國立臺北大學
National Taipei University

NovaPet

"A burst of personality in your digital sky."

NovaPet

Leisure & Sports Management, NTPU
Jun-Yu Wu
(Jeremy)

Information Management, NTPU
Hsin-Ting Lu
(Bob)

Smart Health Care Management, NTPU
Zeeshan Rehman
(ZEE)

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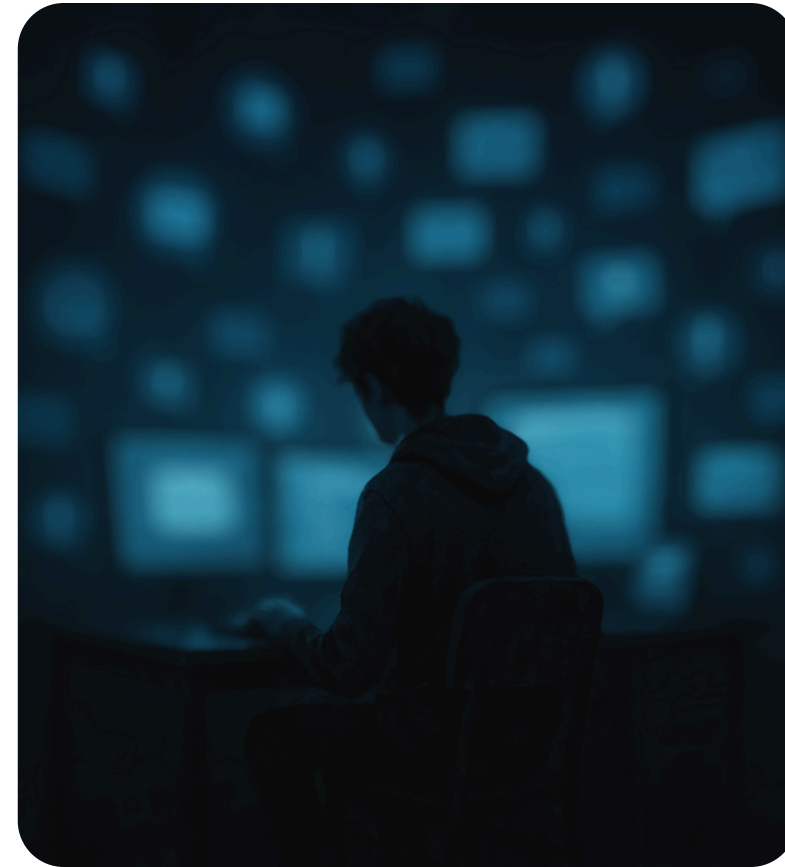
05 Product Demo

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01 Improvements

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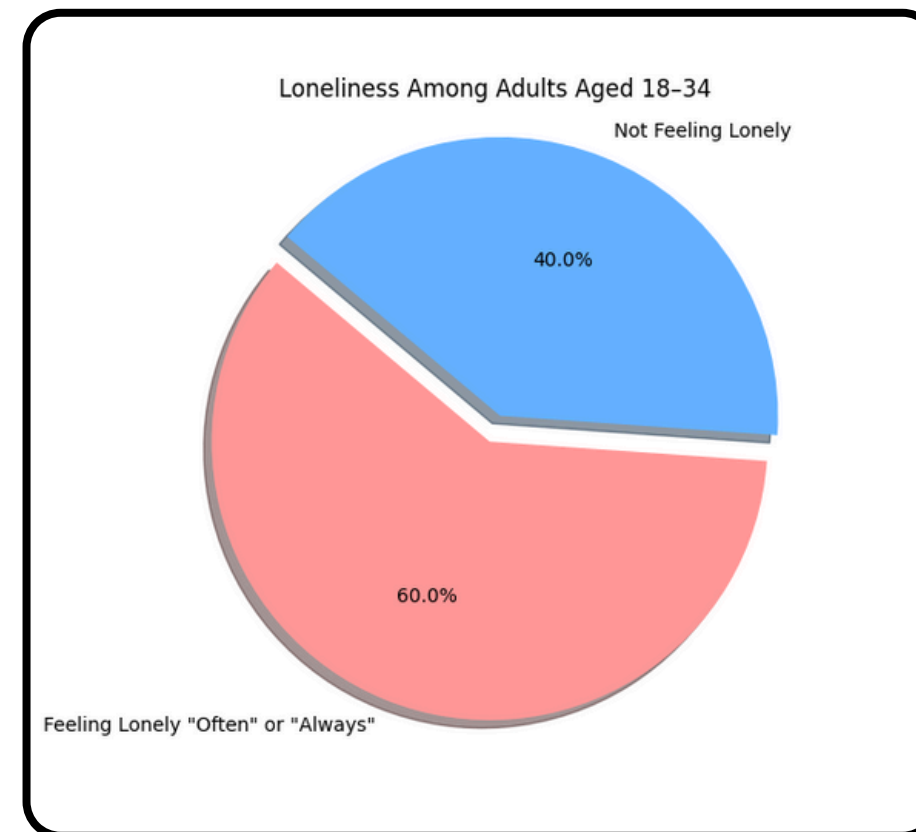# Background and Motivation

Smart Health Care
Management, NTPU
Zeeshan Rehman
(ZEE)

Background

The Digital Loneliness Epidemic

🧑‍💡 Our daily lives are dominated by technology, often leaving interactions feeling impersonal.

