



**grincon1**

2019.11.22 // c-base berlin

# Is it possible to deliver Grin through Telegram?

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Fair Square Lab



Q T U N



# Approaches - linking Grin & Messenger



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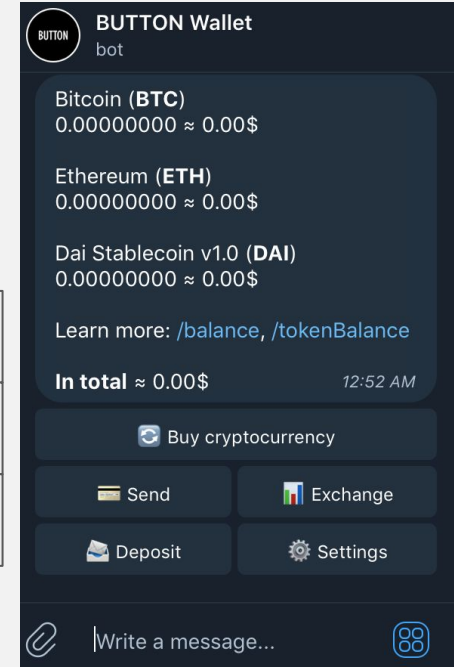
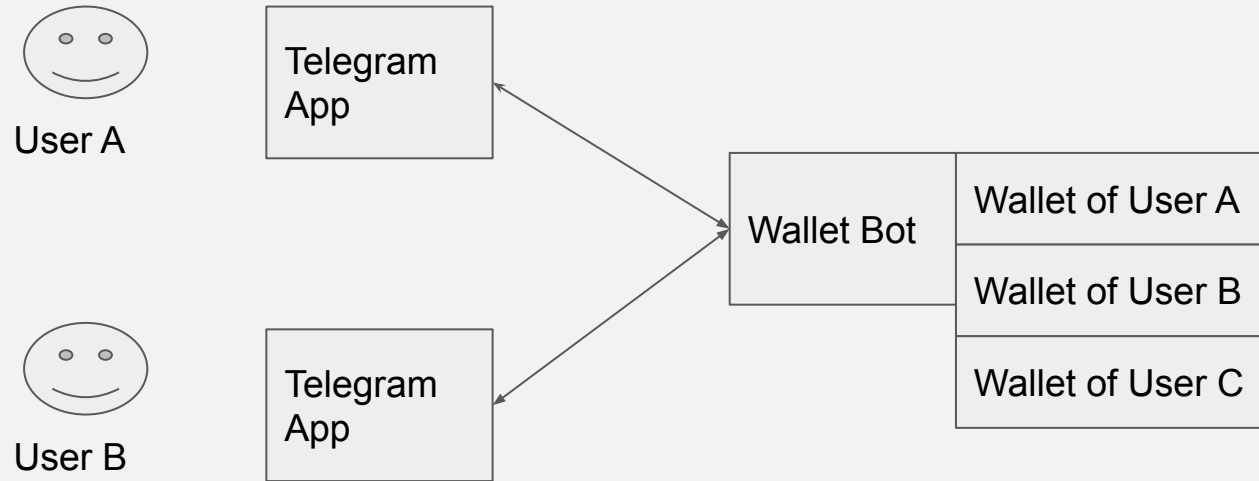
# Backgrounds

- Fair Square Lab
  - Developing tech-based services : Blockchain
- Iryoung : CTO of Fair Square Lab
- Our current projects
  - Mining Service - Mining OS, Stratum proxy, Automatic Switching
  - Crypto Trading - Algorithm trading, Market Making
  - Aggregated Blockchain News - processing natural language (ex. sentiment analysis)

