

# **Hands-on blockchain with Hyperledger Fabric**

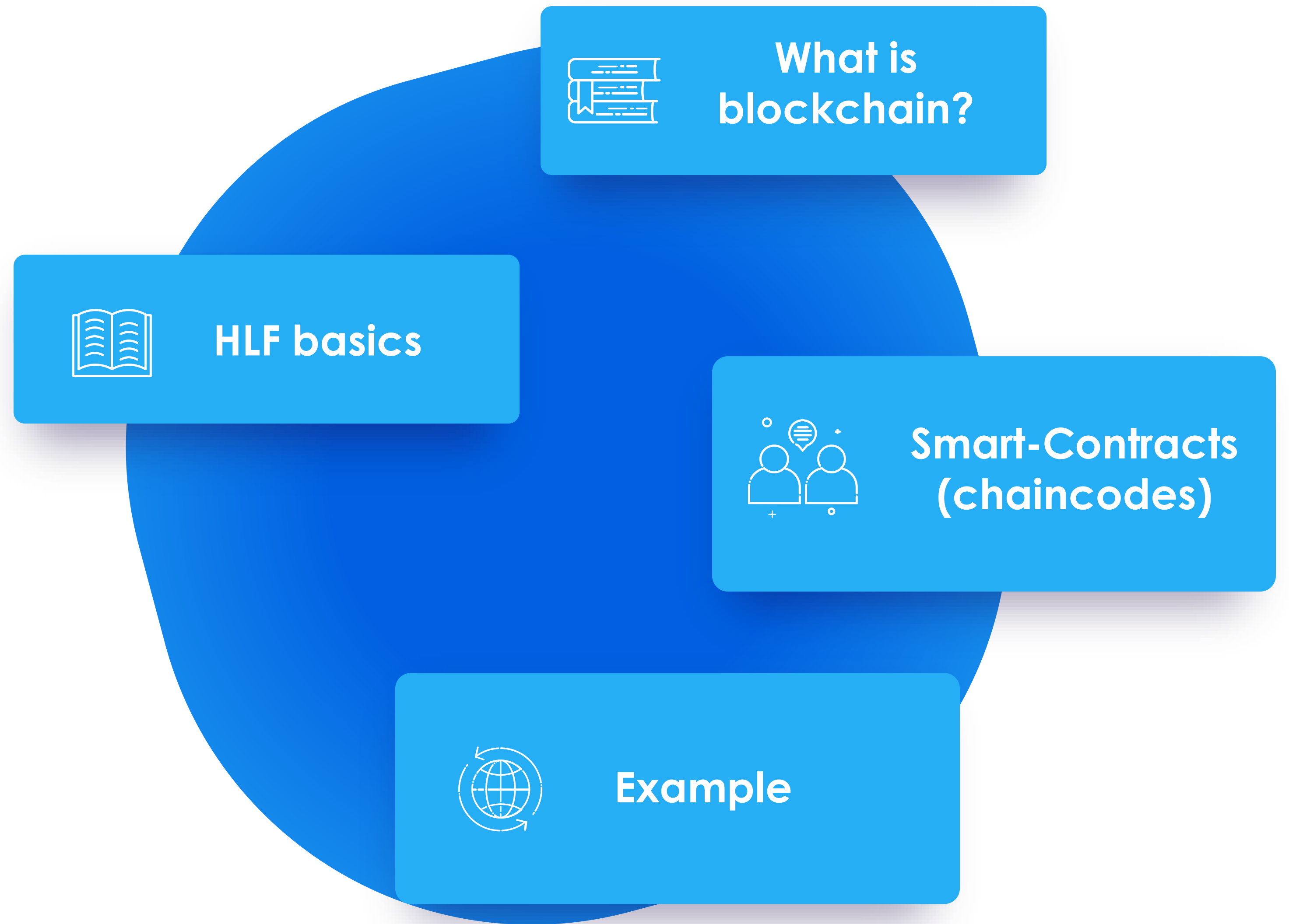
# about me

Lead Software Engineer at EPAM Systems