🧑‍💻 Extended screen time from remote work, studying and browsing can lead to stress and isolation.

👨‍👩‍👧 AI tools today are transactional, not emotional.

Loneliness Among Adults Aged 18–34

Not Feeling Lonely

40.0%

60.0%

Feeling Lonely "Often" or "Always"

The Problem

⏱️ 6+ hours/day spent online (Statista, 2023)

💔 52% of Gen Z/Millennials feel isolated despite constant connectivity (Pew Research)

📊 60% of adults aged 18–34 report feeling lonely "often" or "always" (Cigna, 2023).

🙌 89% of users are more loyal to apps that offer emotional engagement (McKinsey, 2024)

Motivation

Humanizing Technology

🙆 Vision: Make AI feel less like a tool and more like a friend.

🖼️ Example: NovaPet pets don't just remind you to drink water they ask, "Had a rough day? Let's take a breather 🌟

Empowering Daily Life

🧑‍🎓 For Students: A study buddy that celebrates small wins.

🧑‍💻 For Remote Workers: A companion that breaks the isolation of WFH.

🧑‍🎮 For Gamers: Collectible pets with rich lore and personalities.

The Inspiration

🪐 NovaPet Why NovaPet?

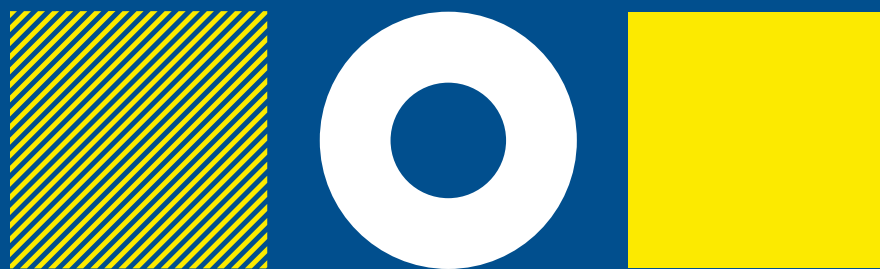🌟 Emotional AI: Pets that listen and adapt to users.

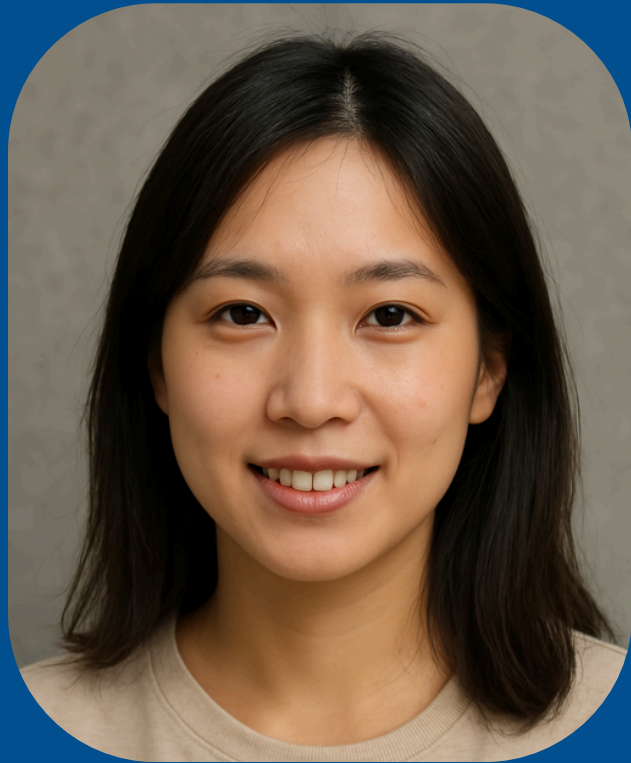🎮 Nostalgia Meets Innovation: Tamagotchi's charm + ChatGPT's brains.

🧠 Productivity with Heart: Turn browsers into spaces of warmth.

User Scenario

Leisure & Sports
Management, NTPU
**Jun-Yu Wu
(Jeremy)**

ABOUT THE USER

Min shares a small dorm room and often studies until midnight. She's used to being surrounded by people online, but still misses real emotional connection. NovaPet became her late-night companion that quietly cheered her on.

