

SYNKRO

in a blink, you're in sync...



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MOTIVATION



THEFT LOSS

Direct Access Risk: Stolen cards grant immediate campus facility access, exposing sensitive Student ID data.

Financial Exposure: Access to student accounts like Campus Cash is instantly vulnerable.

Disruptive Cost: Manual cancellation, administrative intervention, and costly, replacement fees are triggered.



PHYSICAL DEGRADATION

Unreliable Service: Magnetic strips and chips fail due to wear and tear.

Unnecessary Lockouts: Students are denied access through no fault of their own.

System Overload: Forces manual overrides and staff intervention at service points.



FORGETTING FACTOR

Workflow Failure: The card ignores the modern student's primary credential (the phone).

Guaranteed Disruption: If the card is forgotten, denial of service is immediate.

The Daily Question: We eliminate the need to ask: 'Did I remember to bring my ID?' .



ENVIRONMENTAL ISSUE

50M+ Plastic Cards Annually: Quantifies the massive scale of the problem in the US.

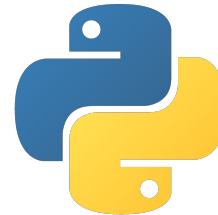
PVC Plastic: Non-recyclable pollutant that takes centuries to degrade.

Sustainability Failure: Positions **Synkro** as the sustainable, digital alternative.



SYNKRO

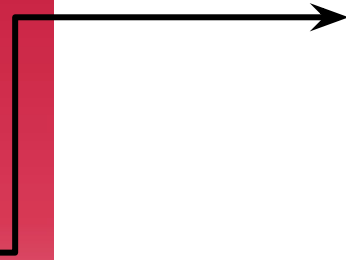
TECH STACK



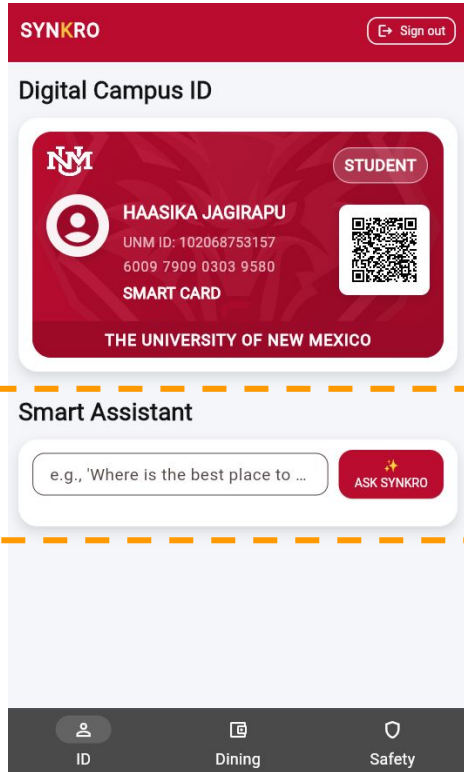
SECURE SSO AUTHENTICATION



Firebase



HOME SCREEN



Smart Assistant

Where can I find quiet study spaces at UNM?

ASK SYNKRO

- Quiet study spots:
- Centennial Science & Engineering Library (upper floors)
 - Zimmerman Library (quiet zones)
 - SUB study lounges (early mornings)
- Pro tip: bring headphones during peak hours.

study

quiet

library

dining

centennial

safety

police

EXPENSE TRACKING

SYNKRO Sign out

Current Balance
\$131.50
Last Updated: Live

Add \$10 to Account

Share Dining Dollars

Recent Transactions

- Top-up** +\$10.00
2025-11-17 15:32:34
- Sent to Anurag** -\$11.50
2025-11-17 15:32:27
- Top-up** +\$10.00
2025-11-16 22:22:39
- Top-up** +\$10.00
2025-11-16 22:22:36

ID Dining Safety

Firebase

Project Overview

Project shortcuts

- Authentication
- Firestore Database**
- Data Connect
- Storage
- Analytics Dashboard
- Hosting