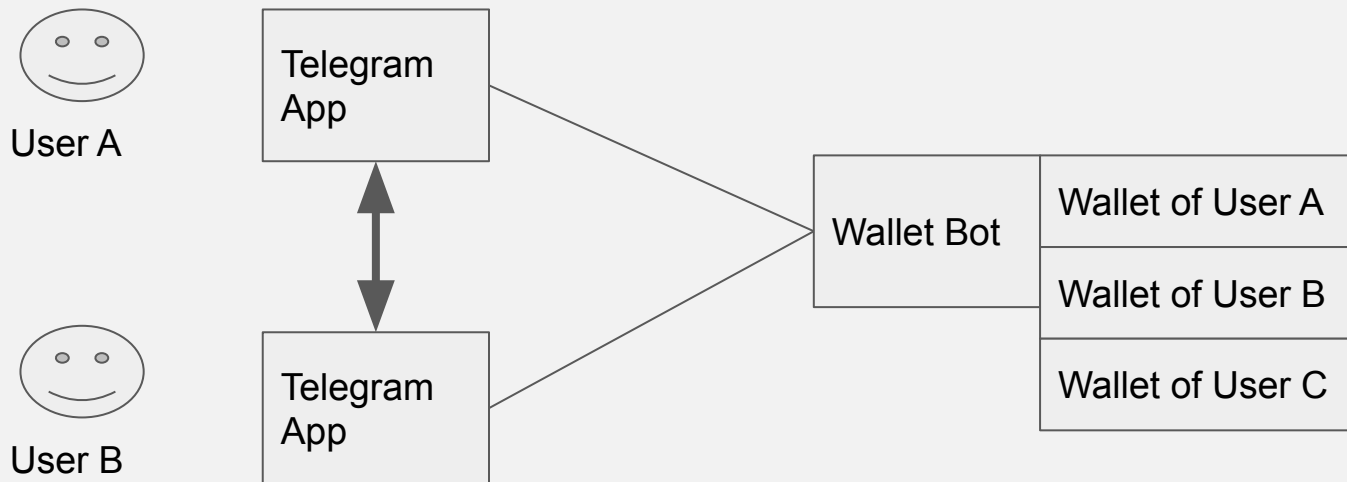
# Linking Crypto on Messenger

- Messenger based Crypto wallet
  - Can we send crypto via emails and messages like how we attach documents and pictures.?

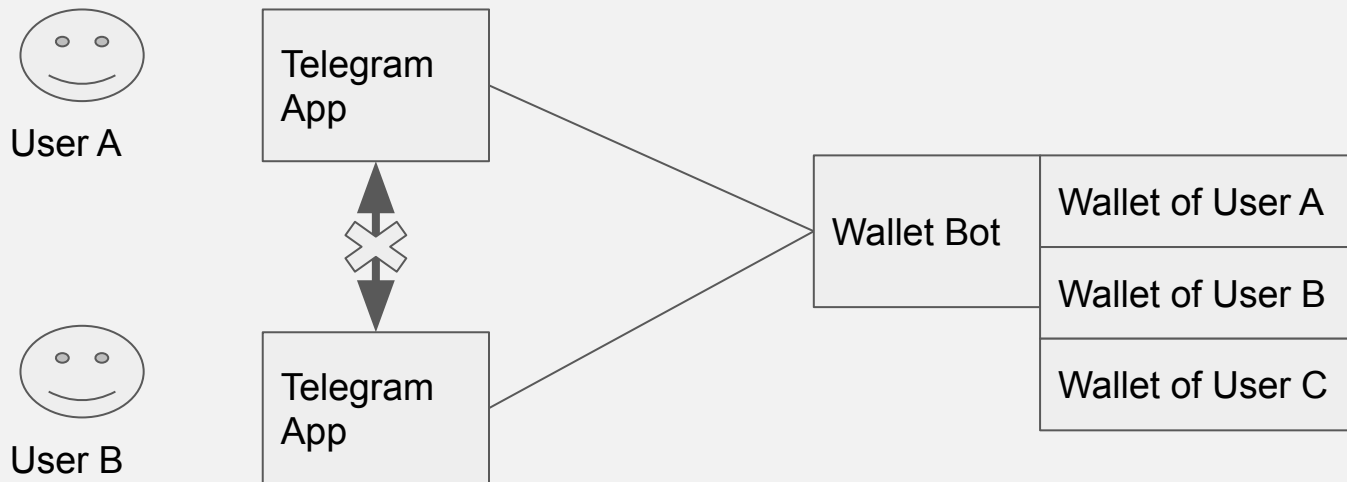
# Centralized without an account integration



# Centralized with an account integration



# Centralized with an account integration



# Failed - Linking Crypto with Messenger

- It's hard to map a user & a blockchain address
  - Address based blockchain
  - Multi-address & messenger account
  - Nothing to attach to a message
- Personal information issue!
  - Revealing relationship between a messenger account & blockchain address.



