

HacX

Team AICU

SC1: Solving Bicycle & PMD Thefts
Nanyang Polytechnic
25 October 2023



AICU





Yi Cheng's house



Yi Cheng's house





Problem





U Lock



CCTV



Posters

2-3 bicycle cases per week in each neighbourhood

~ Woodlands NPC

Our Solution?

PAIN POINT



Trace common bicycle models without the use of CCTV footage, GPS tracker etc.

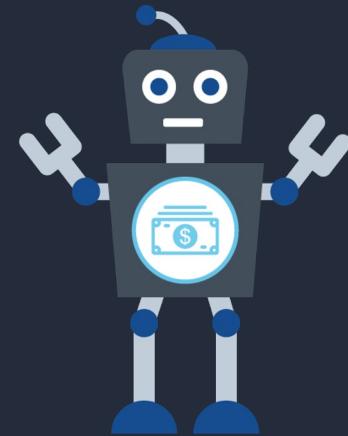
AI-powered mobile application



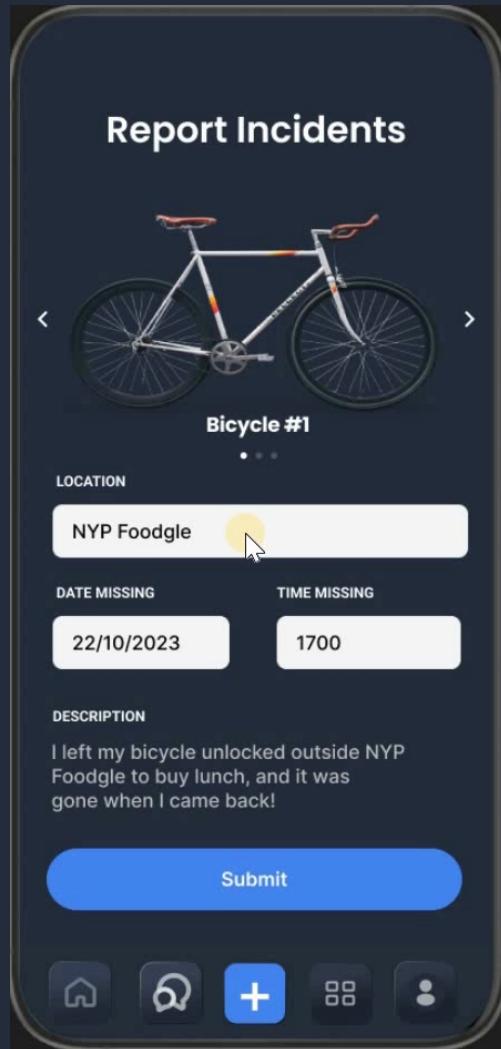
Police's
effort

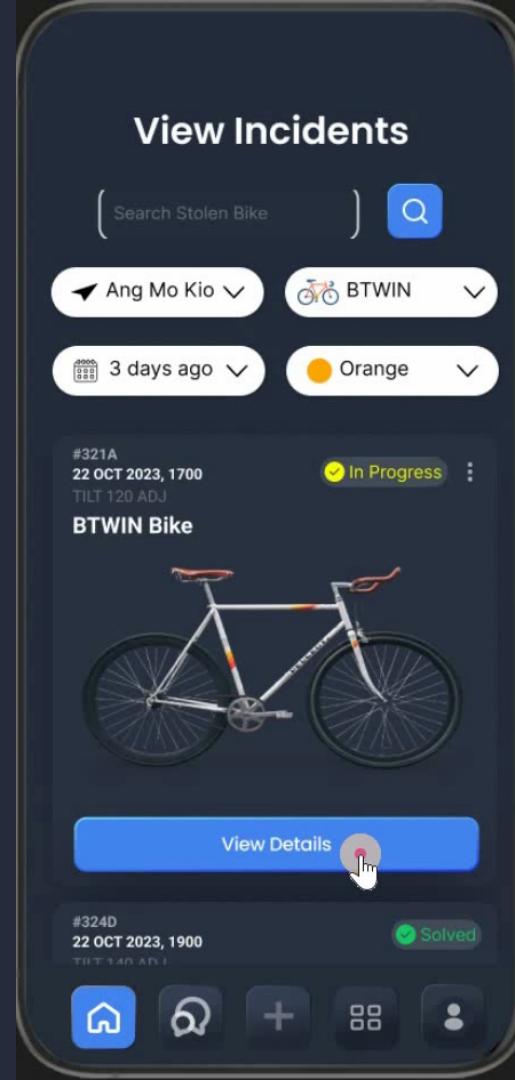


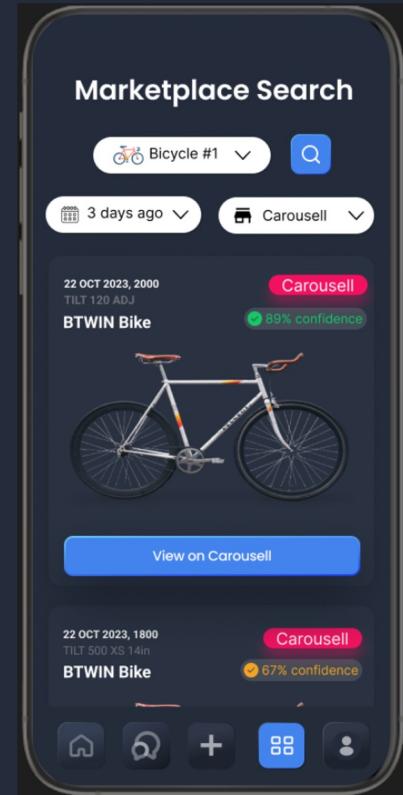
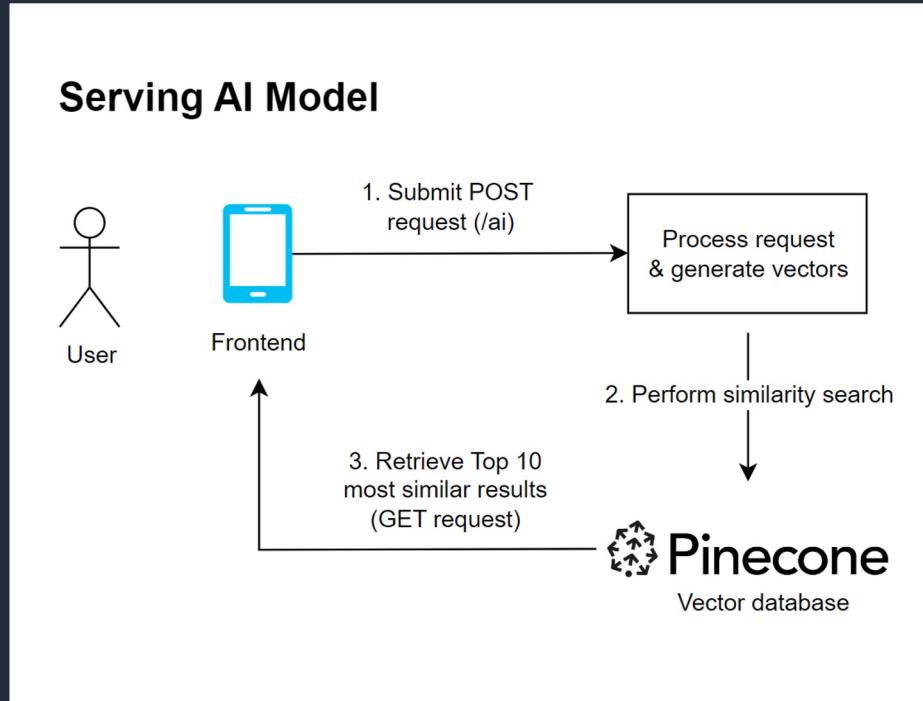
Resident's
effort



