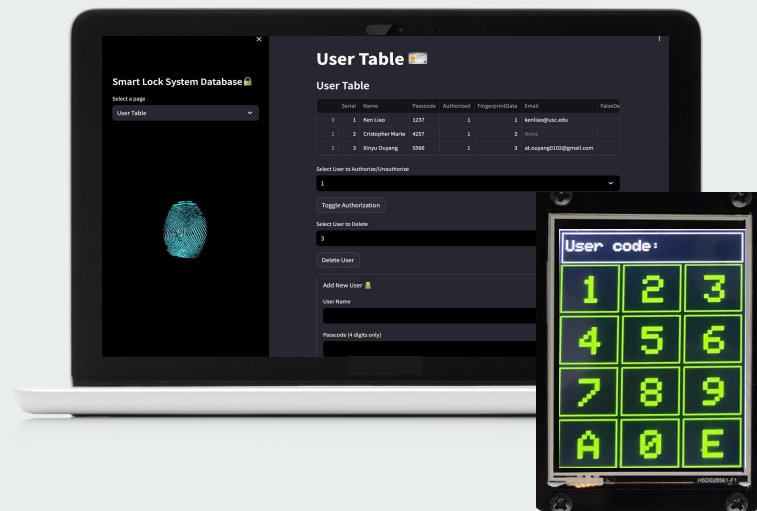


Smart Secure Biometric Access Lock

Group 5:

Ken Liao, Cristopher Marte, Xinyu Ouyang



Problem:

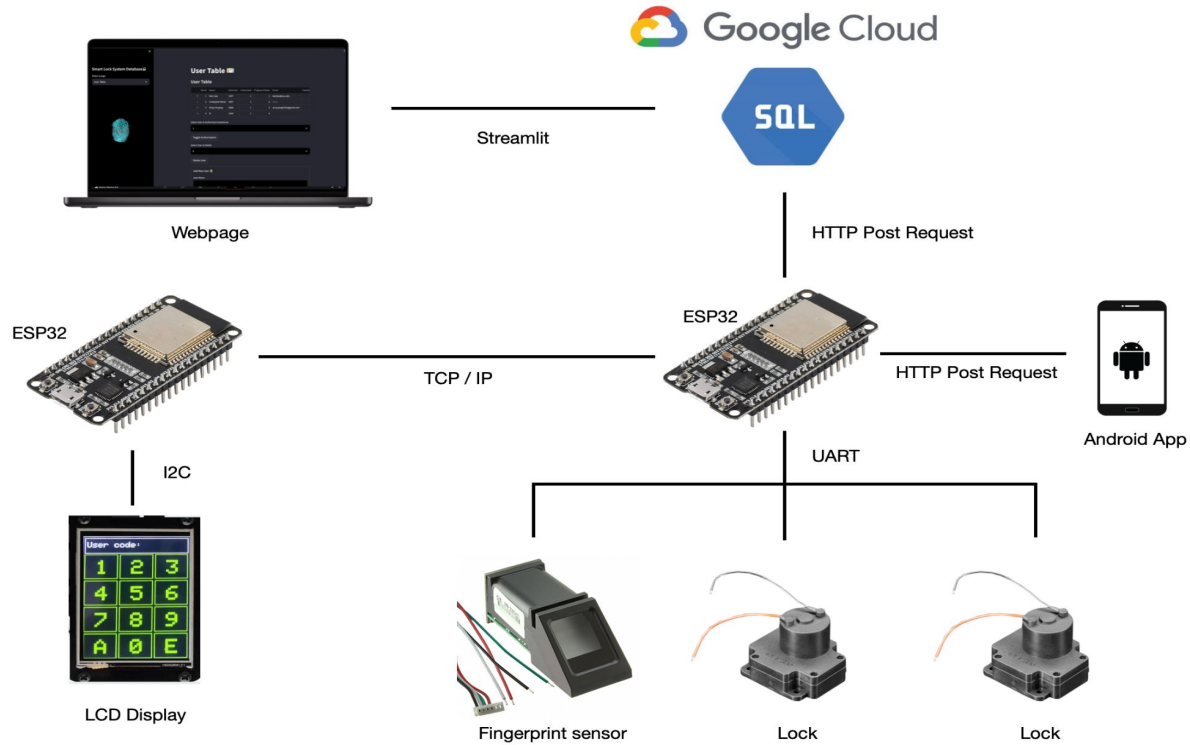
- An estimated 260 million packages were stolen the past year (CNBC)
- Collectively, Americans lost \$29.2 billion to package theft (Capital One)



Implementation: (Solution)



Block Diagram



Database & Visualization

User Table

User Table

	Serial	Name	Passcode	Authorized	FingerprintData	Email	FalseDe
0	1	Ken Liao	1237	1	1	kenliao@usc.edu	
1	2	Cristopher Marte	4257	1	2	None	
2	3	Xinyu Ouyang	5566	0	3	at.ouyang0102@gmail.com	

Select User to Authorize/Unauthorize


1

Toggle Authorization

Select User to Delete

3

Delete User

Add New User 

User Name

Passcode (4 digits only)

Email (Optional)

Page 1

Log Table

Log Table

	LogID	Serial	Name	InputType	Result	Time
0	1	1	Ken Liao	Fingerprint	Success	2023-10-24 17:01:42
1	2	2	Cristopher Marte	Passcode	Success	2023-10-24 17:05:33
2	3	3	Xinyu Ouyang	Passcode	Failed	2023-11-28 13:05:23
3	4	1	Ken Liao	Passcode	Success	2023-12-18 23:19:06

Refresh Data

Page 2

Delivery List

Delivery List

	Name	TrackingID	Delivered	Time
0	Ken Liao	H12304749523	1	2023-10-24 17:01:42
1	Ken Liao	T23985734566	1	2023-10-24 17:05:33
2	Ken Liao	L12985645543	1	2023-11-28 13:05:23

Add New Delivery Entry

Recipient Name

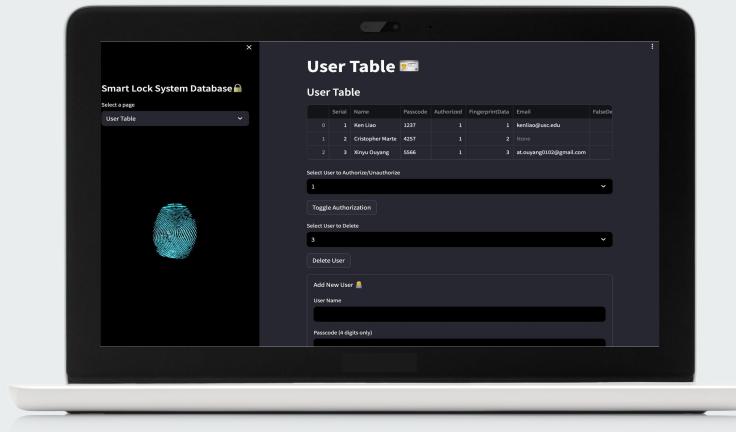
Tracking ID

Add Delivery

Refresh Data

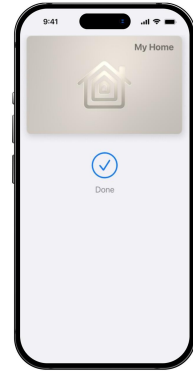
Page 3

Demonstration



Future Improvements

- Scaling the number of locks if needed
- Control door lock from the app
- Adding Mobile Application Capabilities (Digital Card Access).





Thank You!