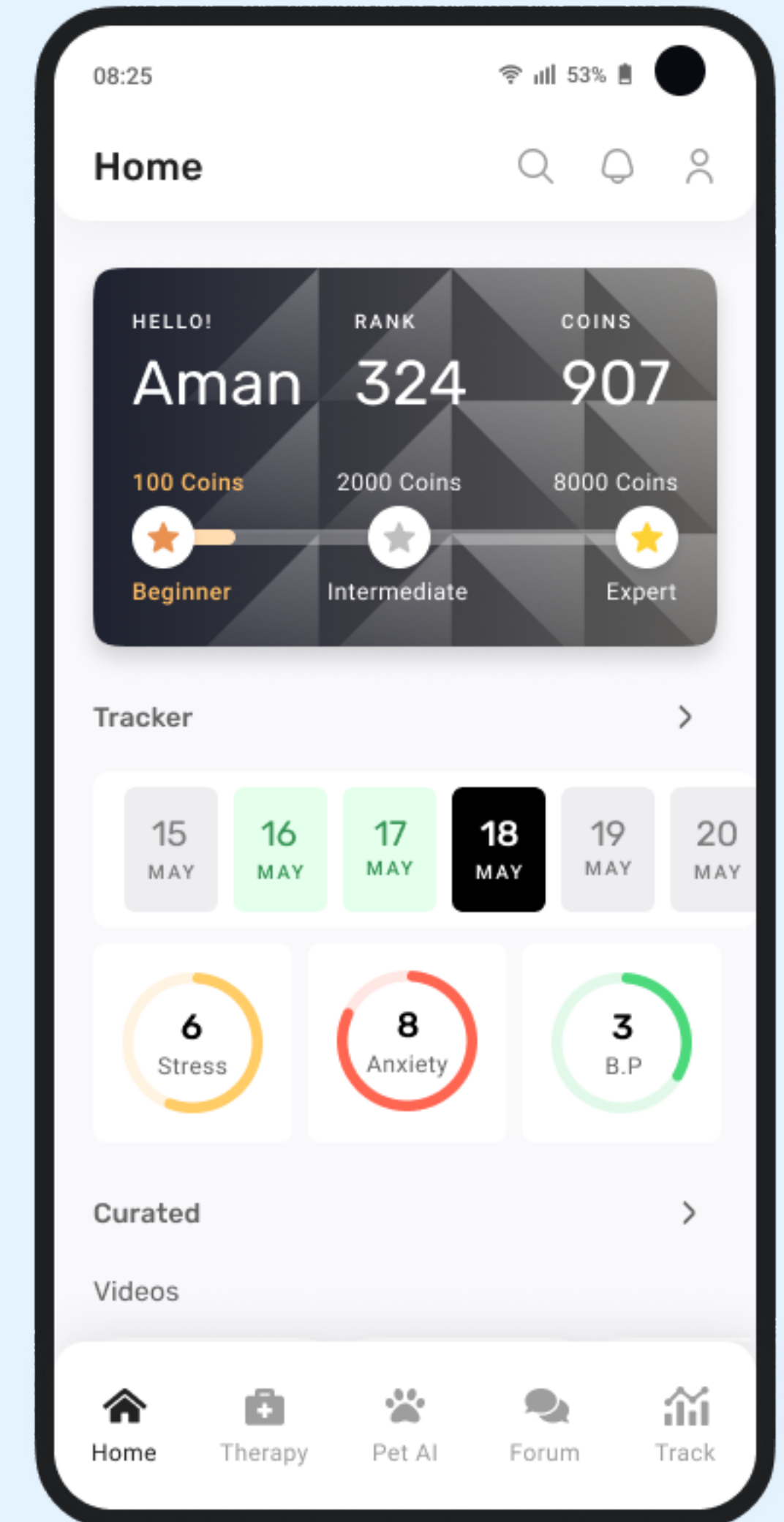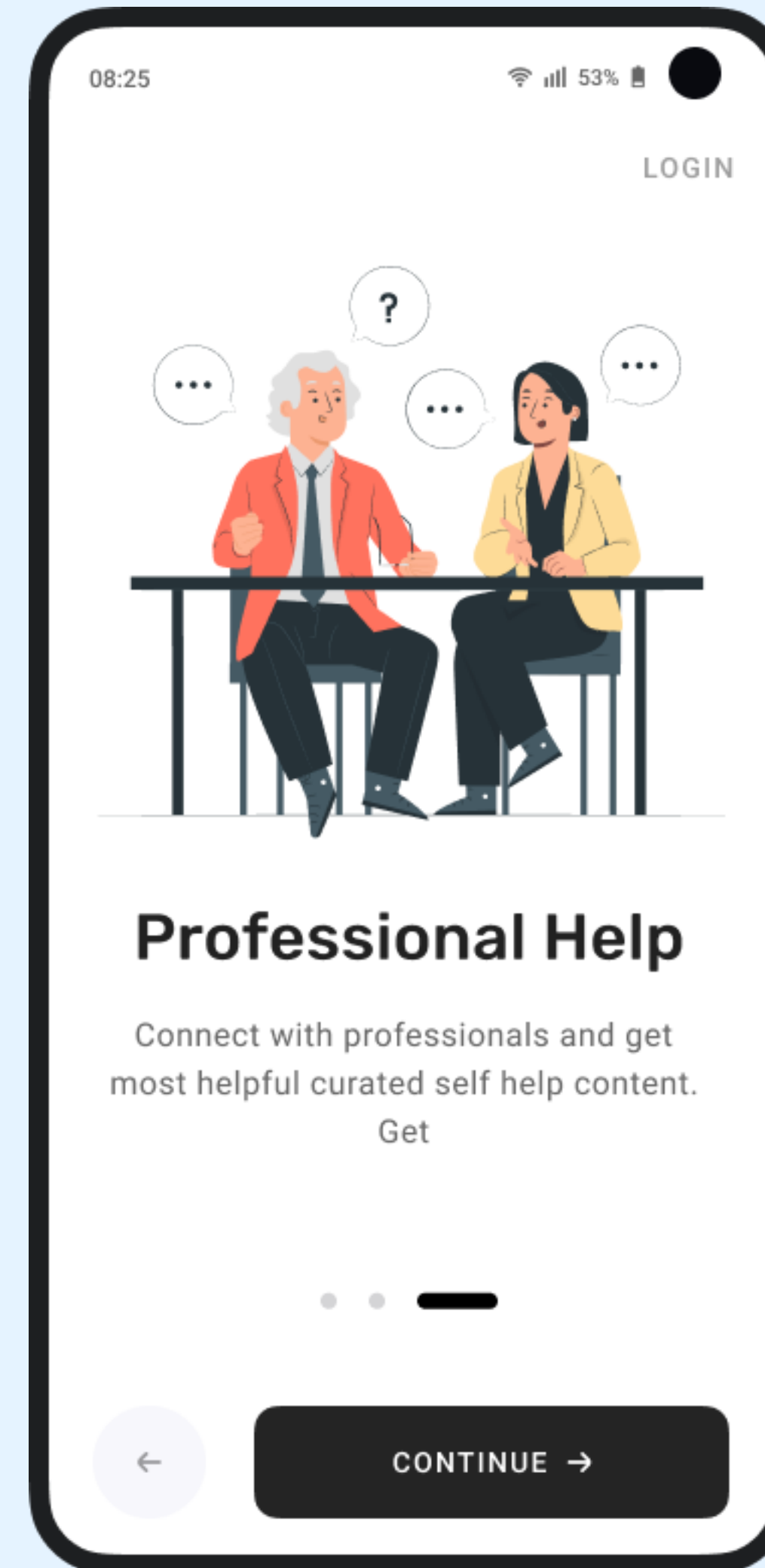