Our AI







Online Marketplace Search

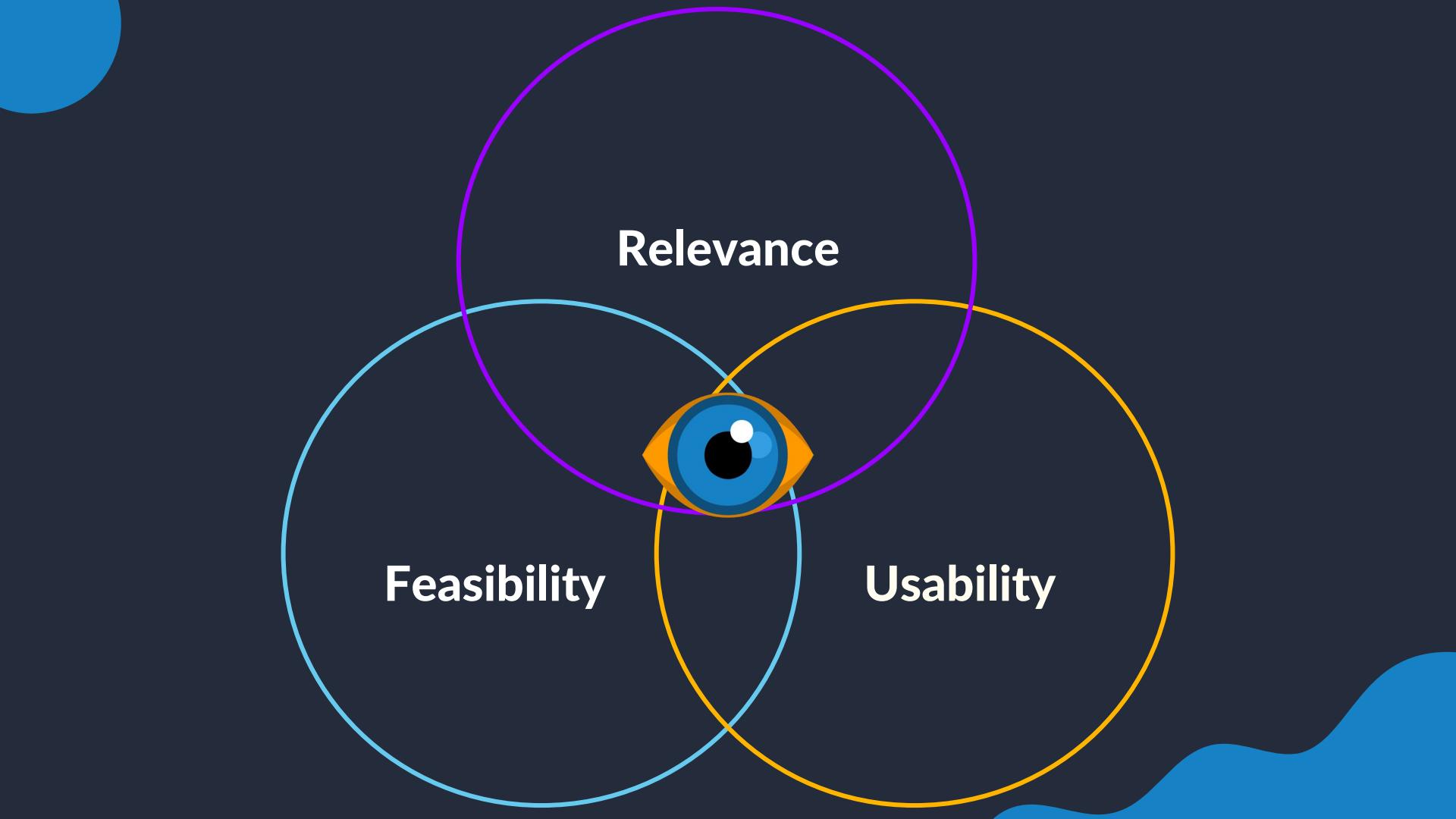
BTWIN Decathlon Hybrid Bike

Used only 3x times for 3-4hrs ride each time.

https://media.karousell.com/media/photos/products/2023/10/15/btwin_decathlon_hybrid_bike_1697352591_928dfebc_progressive.jpg