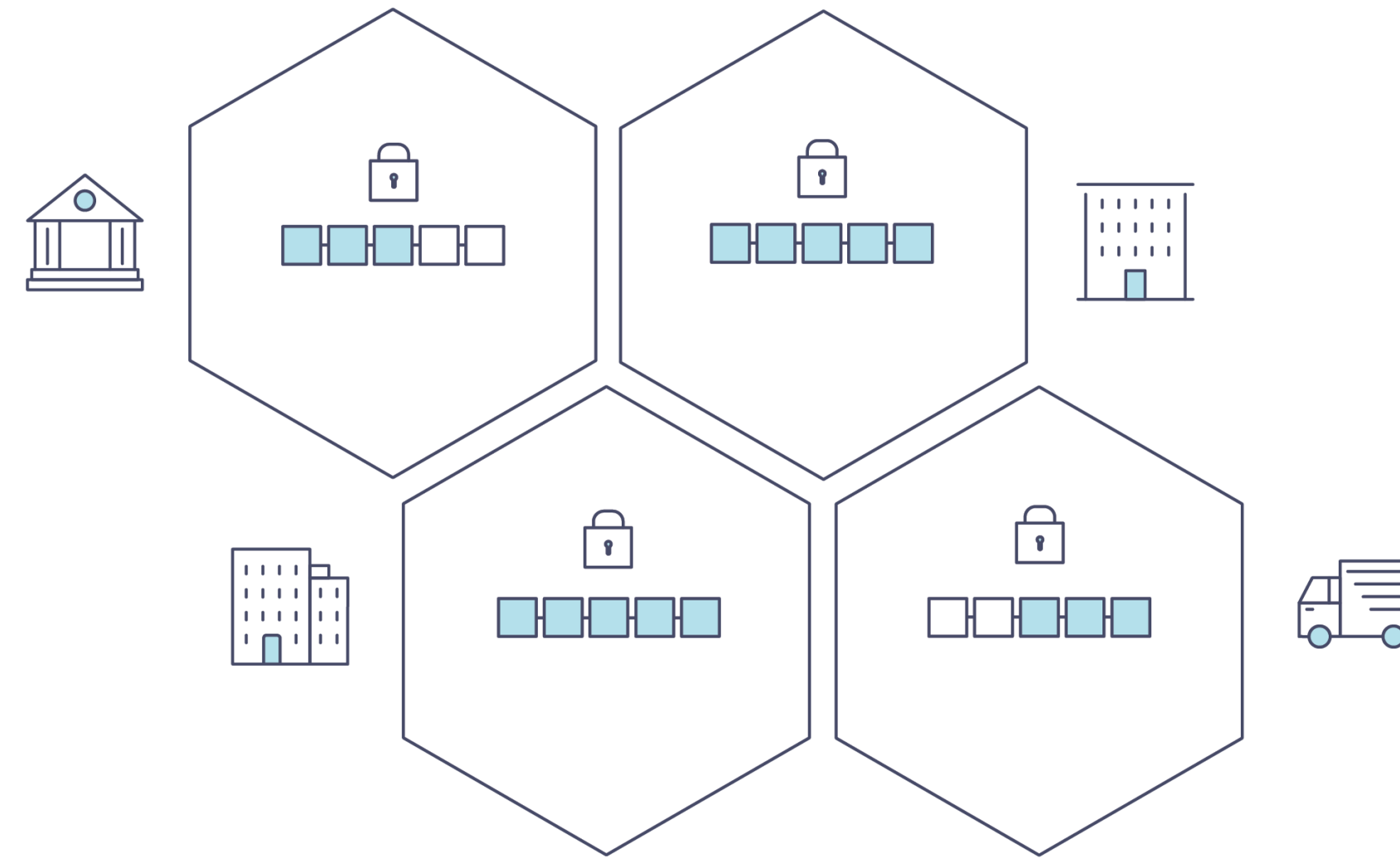
Eugene Kortelyov

# Agenda

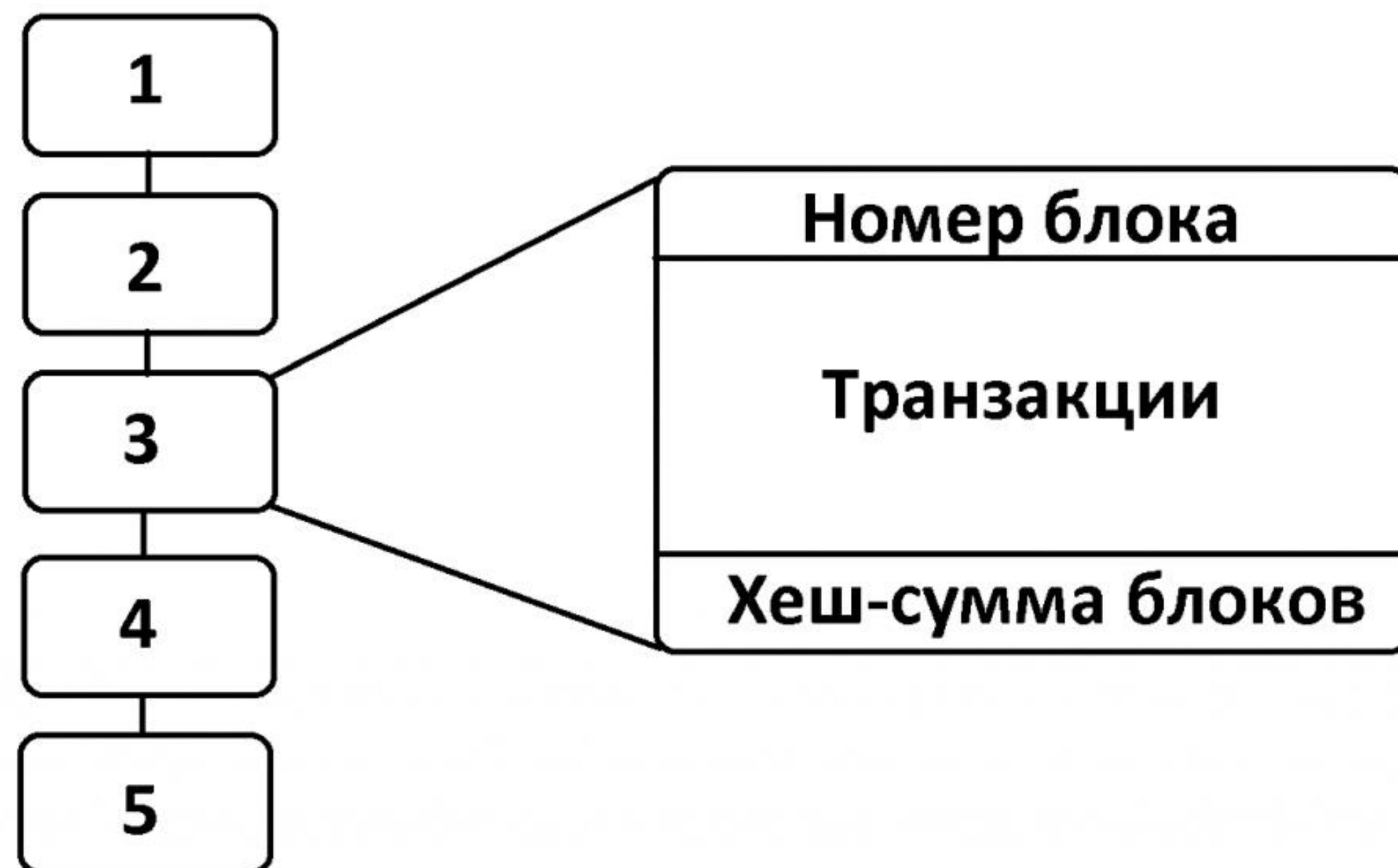