# So, we dropped the project

- Address based blockchains don't work well with Messenger wallet concepts

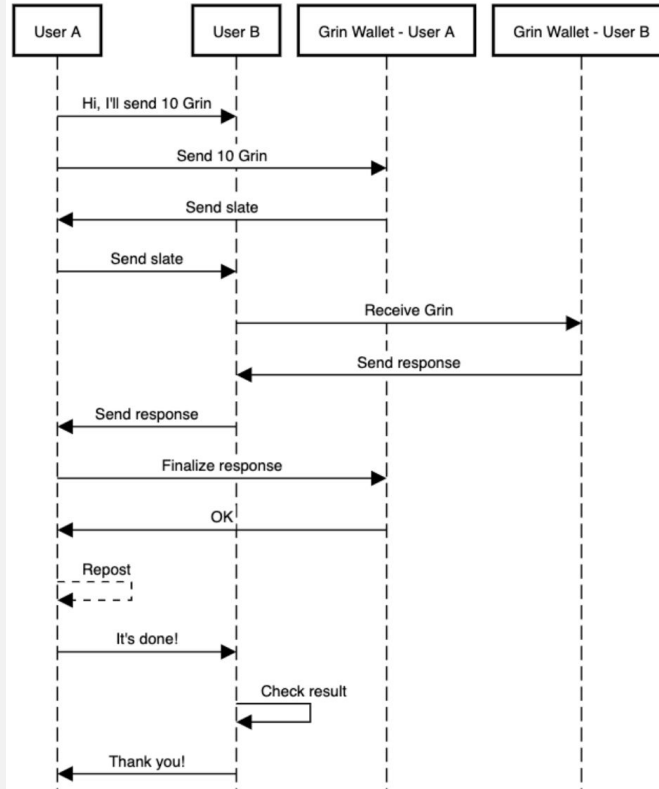
# Grin?

- We found GRIN?
- It's different. real NEW one.

# GRIN!!!

- MimbleWimble.
- Open(Decentralized?) community based project
- unique transfer mechanism
- **slate**?? --> an attachment of amessenger?

# Grin transfer is not easy



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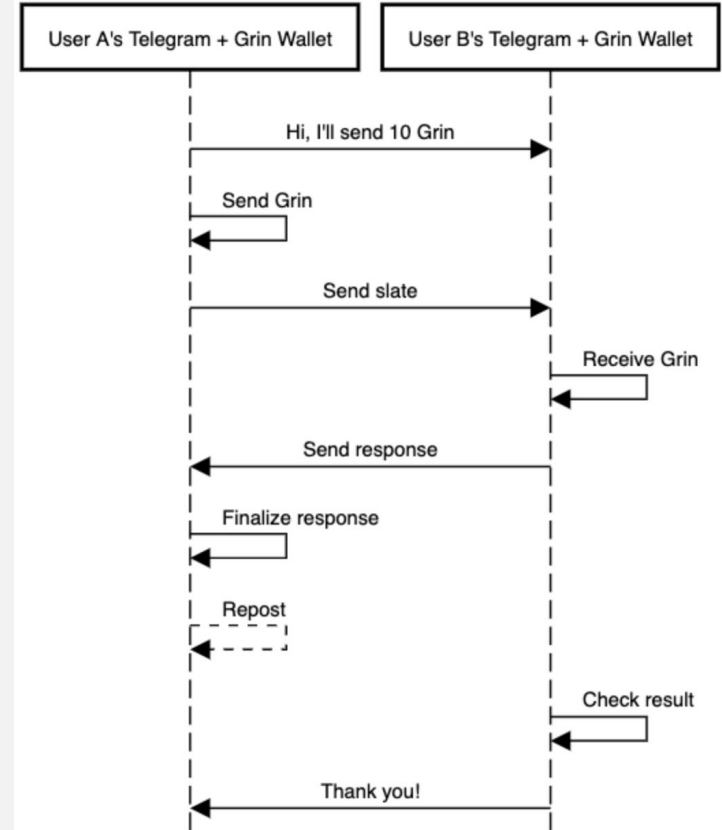
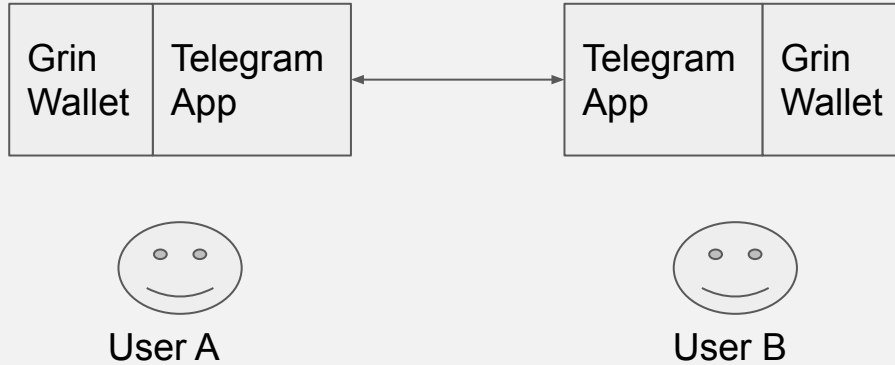
# Can we make better UX - Grin & Telegram?