BEHAVIOR PATTERNS

Uses Chrome for studying, YouTube, and daily browsing (6–8 hours/day)

MIN

- 21 years old
- Female
- New Taipei
- Student
- @NTPU

GOALS AND NEEDS

- Emotional support when being alone
- Gentle nudges for healthier digital habits (rest, hydration)
- A playful, non-intrusive companion to reduce academic stress

ENGAGEMENT POTENTIAL

- Daily active user
- Emotionally motivated
- High retention if the pet feels "alive" and emotionally expressive

FRUSTRATIONS

- Used to use a focus timer plugin, but found it too cold and rigid
- Tried mobile pet apps, but disliked having to "feed" or "train" the pet

KEVIN

- 32 years old
- Male
- Taipei
- Product Manager
- @Google

ABOUT THE USER

Kevin is a product manager at Google, leading fast-paced cross-functional teams. While he thrives on structure and efficiency, the daily intensity often feels draining. NovaPet became a rare moment of lightness—something simple, friendly, and just human enough to make long hours feel a little warmer.

GOALS & NEEDS

- Gentle emotional balance during long, demanding workdays
- Integrated task reminders without breaking flow
- Prefer minimal, non-distracting interaction style

FRUSTRATIONS

- Tried desktop pet software before, but it felt gimmicky or distracting
- Doesn't want tools that require training or too many setup steps

BEHAVIOR PATTERNS

Starts Chrome around 9 a.m. and works through tabs and meetings

ENGAGEMENT POTENTIAL

- Functional user type
- Medium emotional bonding, but high tool-utility dependency
- Likely to pay for productivity-enhancing upgrades

NINA

- 24 years old
- Female
- Kaohsiung
- Content Creator
- @Instagram

ABOUT THE USER

Nina is a creative spirit who believes every tool on her screen should either spark joy or spark ideas. NovaPet became her little companion that sits quietly on the side—sometimes playful, sometimes poetic.

GOALS & NEEDS

- Artistic inspiration and emotional stimulation when feeling blocked
- Enjoys collectible or customizable elements (pets, planets, themes)
- Seeks lightweight ritualistic tools to start her creative day

FRUSTRATIONS

- Tried desktop mascot apps but found them hard to customize
- Wishes more tools had aesthetic quality and personality

BEHAVIOR PATTERNS

Opens Chrome as part of her morning ritual

ENGAGEMENT POTENTIAL

- Likely to become a brand evangelist
- High visual and emotional sensitivity
- May give feedback and share product on social media

Product Objectives
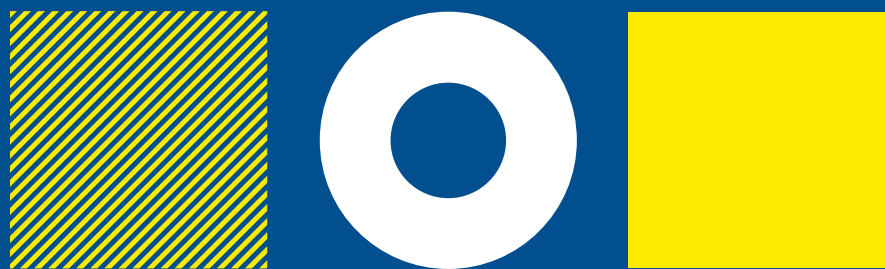
Information
Management, NTPU
**Hsin-Ting Lu
(Bob)**

Product Objectives

An **AI-powered virtual** pet designed to deliver emotional companionship, interactive reminders, and engaging rewards, making your digital life warmer and more enjoyable!
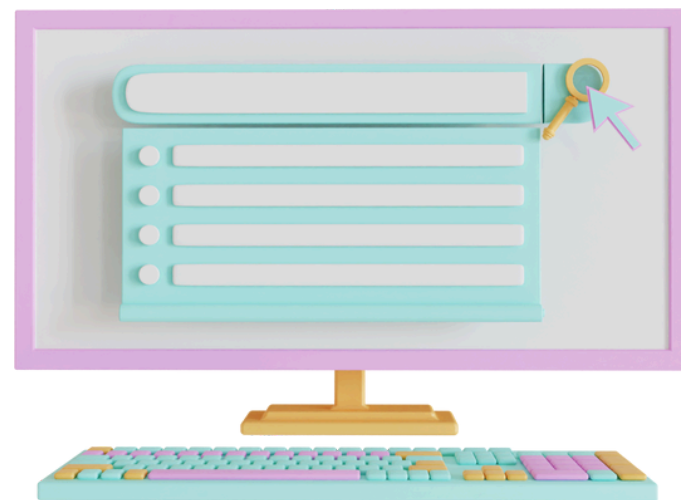
Product Objectives

What are we going to build?

Chrome Extension

Product Objectives

Why do we choose Chrome Extension?

No matter what you're doing online—videos, shopping, or learning—NovaPet is **always with you**. Your digital pet, your **home companion**.

Marketing Analysis

Leisure & Sports Management, NTPU

Jun-Yu Wu (Jeremy)

4P Analysis

Product
AI-POWERED VIRTUAL PETS

🌟 **Unique Personalities:** Every pet has its own mood, habits, and quirks.

🗣️ **Dynamic Dialogue:** Smart, tone-sensitive conversations.

🪐 **Planetary Designs:** Customize habitats on themed mini-planets.