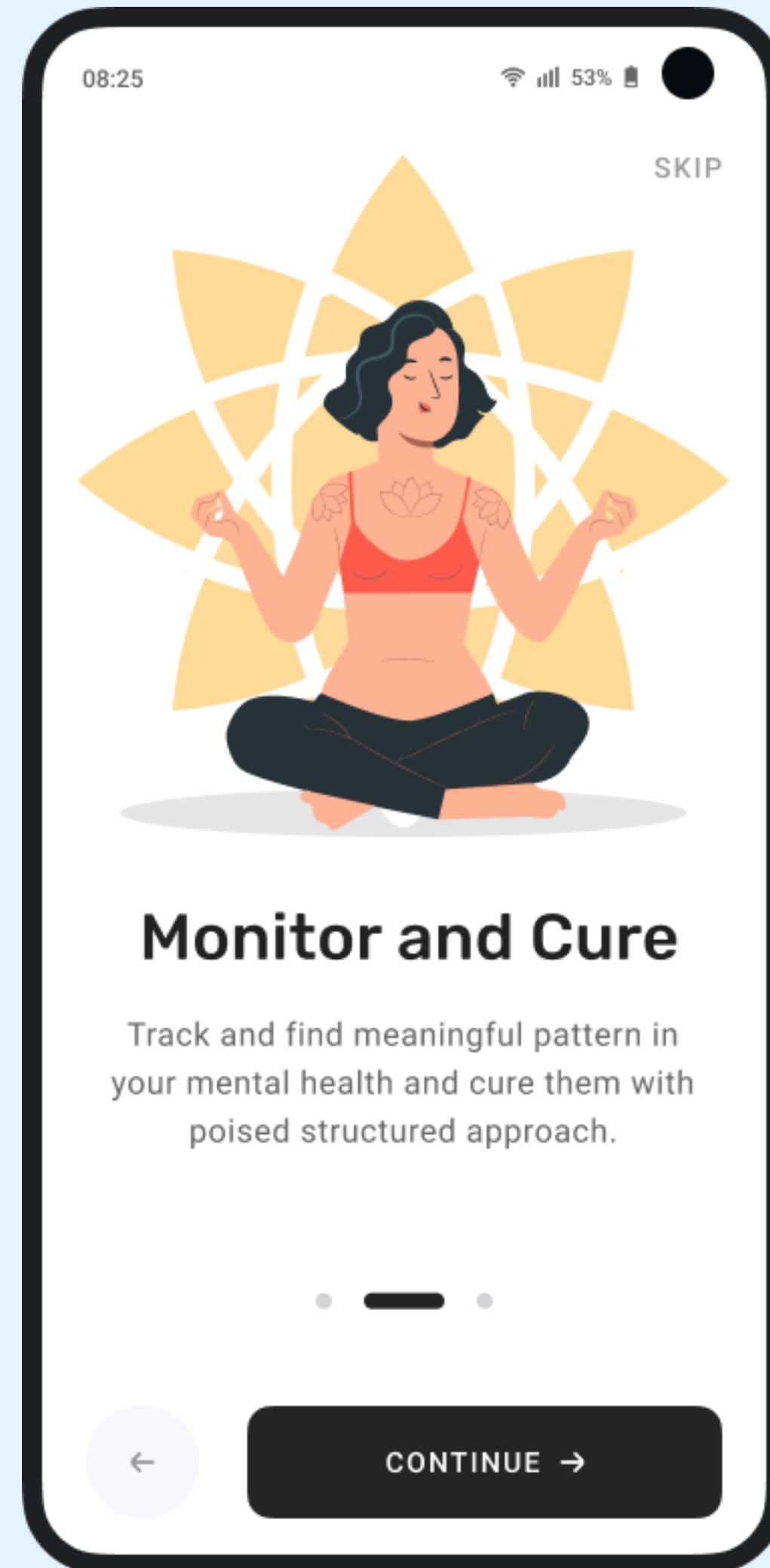