# **Team Member**





**Jerry Hsu** 



**Ryan Chen** 



**Wilson Dai** 











## **TCG Card Collection**

Trying to solve the problem of **trading convenience**, **price traceback** integration, and card **management**.

Problem Domains: User experience, Investment







# ···· Initial POV of this testing

We realized that...

There would be a search for prices across all platforms.

It would be game changing...

If people could search for prices across all platforms in one place, they could not only find the best deals more efficiently but also make smarter and more informed purchasing decisions.



# ···· Interviewees - Andy



### WHO?

**NORMAL PLAYER,5 YEARS EXPERIENCE, OFFICE-GOER** 

### WHERE?

**DISCORD INTERVIEW** 

## WHAT WE FOUND OUT?

BUYERS PREFERRED TO JUDGE THE SELLER'S TRUST HISTORY BY THEMSELVES POORLY DESIGNED INTERFACE IS THE PAIN POINT



# ···· Interviewees - INJ



### WHO?

**COMPETITOR, OVER 7 YEARS, DESIGNER** 

## WHERE?

**IN-PERSON INTERVIEW** 

### WHAT WE FOUND OUT?

SELL EXTREMELY HIGH PRICE CARD BY CONTACT PERSON
PERSONALIZING ALGORITHM FOR CARD TRADE
DISLIKES SENDING CARD DUE TO CARD CONDITION ISSUE



# ···· Interviewees - Snivy



WHO?

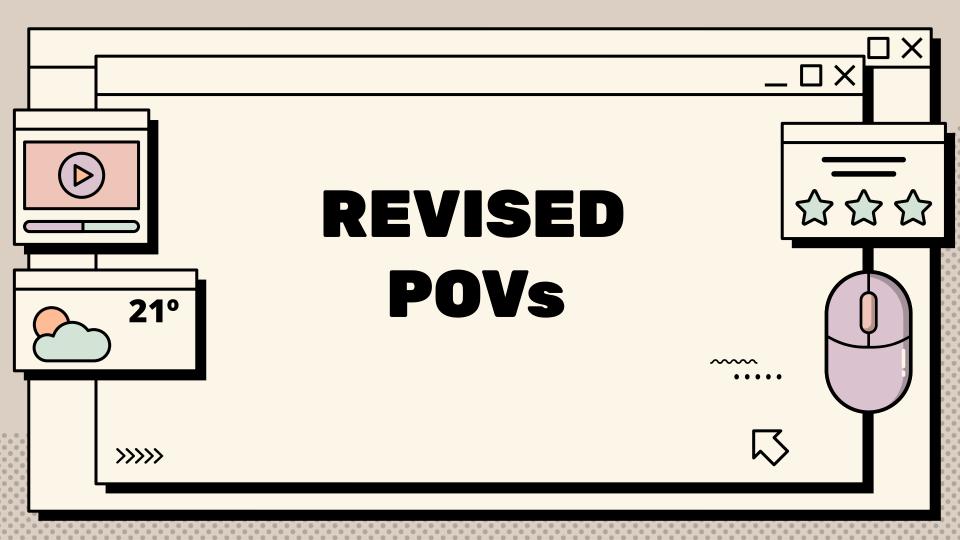
PLAYED FOR 5~YEARS, PTCG JUDGE

WHERE?

**ONLINE ON DISCORD** 

WHAT WE FOUND?

RARELY TRADE VIA INTERNET MEDIA WITH CONCERN ABOUT FREQUENT FRAUD





#### • • • •

## **Revised POV**

### We met...

Andy, who tried TCG Store before but forfeited

## We realized that...

Buyers struggle to search a certain card's deal in current poorly designed platforms (lack of cross platforms search) It would be game changing...

If people could search for prices across all platforms in one place, they could not only find the best deals more efficiently but also make smarter and more informed purchasing decisions.



# **HMW** statements



reduce the additional costs of international card purchases	look for cards related to one character	check the price of a card in other country
look for a card from other country collector	transfer the money and card with other country player	buy several cards at once to reduce shipping cost
consider a deal good or not	build a searching system integrated each language	get a card's history trading prices
display info from different platform into a single form	cross-reference Pokémon card names in Chinese, English, and Japanese?	use image recognition to help players identify the content of non-Chinese Pokémon cards?