🔔 **Smart Reminders:** Gentle nudges to hydrate, stretch, or relax.

🧩 **Collectibles & Upgrades:** Unlockable traits, skins, and memories.

Price
FREEMIUM + MICROTRANSACTIONS

🆓 **Free Tier:**
- Access to 1–2 base pets.
- Limited daily interactions and themes.

💎 **Premium Tier (Pay-to-Unlock):**
- Exclusive pet species and planetary designs.
- Special rituals, seasonal events, and mini-games.
- One-time purchases or monthly membership.

🛍️ **In-App Purchases:**
- Rare accessories (hats, outfits, gadgets).
- Emotion packs, stickers, or audio packs.
- Name change tokens or "rebirth" for legacy pets.

Promotion
HOW WE REACH USERS

📱 **Social Media Push:**
- TikTok, IG, YouTube Shorts for pet reactions & skits.
- Trendy challenges (e.g., #MyNovaPet).

🤝 **Influencer Partnerships:**
- Creators co-design pets or themes.
- Affiliate codes for custom pets.

📧 **Email Campaigns:**
- Pet care tips, event updates, birthday reminders.

🔍 **Search Engine & Video Ads:**
- Target pet lovers, students, and productivity tools.

📅 **Daily Rituals:**
- "Pet of the Day" quotes or journal-style prompts.
- Emotional check-ins to drive habit loops.

Place
WHERE USERS ACCESS NOVA PET

🧩 **Chrome Extension Store:** Primary platform for distribution.

🌐 **Official Website:** For downloads, support, pet showcases.

✉️ **Early Access Invites:** Build hype with limited test slots.

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Segmentation

- **Demographics**: Aged 15–30, students, freelancers, remote professionals
- **Behavior**: Heavy Chrome users, emotionally driven, pet lovers, tech-friendly
- **Needs**: Emotional support, light productivity tools, daily companionship

T
Targeting

- **Primary Audience:** Students and workers who want an emotionally intelligent and pleasing companion while online
- **Secondary Audience:** Creators and mental wellness seekers interested in self-expression and routine rituals

P
Positioning

"NovaPet is an AI-powered virtual pet that offers daily companionship, emotional warmth, and playful interaction—living quietly inside your browser to make every day a little brighter."

Product development Process

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Management, NTPU
**Jun-Yu Wu
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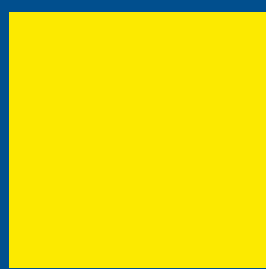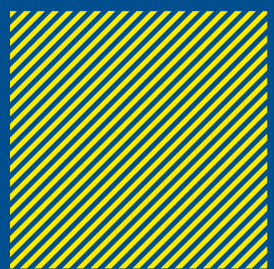
OUR TEAM MEMBERS

JEREMY

PRODUCT MANAGER

——

BOB

FULLSTACK DEVELOPER

——

ZEE

TEAM MEMBER

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Product Workflow

User

Response

CSS

HTML

JavaScript

NovaPet

Input Text

Feedback and Award

Reminder

Firebase

Chatgpt API

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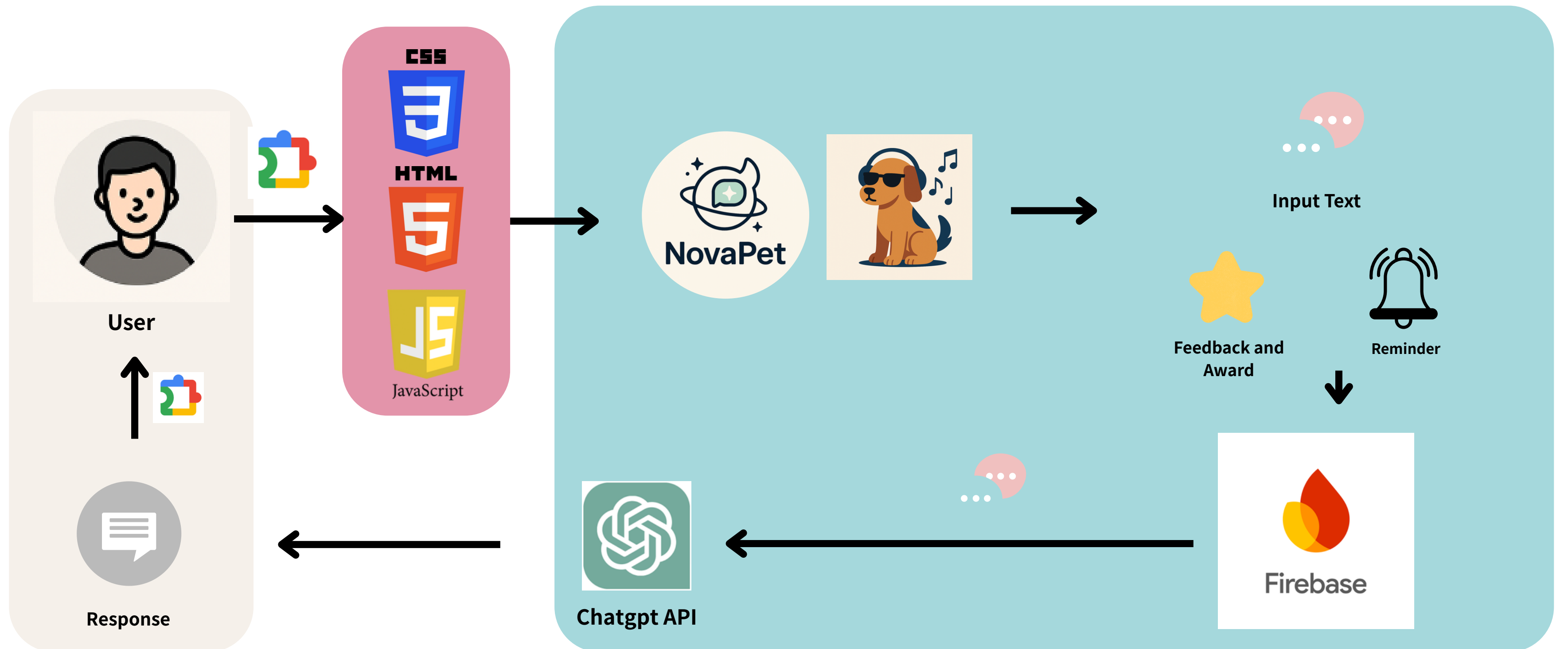
Personal Reflections:

1. First time building a Chrome Extension

   — had no clear image in my mind at the beginning.

2. Implementing context memory felt really cool since I had never tried it before~

3. It was challenging to build features one by one

   — sometimes AI didn't give the right answers, so I had to debug on my own.

"Design with Vision, Deliver with Focus"

Personal Reflections:

- Focused on shaping what NovaPet should become — not just how to build it.

- Prioritized features based on value and feasibility under tight deadlines.

- Learned to make trade-offs when time was limited — not everything can ship.

- Explored how to design intuitive and engaging user interfaces.

- Faced the challenge of clearly communicating my ideas to developers.

Product Functions & DEMO

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Management, NTPU
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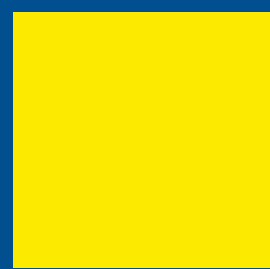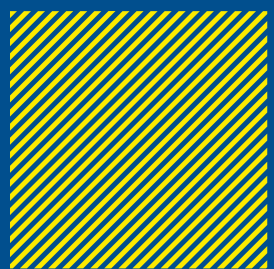
NovaPet Feature

Pick your own Pet!

NovaPet Feature

Main Interface
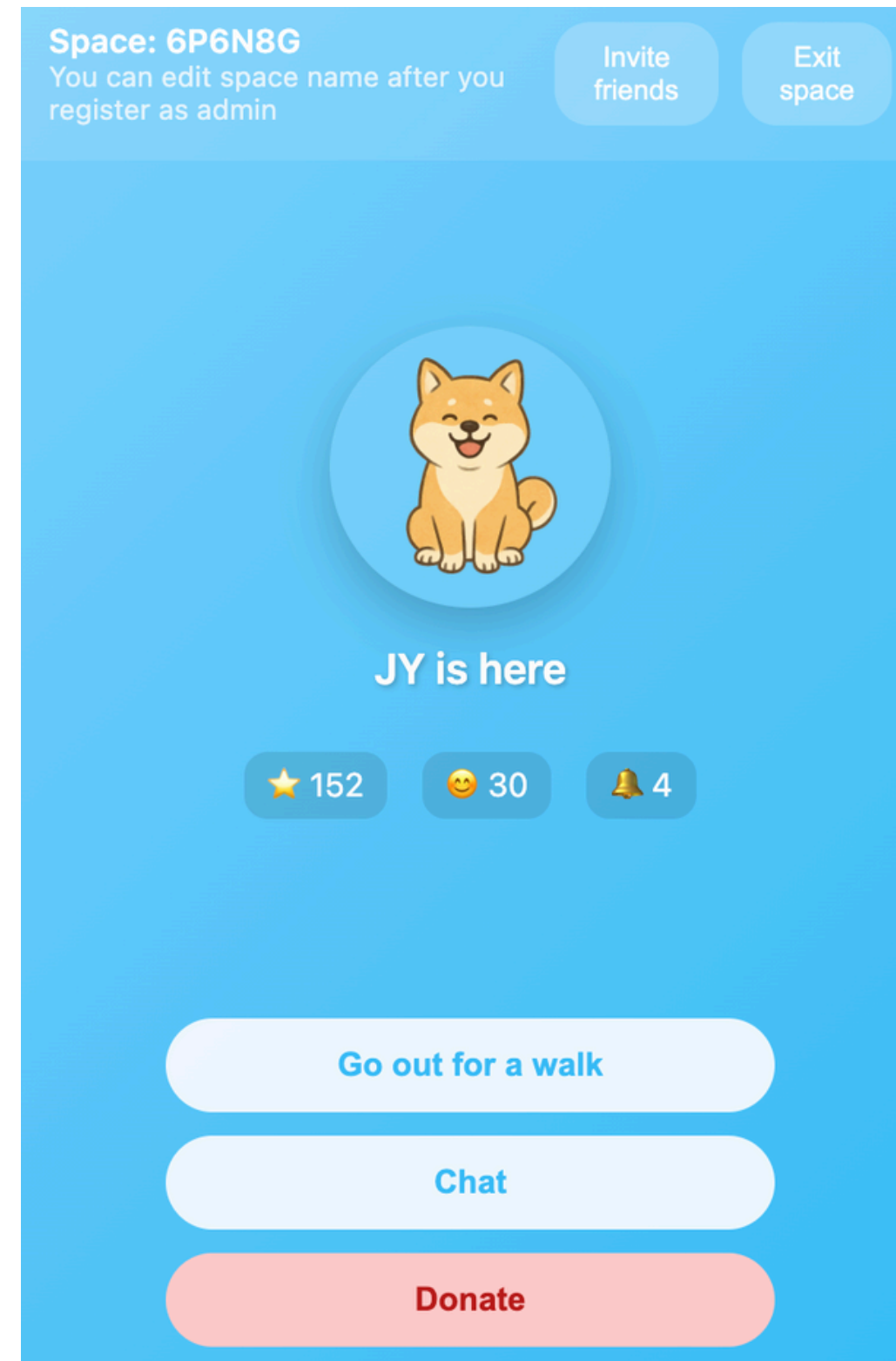
NovaPet Feature
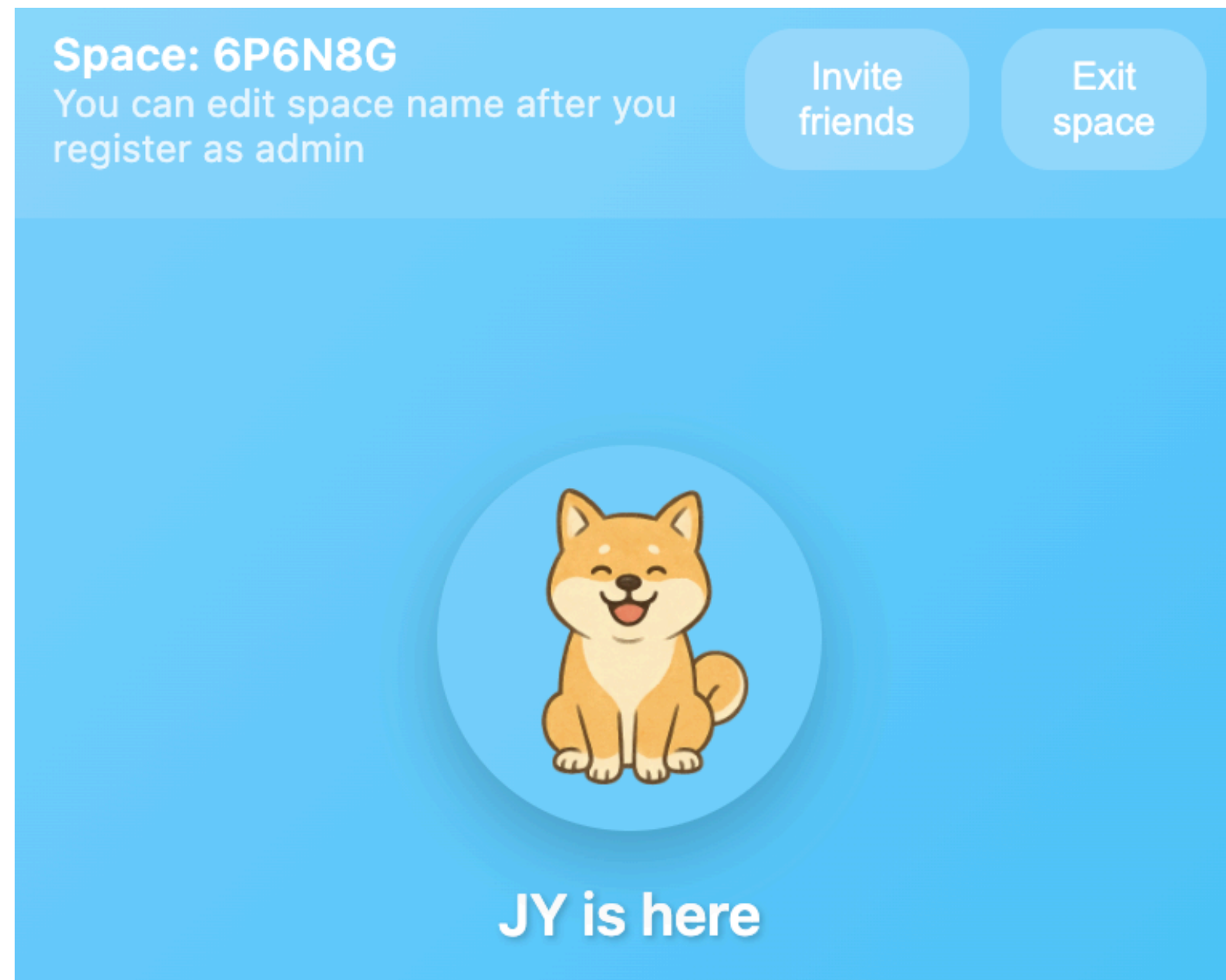
Space & Code for Everyone to join!