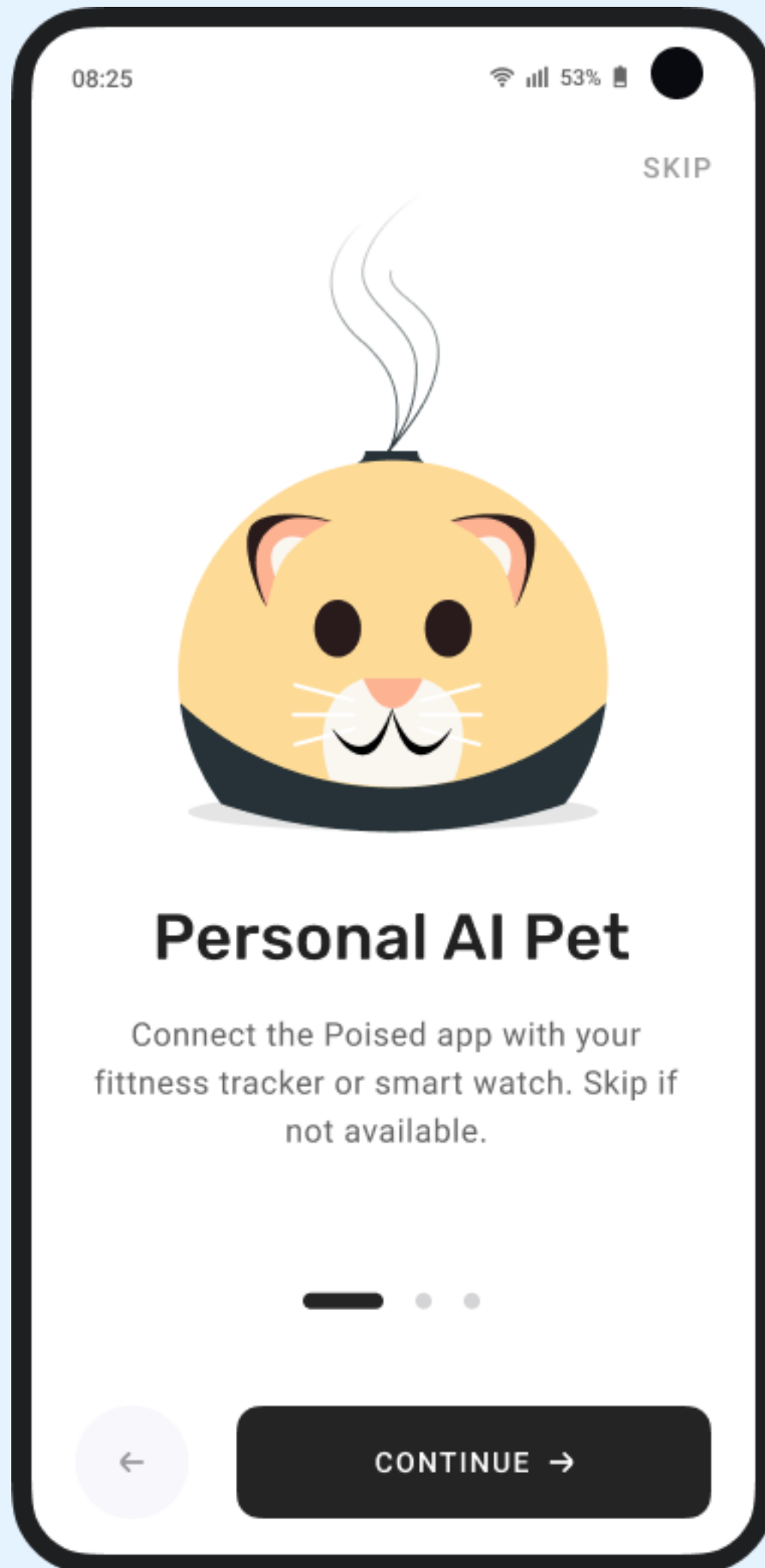
Poised App Screens 01