Search





Relevance

Feasibility

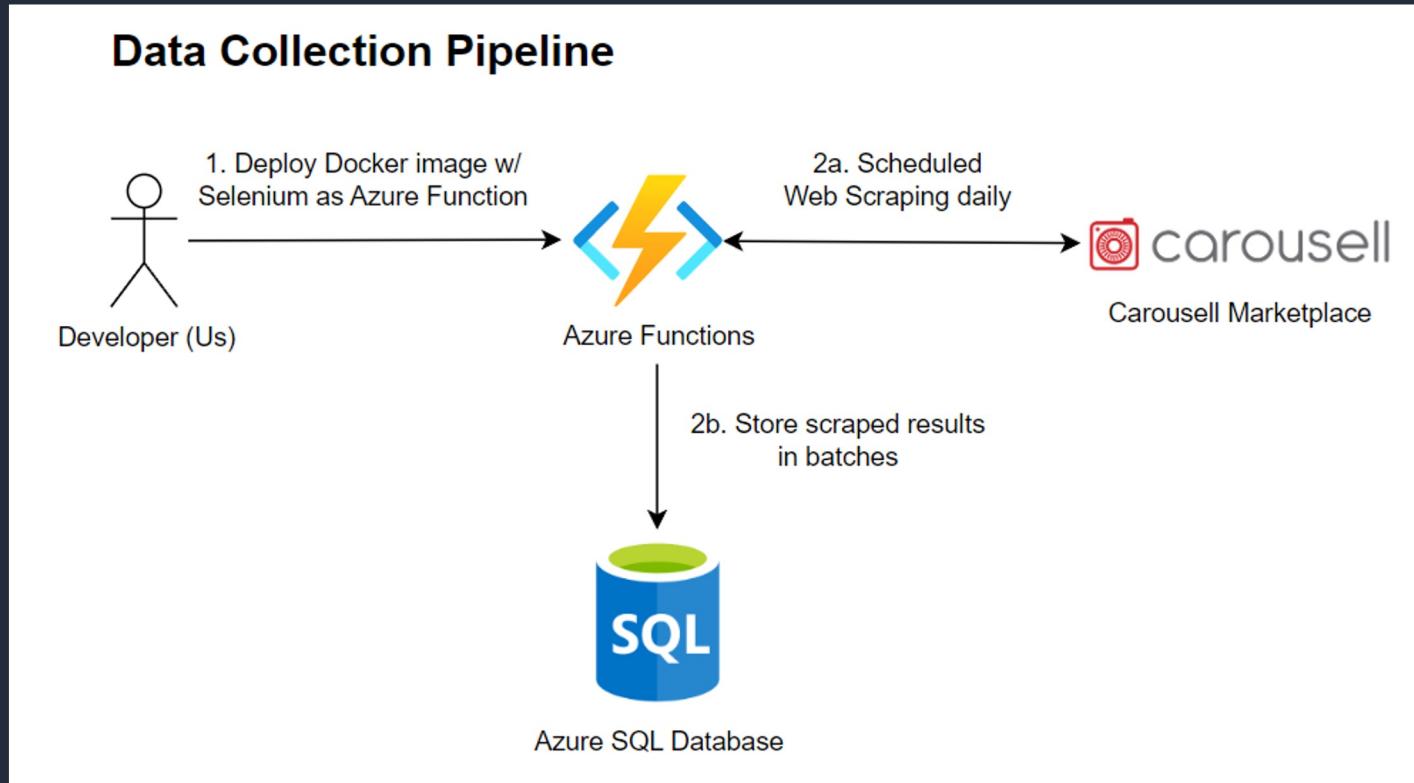
Usability

Relevance

PAIN POINT

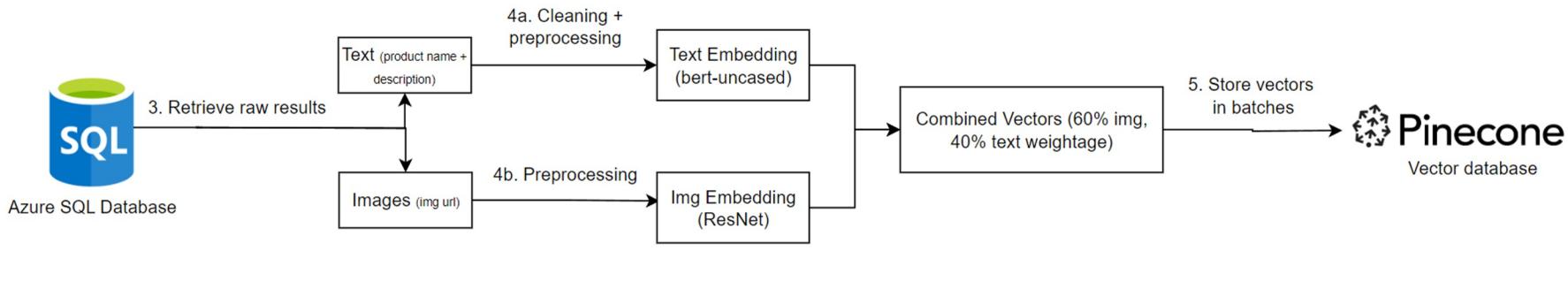
How does our app help residents