NovaPet Feature

Chat   ✕

🙂 *JY* Woof! I missed you, JY! Let's chat!

Chat with your Pet
with customize memories

🐾 Say something to your pet   ➤
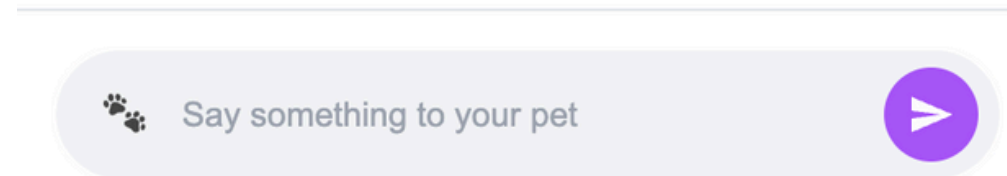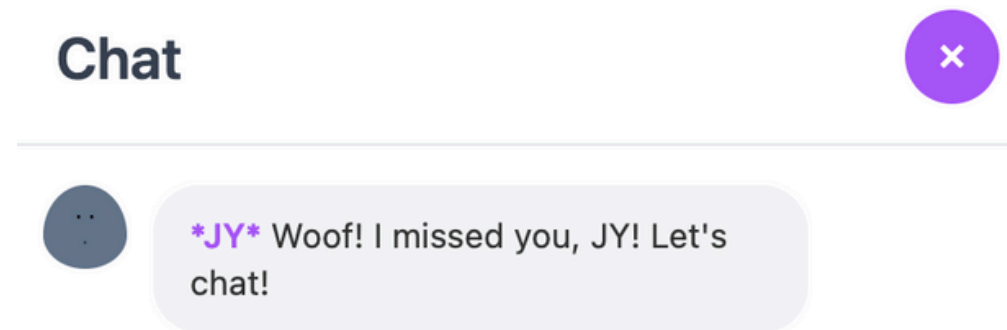
You can say anything to your happy dog. Just a few examples:

• Talk about how you feel today

• Ask for help with your homework

• Anything you want to talk to your friends about

NovaPet Feature

Donation for supporting this open source product!
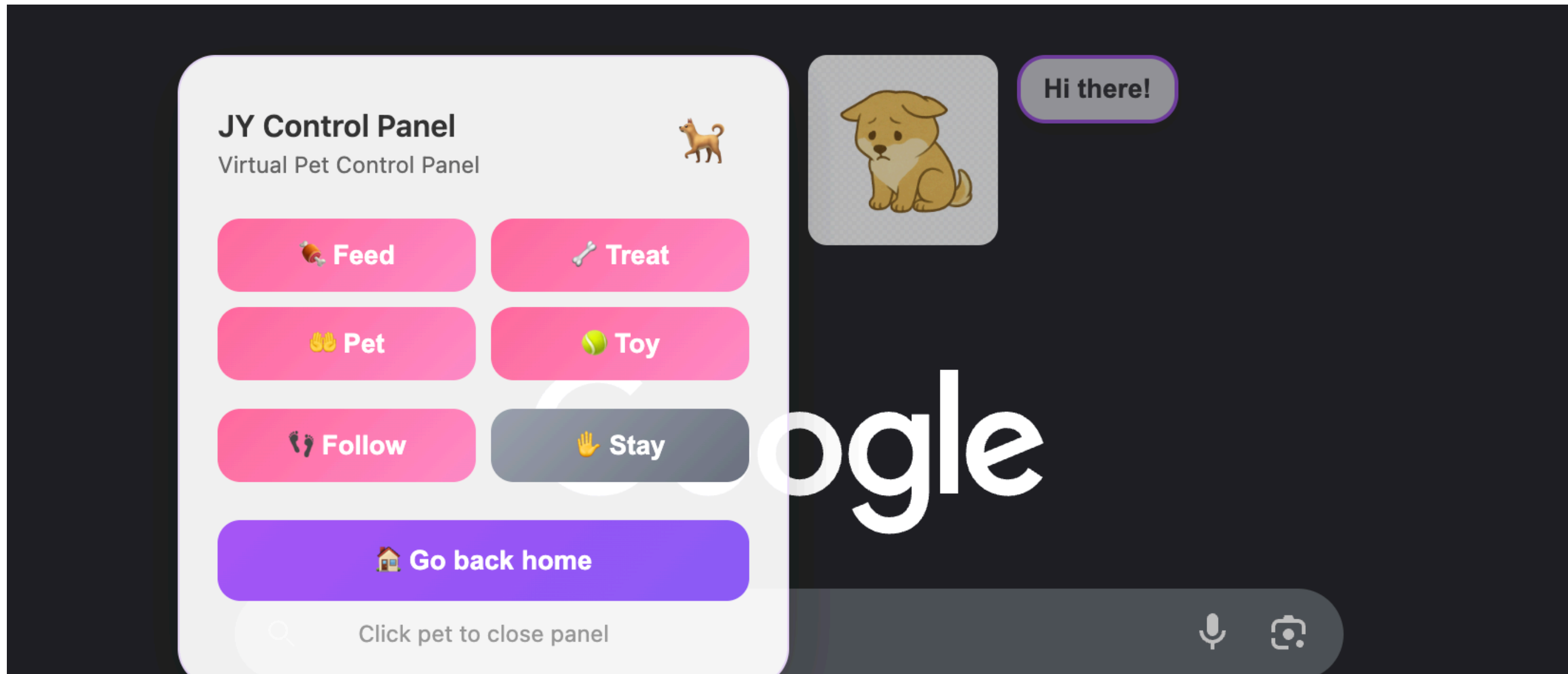
NovaPet Feature