# Solutions from top HMW »»»



Build a comparison table with names in languages, id, etc	Establish a database for collecting card information	Create a bot for checking the existing card by searching
Find out several platform which exists sufficient data	Train ChatGPT for finding informations about this	Using web scawlers to collect data from official or third-party sources
Integrate card name data into auction platform	Ask for card list from different region collector	Target each language to its frequent platforms
A filter for users to choose from different region	Add an image search function	More narrow classification for a same card name



#### • • • •

## **Revised POV**

### We met...

INJ, who use Facebook trade groups for buying often

### We realized that...

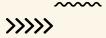
Collector agree with the idea of personal algorithm best deal recommendation, but thinks it hard to achieve.

It would be game changing...

If the collection and purchase history could be recorded and used to analyse their preference, and showing them deals that they are willing to purchase



# **HMW** statements



Get current and history prices	Collect trade info from those platforms not providing final price	Estimate price trend
Check a transaction is real or not	Help profit-targeting users to evaluate their card's value	Deal with language problem
Identify cards for a transaction	Help collecting-oriented users be aware of targeted cards' price trend	Determined a reasonable price interval



# Solutions from top HMW »»»



Build filter system to classify cards(language, certification, etc.)	Webscrewer to looking for final prices in those platform providing this info	A window for user to manually provide their trading details before.
Al prices analysis system	Users could tag their profitable cards and observe it trend	Al checking system for transaction data manually provided by users
Integrate existing prices analysis tools	User could mark their loved cards for convenient observation	Encourage users to provide transaction detail match via the platform



#### • • • •

# **Revised POV**

### We met...

Snivy, who is the only one didn't buy cards online

## We realized that...

Trading scams do stop some potential users from using online trading platform. Ensuring trustworthy transactions for both buyers and sellers is important.

## It would be game changing...

We build a secure and fair reputation system for card trader with appropriate punishments and alerts, making them able to trust trading online.



# **HMW** statements

>>>>>

How might we build trust		
for new users who are		
afraid of trading scams?		

How might we create transparency in each trader's history without invading their privacy?

How might we build a trading platform that feels fun and secure?

How might we show users which traders are safe to trade with at a glance?

How might we help users resolve conflicts after a trade goes wrong?

How might we use AI to detect unusual trading patterns that may indicate scams?

How might we educate new users about safe online trading practices?

How might we show users like Snivy that most trades are safe and successful? How might we allow users to verify who they're trading with in creative, low-barrier ways?

How might we design fair and visible penalties for dishonest traders?

How might we create a space where new users can practice trading safely?

How might we change the perception that online trading is inherently risky?



# Solutions from top HMW »»»

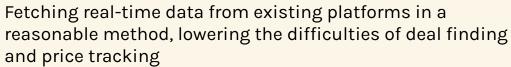


Reputation system for buyer and seller	Presenting seller's trading history to buyer	Punishing fraud account by banning device
Trading records to ensure not alt account	Looking for third party contact person for trade	Limit some functions for verified traders
Name-based rationing system for users verification	Review highlights when hovering trader's name	Mutual connectiuons indicators of trader history
Differ users with obvious sign (color label)	Verified checkmark for trusted seller	Smart ranking in list to push safe trader higher



# **Three Top Solutions**









Integrate existing prices trend analysis tools into our platform, and enable user to search and filter data easily with their own target (collect/profit/competition/etc.)





A name-based rationing system makes scammer harder to create accounts and ensure buyer able to trace the seller when scam happens, reducing the amount of trash accounts

Name-based rationing system for users verification



# Summary

- Core Pain Points from Users
  - It efforts when looking for price across platforms
  - Hard to find possible trades by their preference
  - Scammers are hard to recognized and punished

- Key POVs (User Insights)
  - Simpler price searching
  - Desire for personalized recommendations.
  - New users fear scams



# How Al assists us

- Generate ideas for HMW questions
- Help me gain insights from the POVs
- Via: ChatGPT-4o, ChatGPT-o1