and police identify stolen
bicycles of common models?

Relevance (Online)

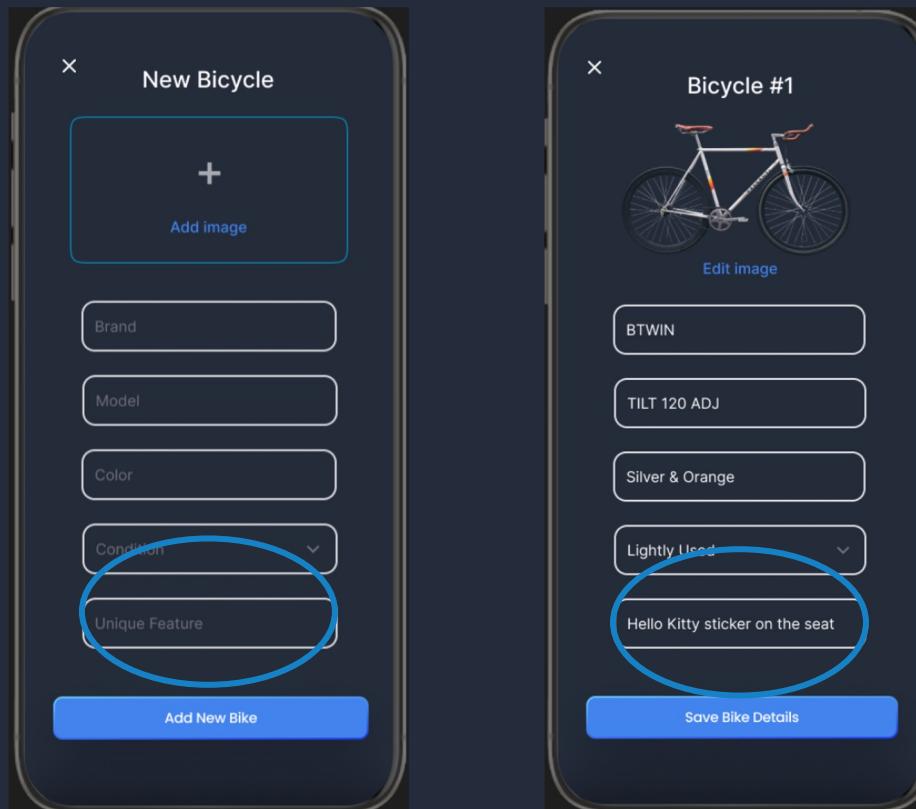


Relevance (Online)

Data Processing Pipeline



Relevance (Physical)

