BootCamp Moscow

Mobile libraries for HL Iroha

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Agenda

- What is HL Iroha?
- Ideas behind iOS client library
- Wallet App Example
Hyperledger Iroha

**Simple & Fast**
Transaction finality within 1-2 seconds. Hundreds of transaction requests per second.

**Mobile first**
iOS, Android, and JavaScript SDKs are provide to ease development of end-user applications.

**Asset Management**
Assets such as currencies, points, tickets, securities, registry, identity, SCM can be managed using prepared commands.
HL Iroha For iOS

**IrohaCrypto**
- Crypto algorithms
- Keypair generation & restore
- Signing & Validation

**IrohaCommunication**
- Send transactions and queries
- Monitor transactions statuses & blocks
Communication Design

**Middleware**
- For complex flow
- Additional control

**Direct Connection**
- Fast
- Secure

Mobile libraries for HL Iroha

![Diagram showing communication design](Diagram)

- **Domain**
  - Multi assets
    - Assets
    - Assets
  - Account
    - Signatures
    - Role

- **Permissions**

- **“Promise” pattern**
  - T1 → T2
  - T2 → Q1
  - T3 → Q2
  - Success → Success
  - Failure → Success

- **Middleware**
  - Direct Connection
  - For complex flow
  - Additional control

- **Fast**
- **Secure**

- **“Promise” pattern**
Fast Test Cases

iOS Simulator

Unit Test Case

http

Docker

Iroha
References

Library for communication with Iroha:
https://github.com/hyperledger/iroha-ios

Cryptographic library for Iroha:
https://github.com/ERussel/IrohaCrypto

Wallet app example:
https://github.com/ERussel/IrohaWallet