# What is blockchain?

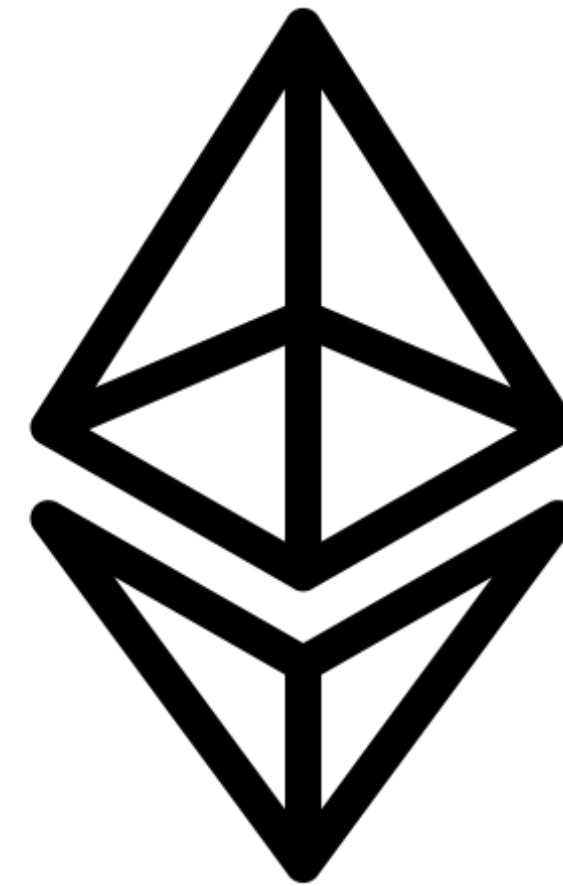
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# What is blockchain?