- Telegram has
  - Telegram App
  - Telegram Server
  - Attachment feature
  - APIs
  - Bot Extension

# Some approaches

- Assumptions
  - Using public grin node
- Ways to implement
  - Modifying Telegram to add wallet feature
  - Create bot
    - Previous model for other cryptos
      - Centralized bot wallet without an account integration
    - Centralized bot wallet with an account integration
    - Every user has their own bot wallet

# Add a Grin wallet feature to Telegram



# Add a Grin wallet feature to Telegram

- Problems
  - Hard to deploy to all users
  - Maybe Telegram team can do this for their own token?



# Centralized without matching an account

- Pros
  - Just add bot! Easy to start.
- Cons
  - Centralized wallet - security issues
  - Just wallet. No improvement in usability

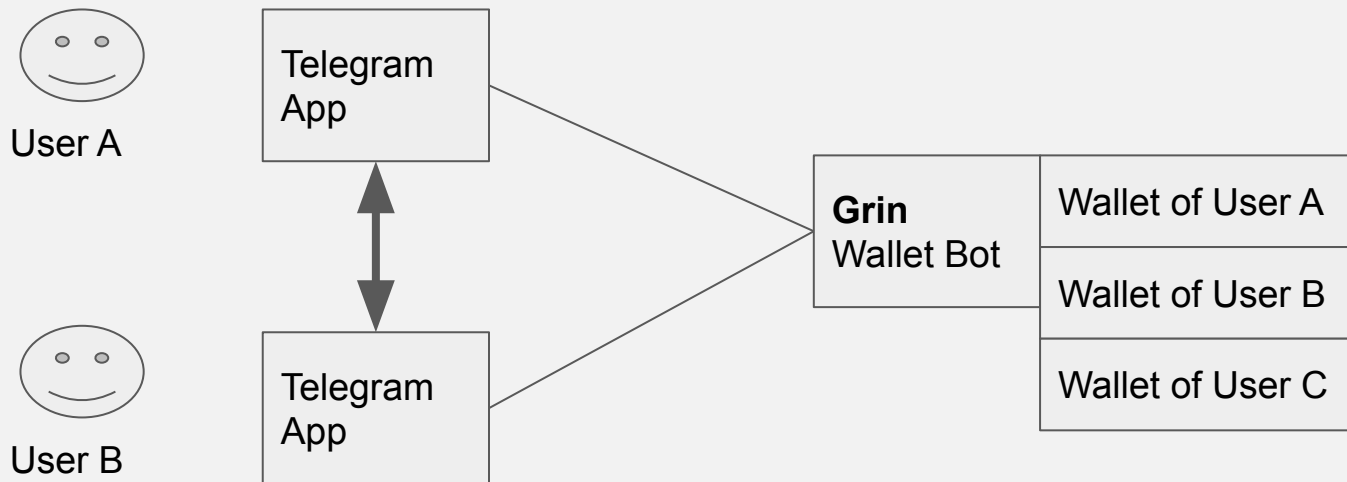
# Intrinsic problems of the most cryptos

- Addresses & an account mismatch - A user can have multiple addresses.  
How a user can choose receiving address? Revealing whole addresses?
- Tracking the history of friends!