Walk your Pet while online!

NovaPet Demo

NovaPet Website
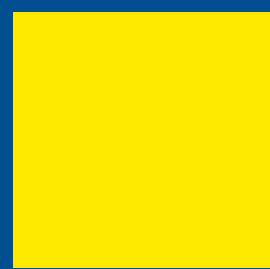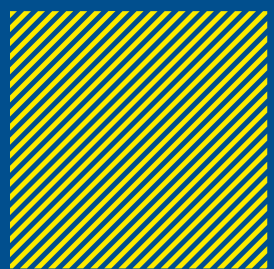

https://novapetextension.github.io/NovaPet.github.io/

Future Expansion

- **Improvements**
- **Business Model**

Smart Health Care
Management, NTPU
**Zeeshan Rehman
(ZEE)**

Future Improvements for NovaPet

Product & Feature Enhancements

Emotion Recognition
- Detect user mood via browser activity, keystroke speed, or webcam (with consent).
- Pet responds empathetically, e.g, offers encouragement or plays a calming animation.

Mini-Games & Challenges
- Unlockable games based on pet type (e.g., puzzle solving, reflex games).
- Earn XP to evolve or decorate your pet's planet.

Voice Interaction
- Talk to your pet using voice commands via mic.
- Adds accessibility and deeper emotional connection.

Business Growth & Engagement

Pet NFT Ecosystem
- Limited-edition pets.
- Community-designed pet drops or seasonal releases.

Merchandise Store
Physical plushies, custom stickers, journals, or posters of your pet.

Localization & Global Themes
Add language packs, regional festivals (e.g, Lunar New Year pets)

Key Partners

- Freelance illustrators and motion designers (pet & planet artwork)
- AI API providers (e.g. OpenAI for dialogue generation)
- University communities and student ambassadors
- Developer community (for technical support & growth)

Key Activities

- Unique Virtual pet characters and worlds
- Chrome extension development and maintenance
- Collecting user feedback and iterating the product

Key Resources

- Character & pet art asset library
- Prompt-to-behavior configuration system
- User data (preferences, points, unlocks)

Unique Value Proposition

- Emotionally intelligent AI pets that provide companionship while browsing
- Unique art styles and personalities for every pet, creating a collectible experience
- Seamless integration into daily life as a browser-side companion
- Light productivity support (reminders, rituals) blended with fun interactions

Customer Relationships

Direct-to-user, emotional bonding, gamified interactions

Channels

Chrome Extension Store, IG/TikTok, Discord, Product Hunt, campus promotions

Customer Segments

- Gen Z students looking for digital companionship
- Remote workers and digital nomads seeking emotional balance
- Creatives (e.g. designers, illustrators, content creators)
- Early adopters and AI-curious users
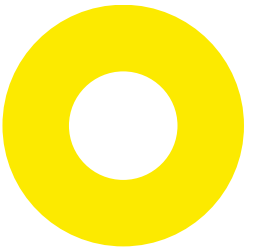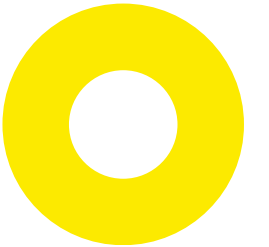
Cost Structure

AI API costs, development, artist commissions, server maintenance （Cloud）, Marketing budget (social media, influencer seeding)

Revenue Streams

Fully open source! freely sponsored by the customer.

References

- https://www.pewresearch.org/
- https://www.cigna.com/
- https://www.media.mit.edu/
- https://hsph.harvard.edu/

NovaPet

Thanks For Your Attention

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