Product categories

- Build
- Run
- Analytics
- AI

Related development tools

- Firestore Studio

Spark Upgrade
No cost (\$0/month)

Synkro

Cloud Firestore >

Database

Add database Ask Gemini about the core concepts of using Firestore

Data Rules Indexes Disaster recovery Usage Extensions

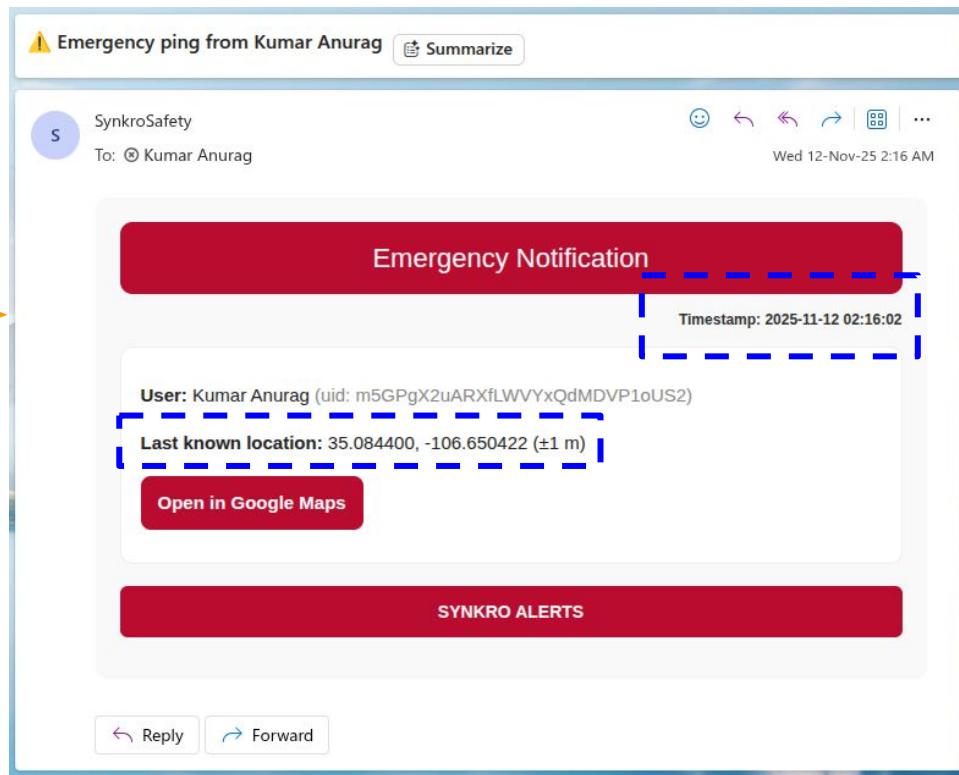
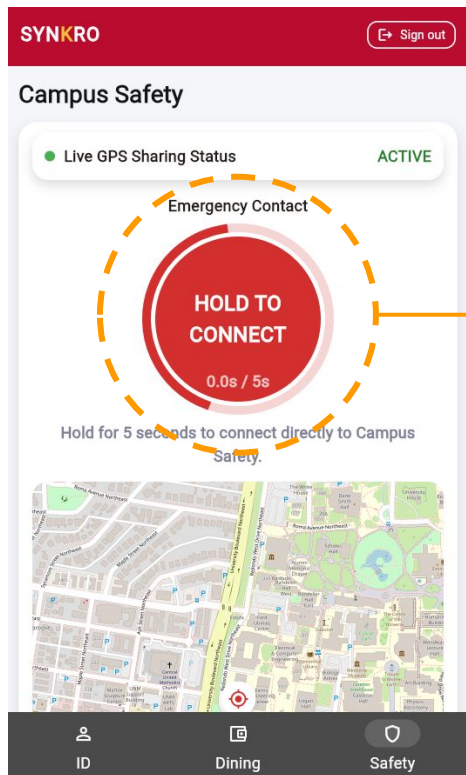
Protect your Cloud Firestore resources from abuse, such as billing fraud or phishing Configure App Check

Panel view Query builder

transfers > 1RrELjNjisk7Pnq...

