

# Usability changes in a post-EOA world

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**Dapp UX today is constrained by the  
concept of what an account is.**



# **Dapp UX today is defined by single signature signing**

**Non-upgradeable**

**Entire account gets connected**

**Must have native token to send transactions**

**Seed phrase storage**

**No native batching**

**No transaction rules**



# Common pitfalls that account abstraction can solve for

Connect before seeing or doing anything

No recovery or  
upgrades

Signing a message for  
every action

Trying to get native tokens with  
no native tokens for gas






Enhanced security, smooth onboarding, convergent applications

# **“Appification” of dapps**





**What greater programmability and  
security on smart contract wallets  
can look like**



# Conditional Logic

← Back to portfolio selection

## Add Portfolio Security

Add an escape hatch, define disaster recovery

Portfolio Selection

Security Settings

Review & Pay

### Add recovery strategies

#### Unwind all positions

Auto-remove exposure if liquidity pool drains more than

#### Do not unwind, revoke all permissions

Keep positions but remove dapp permissions

### Watch on

Optimism



Free

Base



Free

Mainnet



Free

Based

Coming soon



Free

\$25/mo

Estimated Payment

2 networks

Other options

# Cross-chain calls & aggregation

## Transfer funds to purchase

You need 0.5 Zora ETH

Found funds on the following networks. Approve in your wallet to allow ZenGarden to fulfill your order on Zora.



0.199 ETH on Optimism

Balance: 0.1511



0.311 ETH on Ethereum

Balance: 1.9392

Purchase NFT



# Modular authentication to allow user to define the dapp's level of access

This dapp wants to connect to:

 gregthegreek.eth

Access funds up to 100 USDC

Use the splits module

See connected wallets

View your contacts list

Continue

Go back





# **Better blending of offchain and onchain and cross-chain components**

**New solutions = new friction**



UX Enhancement	New user friction & risks
Fewer approvals	Account and funds need to migrate; new address!
Enhanced programmability	EOA is still initial signer for it
Gas abstraction	4337-compatibility before 7702 = not gas optimized
Account Recovery	Unfamiliar user patterns
Modular Authentication or Session Keys	<u>Increased complexity for implementing account methods; you've issued a new wallet for the user</u>