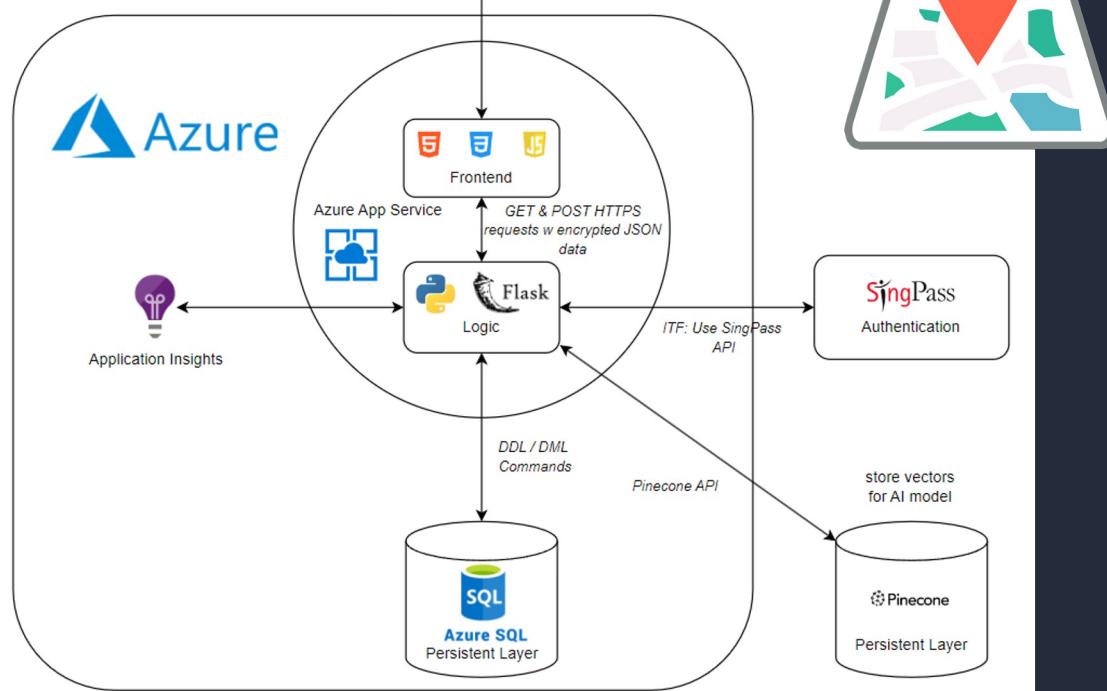


Feasibility





Azure Cloud Native Architecture



Welcome to
AICU!



Log in with singpass

Usability

Report Incidents



Bicycle #1

LOCATION
NYP Foodgle

DATE MISSING 22/10/2023 **TIME MISSING** 1700

DESCRIPTION
I left my bicycle unlocked outside NYP Foodgle to buy lunch, and it was gone when I came back!