(default)	transfers	1RrELjNjisk7Pnq2GHBS
+ Start collection	+ Add document	+ Start collection
transfers >	1RrELjNjisk7Pnq2GH... >	+ Add field
wallets	1ooQntk7ZURMwUIVg2...	amount: 10
	8J669DT7HFFLiRRtfg...	createdAt: 12 November 2025 at 23:03:28 UTC-7
	E79nF7WYfR4RxAQuaT...	fromUid: "VMYTLyZrixTVsgfXqWTWJwNkSND3"
	GFUWuzFkk1heQJofb5...	kind: "topup"
	Hmecy4d8MrDTCiuN8v...	toUid: "VMYTLyZrixTVsgfXqWTWJwNkSND3"
	KXhemWduiXxU3UCvA8...	
	LNJR6NjQLR1w3X57fi...	
	QR7bqCzeG3Eshj1D6D...	
	P5tkRZWKrPwBS4X52k...	
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	ST11GpWaYipyZkdUYi...	
	VbI6uhev5K5uhQhaji...	
	VzPOULOL2E8WfPbA60...	

SYNKRO SAFETY



RESEARCH



Business and Finance



Your ID goes everywhere at ASU



NEURAL NETWORK

Smart Assistant

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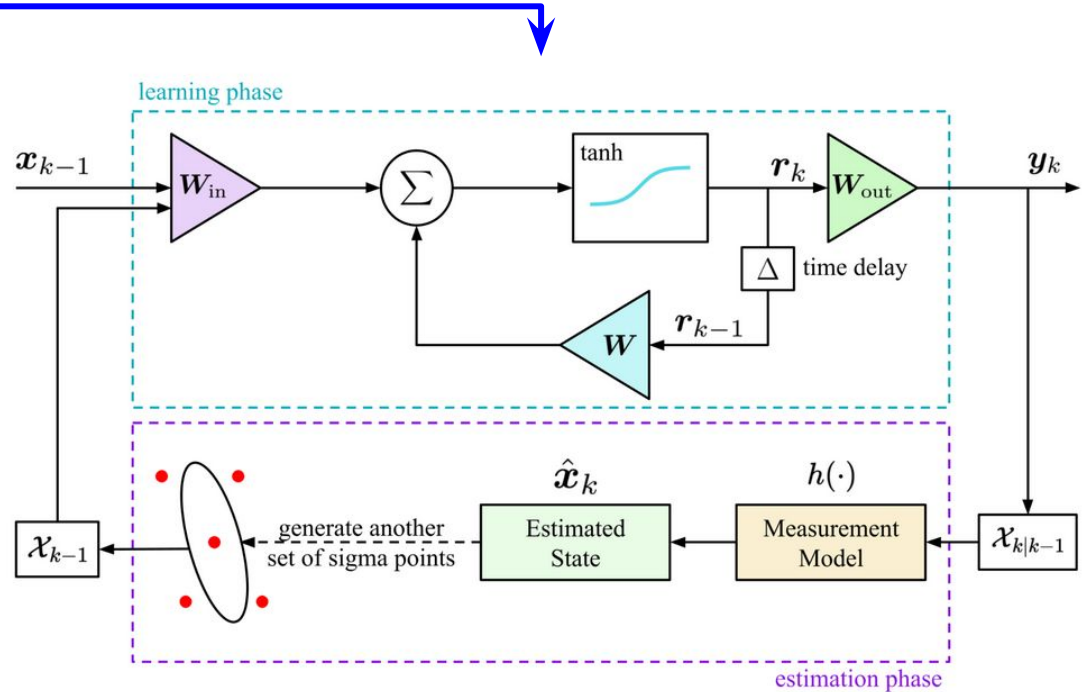
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ScienceDirect



IFAC Journal of Systems and Control



THANK YOU!

Questions & Discussion



SYNKRO