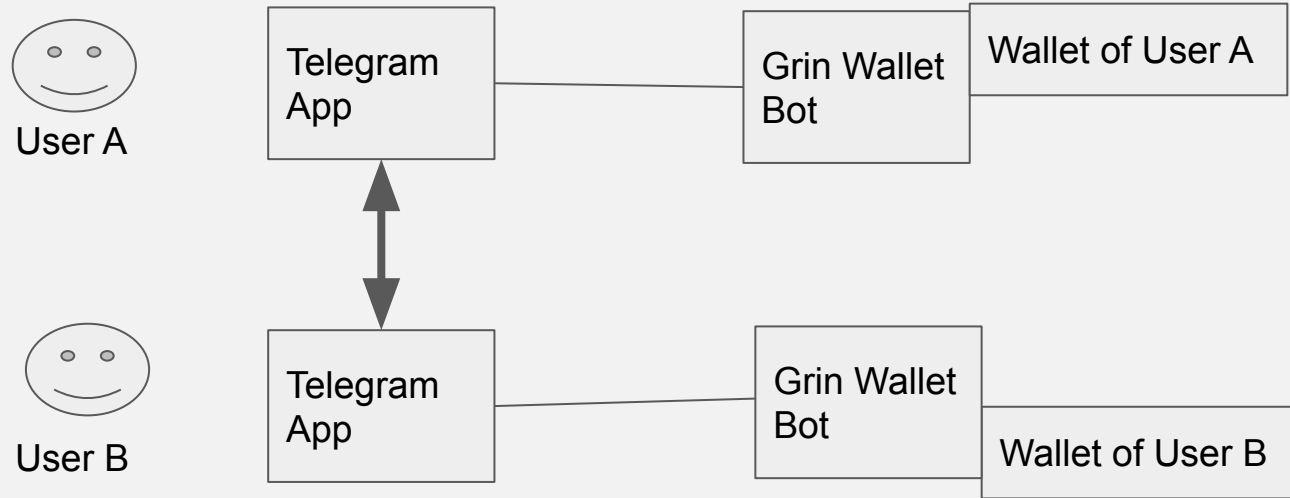
# Grin??

- A user can choose wallet account when receiving. No need to revealing addresses/accounts beforehand! Actually, there's no address :p
  - ~~Addresses & an account mismatch — A user can have multiple addresses. How we can choose? Revealing whole addresses?~~
- It's MimbleWimble!
  - ~~Tracking the history of friends!~~

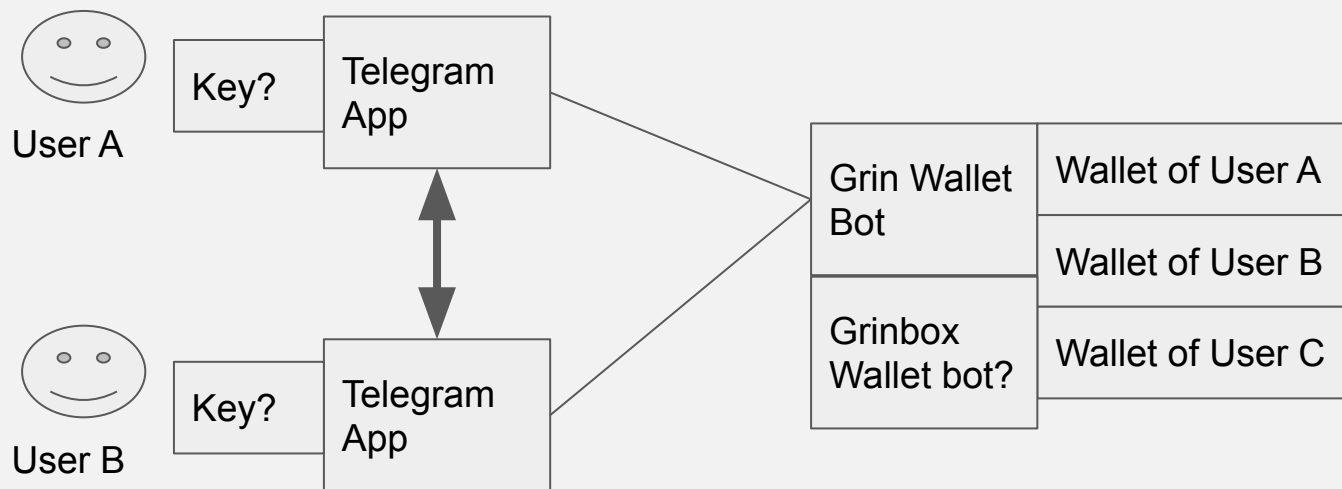
# Centralized with an account integration



# Personalized Wallet Bot



# Centralized wallet?



# Grin can be the best match for Telegram

- Grin is natural born for Messenger
- But there are many future works
- I hope Telegram will add improved features for general cryptos when they add TOK