**How do you build the best  
possible ground-zero dapp  
experience using smart  
accounts?**

**Surely it differs by use case...**



**Doesn't have to.**

# The improvements that will get us there

CAIP-275

ERC-4337

EIP-7702

EIP-7755

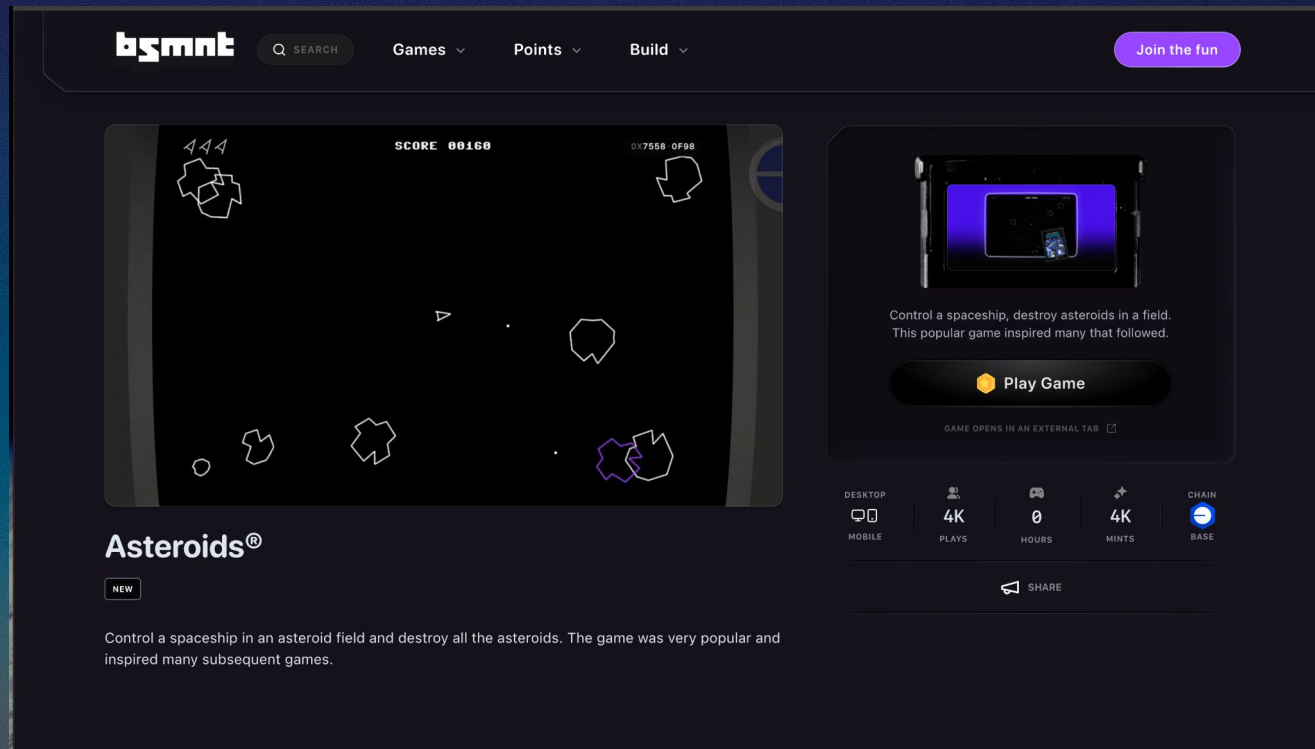
EIP-7715

EIP-7676

RIP-7575



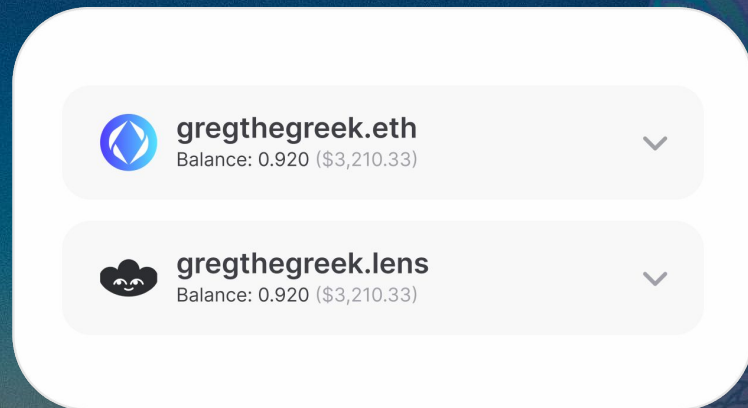
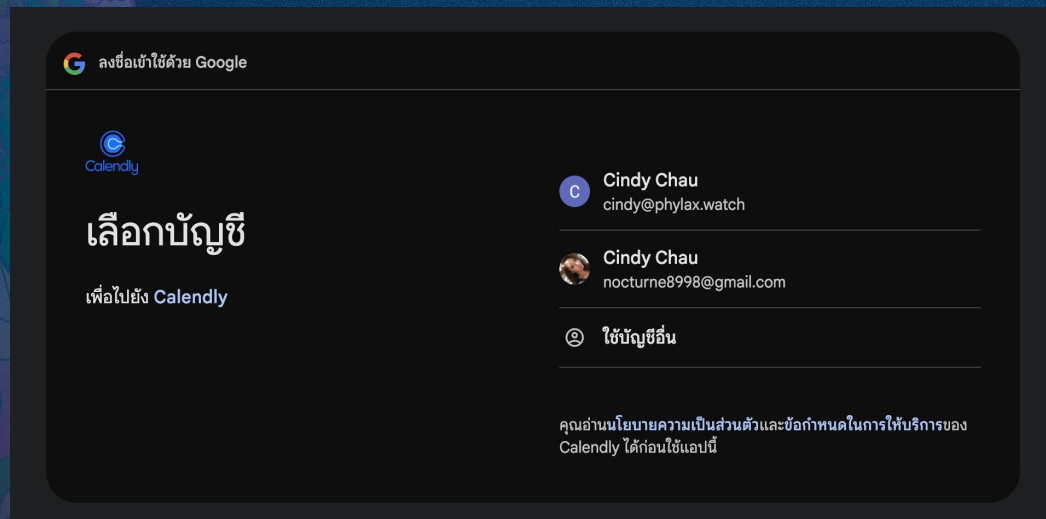
# 1. Let the user browse the app without logging in first with a silent embedded wallet.