Screen 1:

08:25

SKIP

Personal AI Pet

Connect the Poised app with your fittness tracker or smart watch. Skip if not available.

CONTINUE →

Screen 2:

08:25

SKIP

Monitor and Cure

Track and find meaningful pattern in your mental health and cure them with poised structured approach.

CONTINUE →

Screen 3:

08:25

LOGIN

Professional Help

Connect with professionals and get most helpful curated self help content. Get

CONTINUE →

Screen 4:

08:25

Home

HELLO!
Aman

RANK
324

COINS
907

100 Coins
Beginner

2000 Coins
Intermediate

8000 Coins
Expert

Tracker →

| 15 MAY | 16 MAY | 17 MAY | 18 MAY | 19 MAY | 20 MAY |

6 Stress

8 Anxiety

3 B.P

Curated →

Videos

Home | Therapy | Pet AI | Forum | Track

Poised App Screens 02

Business Model Canvas

Key Partners

- **OEM Product Manufacturers**
- **Mental Health Therapist**
- **Essential Oil Manufacturers**
- **Smart Band Manufacturers**
- **Data Hosting Service**

Key Activities

- Easy To Use Product
- Priortize User With Support
- Encourage Mental Health
- Marketing & Advertisement

Key Resources

- Human: Therapists, Devs, Designers, Testers, Marketers
- Physical: Showrooms, Third Party Manufacturing Plant
- Tech: Servers & Digital Infrastructure

Key Propositions

- Tangible Product (AI Pet)
- Aroma Therapy
- Light Therapy
- Sound Therapy
- Pet Fur Touch Experience
- **Automated Ambience Improvement**

Customer Relationships

- Customer Care Call Center
- Forum & Community
- On-Demand Personal Therapist

Channels

- **Affiliation With Therapists**
- Social Media Campaign
- Physical & Online Retail Store
- Word Of Mouth & Ads
- On-Site Repair

Customer Segments

- Work From Home People
- Study From Home Students
- Tier-1 & 2 Indian Cities

Cost Structure (Value driven)

- Technology Infrastructure
- Marketing
- R & D
- Salaries Of Employees
- Support

Revenue Streams

- **AI Pet**
- **Therapy Service**
- **Pet Faces & Haptics**
- **Essential Oils**
- **Sounds**

Thanks

FOR YOUR ATTENTION

INVICTUS