Submit

Bottom navigation icons: Home, Search, Add, Grid, User

AICU Staff

View Incidents Community Discussion Marketplace Search Logout

View Incidents

Filter by

- Ang Mo Kio
- 3 days ago
- BTWIN
- Orange

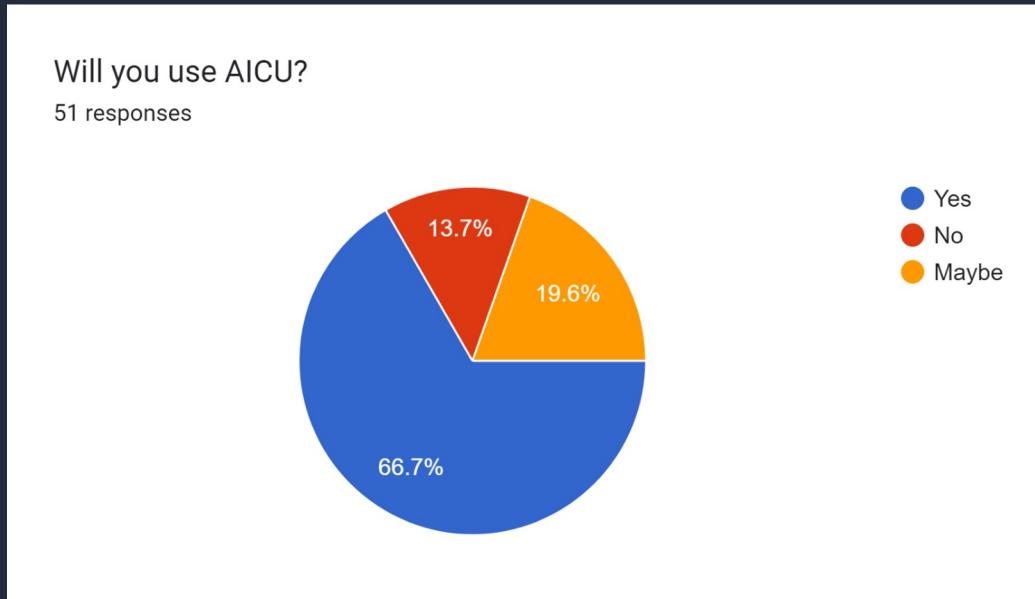
Search bar with magnifying glass icon

ID	Date	Status	Type	Action
#321A	22 OCT 2023, 1700	In Progress	BTWIN Bike	View Details
#324D	22 OCT 2023, 1900	Solved	BTWIN Bike	View Details

Residents

Police

User Testing (51 people)



“Will only use when my bike is stolen”

“If not many people use this app, it's a waste of time”

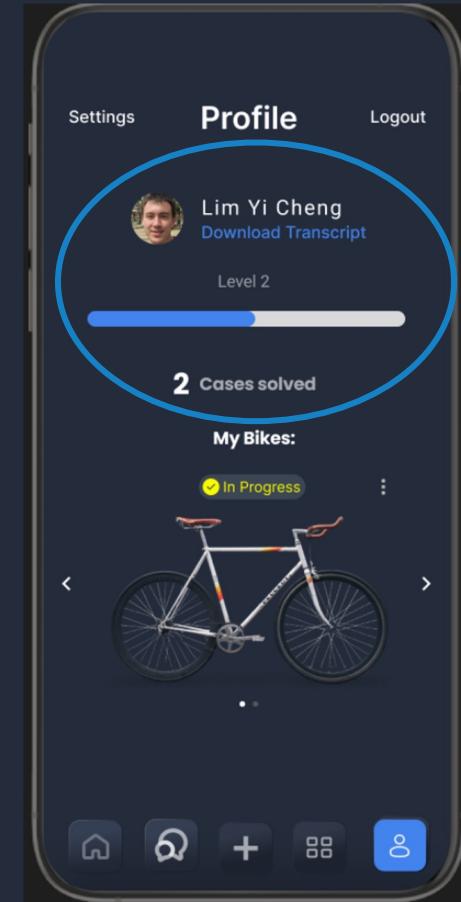
1st Feedback

Motivate residents to continue using AICU

 Lim Yi Cheng
Level 2
2 cases solved
Exp: 100/200

Solved Cases

ID	Bike	Case Description
324D	BTWIN TILT 140 ADJ 	Solved on 23 Oct 2023, 1900 Bike was found on Marketplace (Carousell) Yi Cheng assisted in searching for missing bike on Marketplace and made the report.
369C	BTWIN TILT 360 JPJ 	Solved on 24 Oct 2023, 2100 Bike was found near Hougang Mall Yi Cheng contributed in the Community Chat, he confirmed that the bike is outside of Hougang Mall.



2nd Feedback

Publicise app to more people

- Posted on social media
- Pasted at bicycle parking areas
- Brought around by police during patrol, house visits, or campaign



**Want more eyes
on your bike?**



**DOWNLOAD
AICU NOW!**



<https://aicu.azurewebsites.net/>

 is an AI-powered mobile web app that connects residents, police officers, and AI together to identify stolen bicycles around the neighbourhood, or on online marketplaces.



AICU

Solved Bicycle
& PMD Thefts



Kampong Spirit





~End~

Thank You!



AICU