## 2. Deliver an OAuth experience to let the user sign in with the account they want.

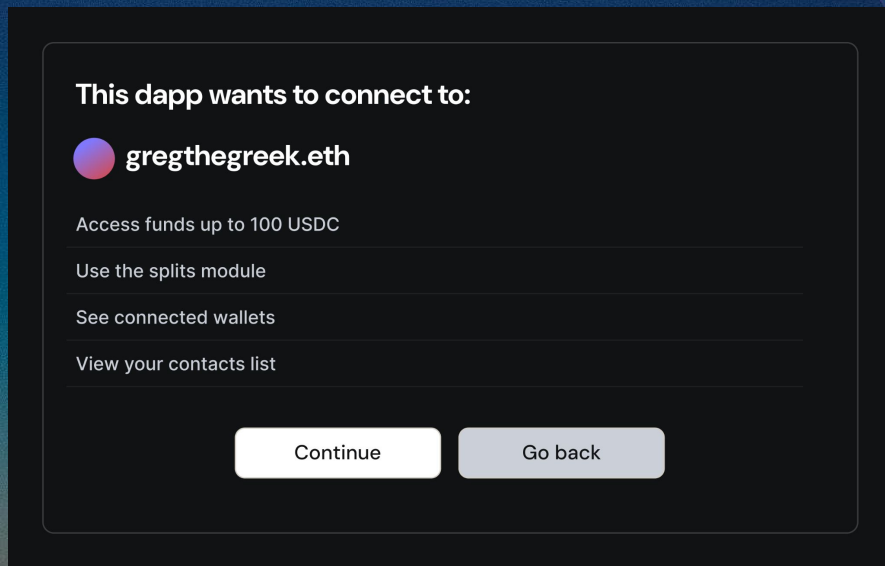
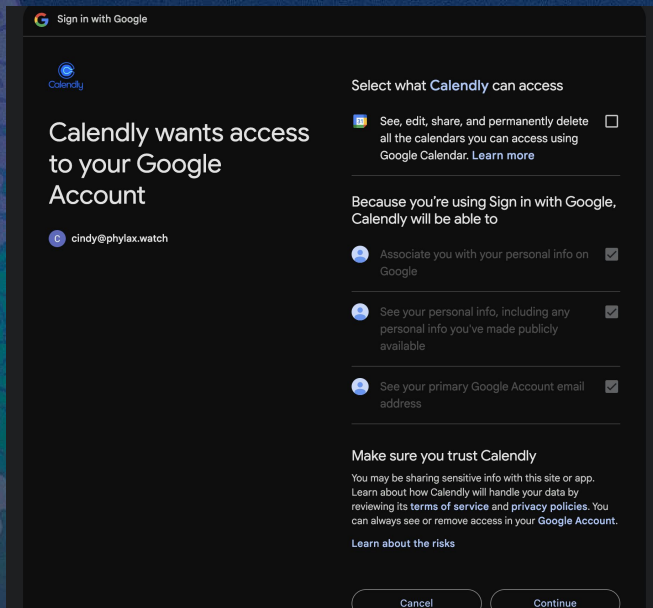
**CAIP-275: Discovery**  
**EIP-7555: OAuth**



### 3. Let the user decide what the app gets to do with it

## EIP-7715: Permissions Controls

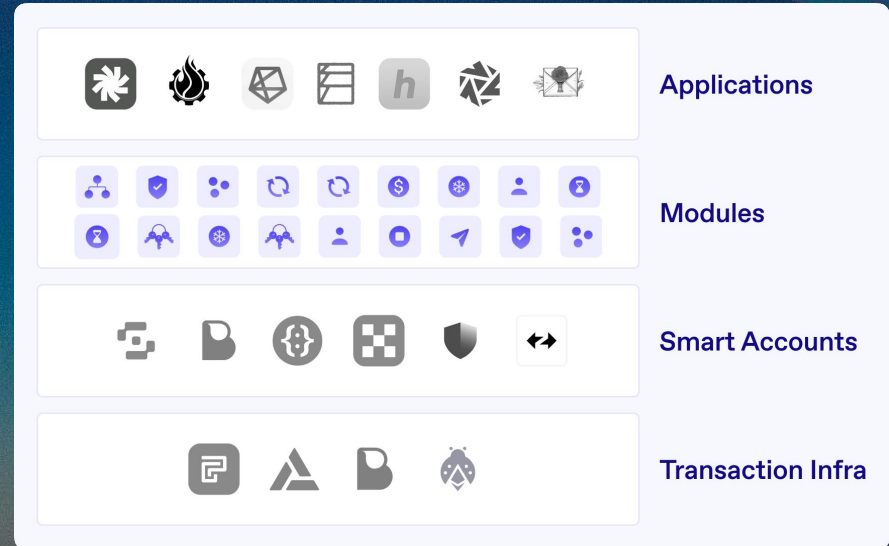
### Authorize a spend limit, session key creation



## 4. Greater programmability and personalized app experiences

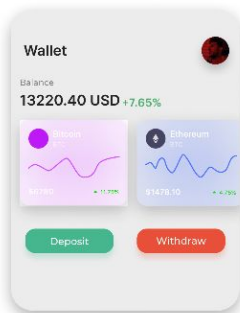
### EIP-7579: Minimal Modular Smart Accounts

- Fewer approvals, more functionality
- Bundle transactions and complex logic

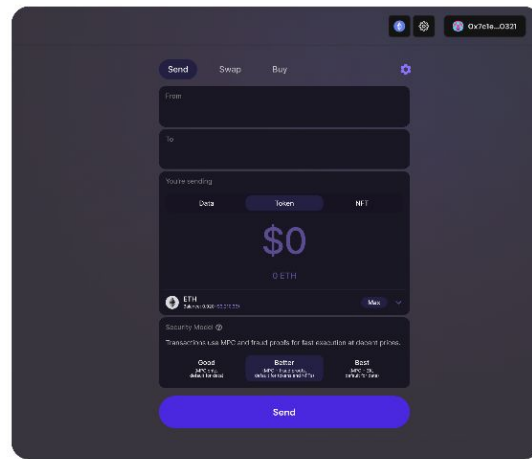




# The Endgame

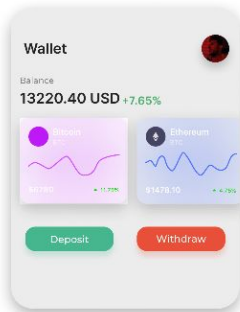


Wallet



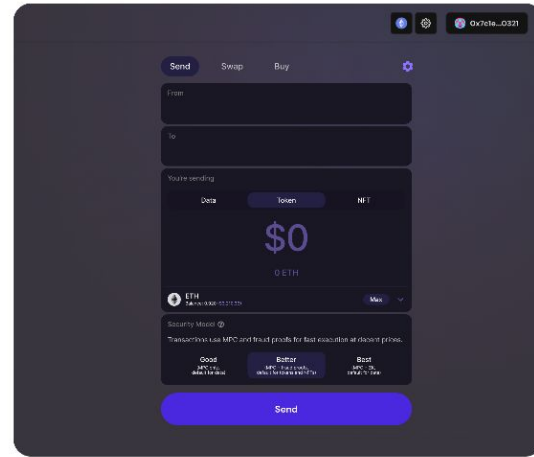
Dapp

# The Endgame



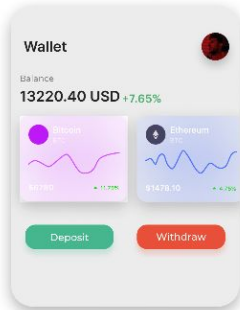
Wallet

ERC-4337



Dapp

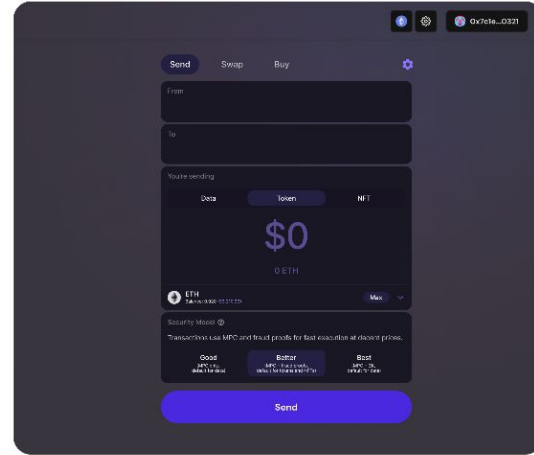
# The Endgame



Wallet

ERC-4337

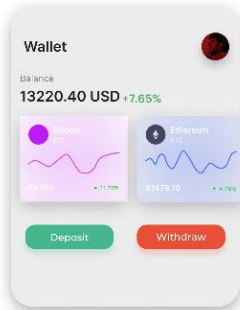
Passkey



Dapp



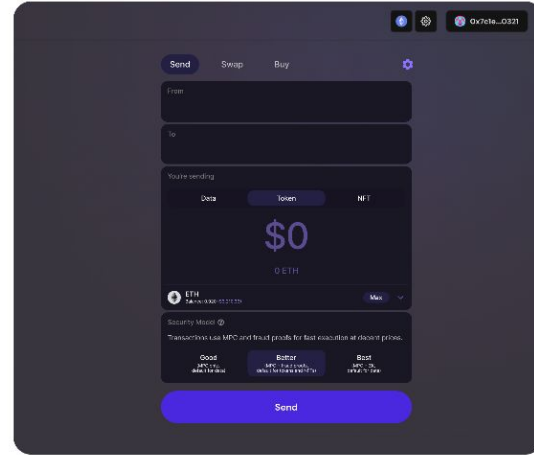
# The Endgame



Wallet

ERC-4337

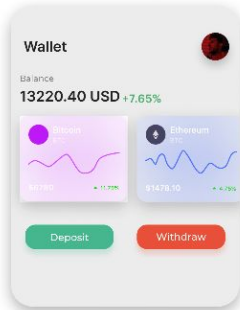
Passkey



Dapp

Embedded  
Wallet

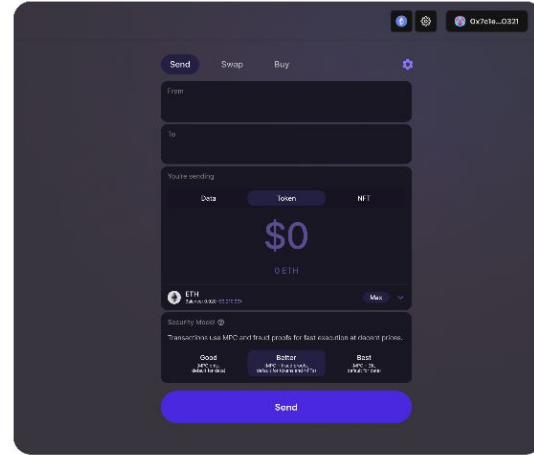
# The Endgame



Wallet

ERC-4337

Passkey



Dapp

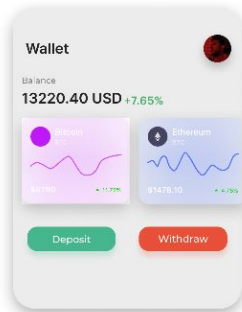
Embedded  
Wallet

CAIP-275



Registry

# The Endgame

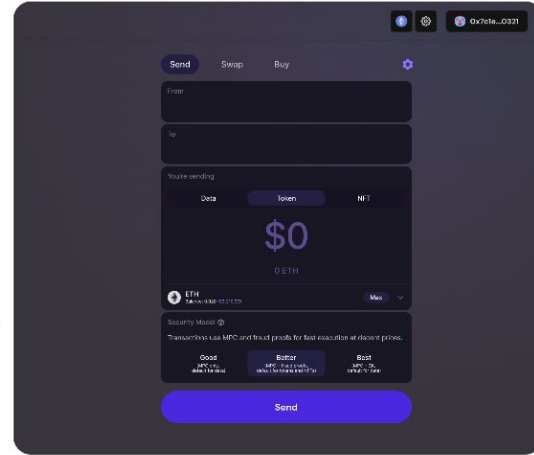


Wallet

ERC-4337

Passkey

ERC-7755



Dapp

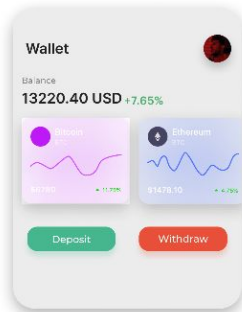
Embedded  
Wallet

CAIP-275

Registry



# The Endgame



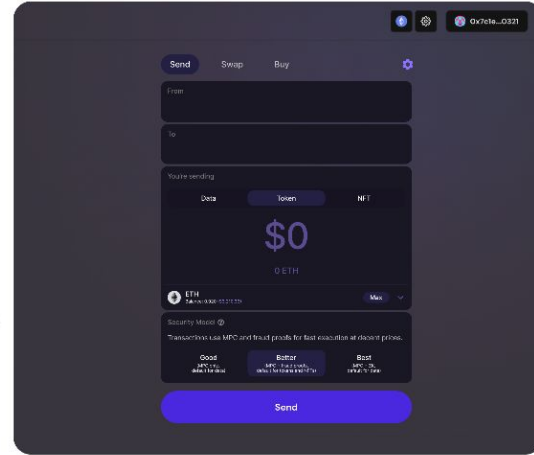
Wallet

ERC-4337

Passkey

ERC-7715

ERC-7755



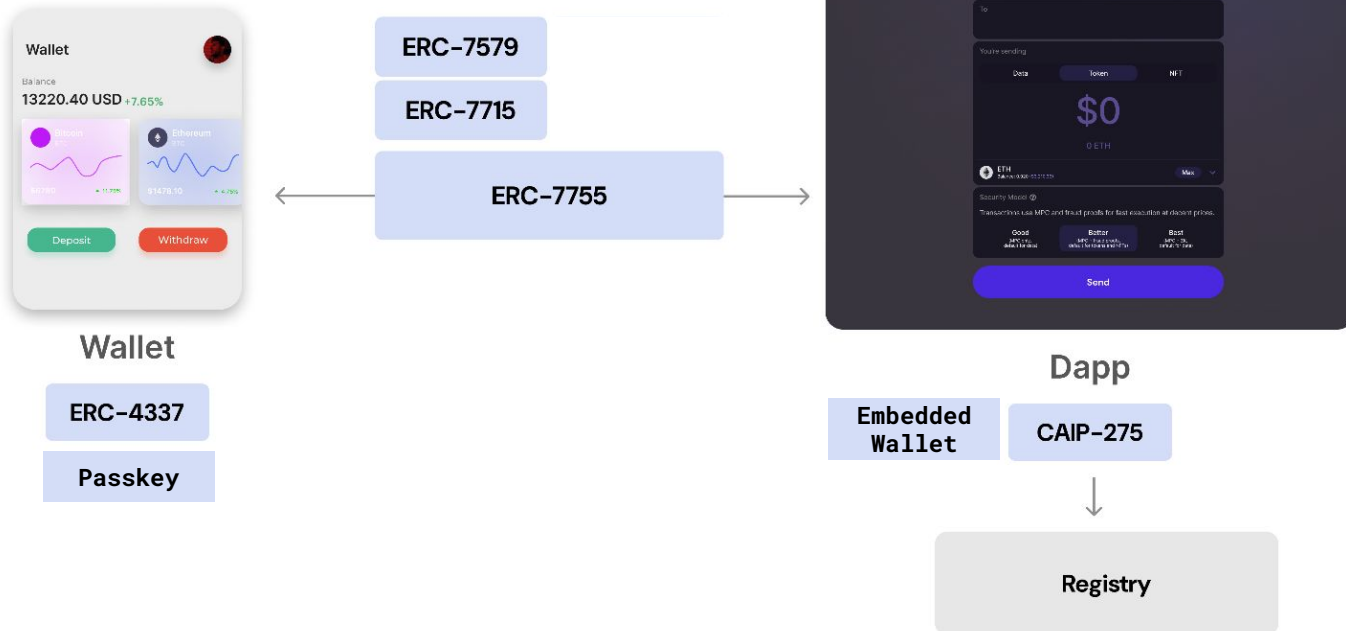
Dapp

Embedded  
Wallet

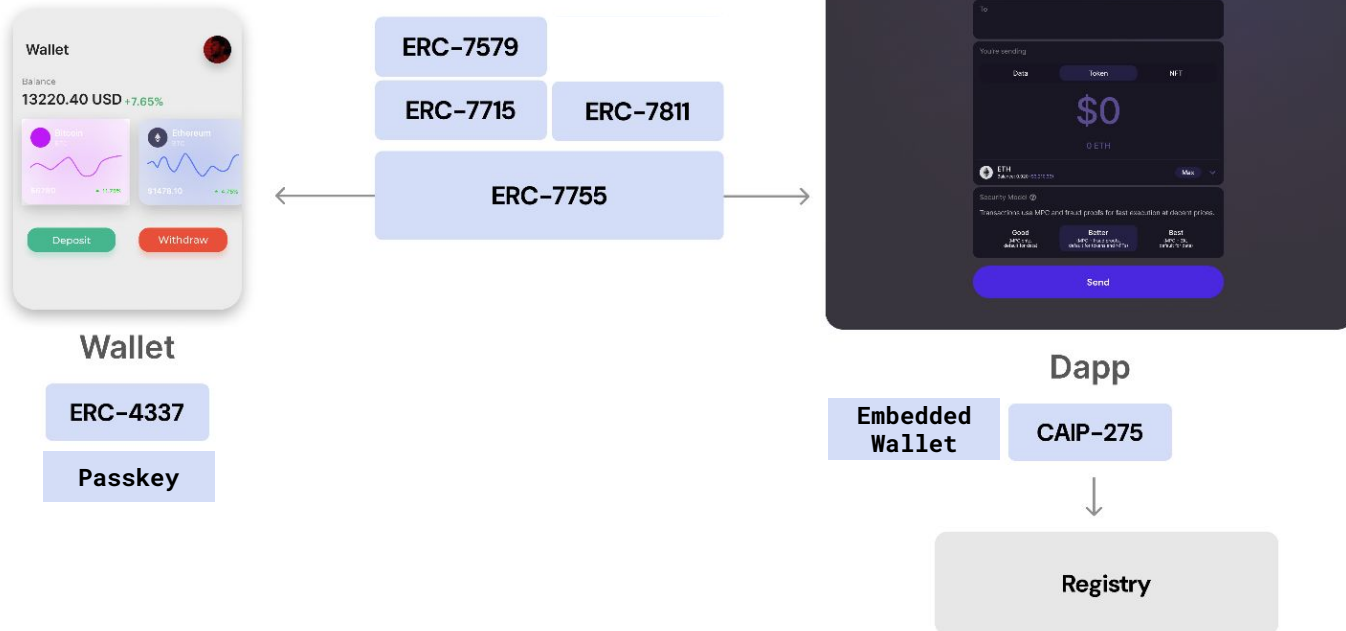
CAIP-275

Registry

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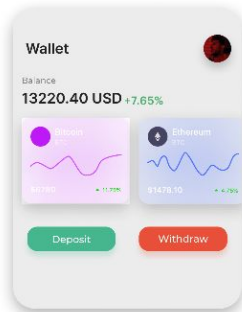


# The Endgame





# The Endgame



Wallet

ERC-4337

Passkey

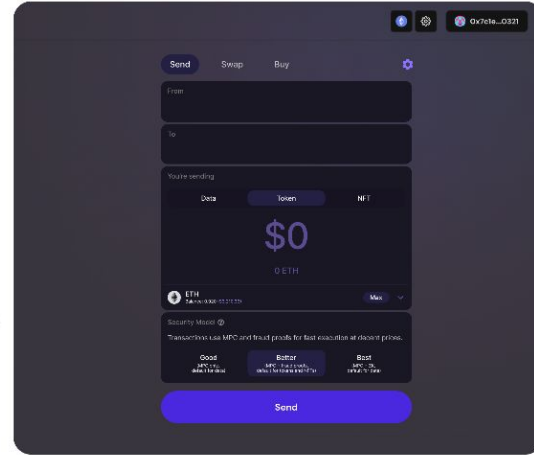
ERC-7579

ERC-xxx

ERC-7715

ERC-7811

ERC-7755



Dapp

Embedded  
Wallet

CAIP-275

Registry



**The time for greater  
ground-zero dapp experience  
is here.**



# Let's keep talking!

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