# What is blockchain?



# What is blockchain?

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## permissionless

- Anyone can join, read, write and commit
- Hosted on public servers
- Anonymous, highly resilient
- Low scalability

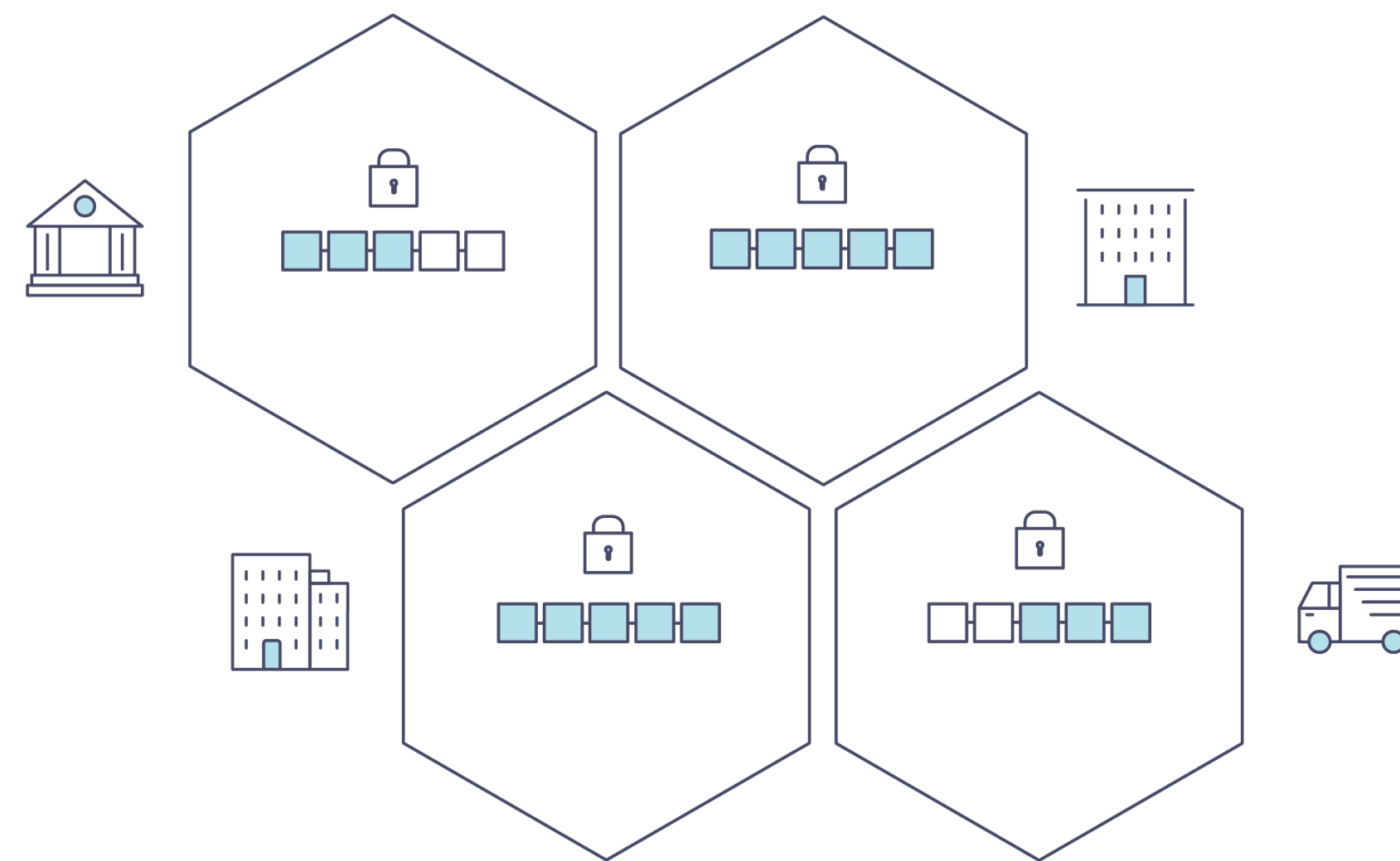
## permissioned

- Anyone can join and read
- Only authorized and known participants can write and commit
- Medium scalability



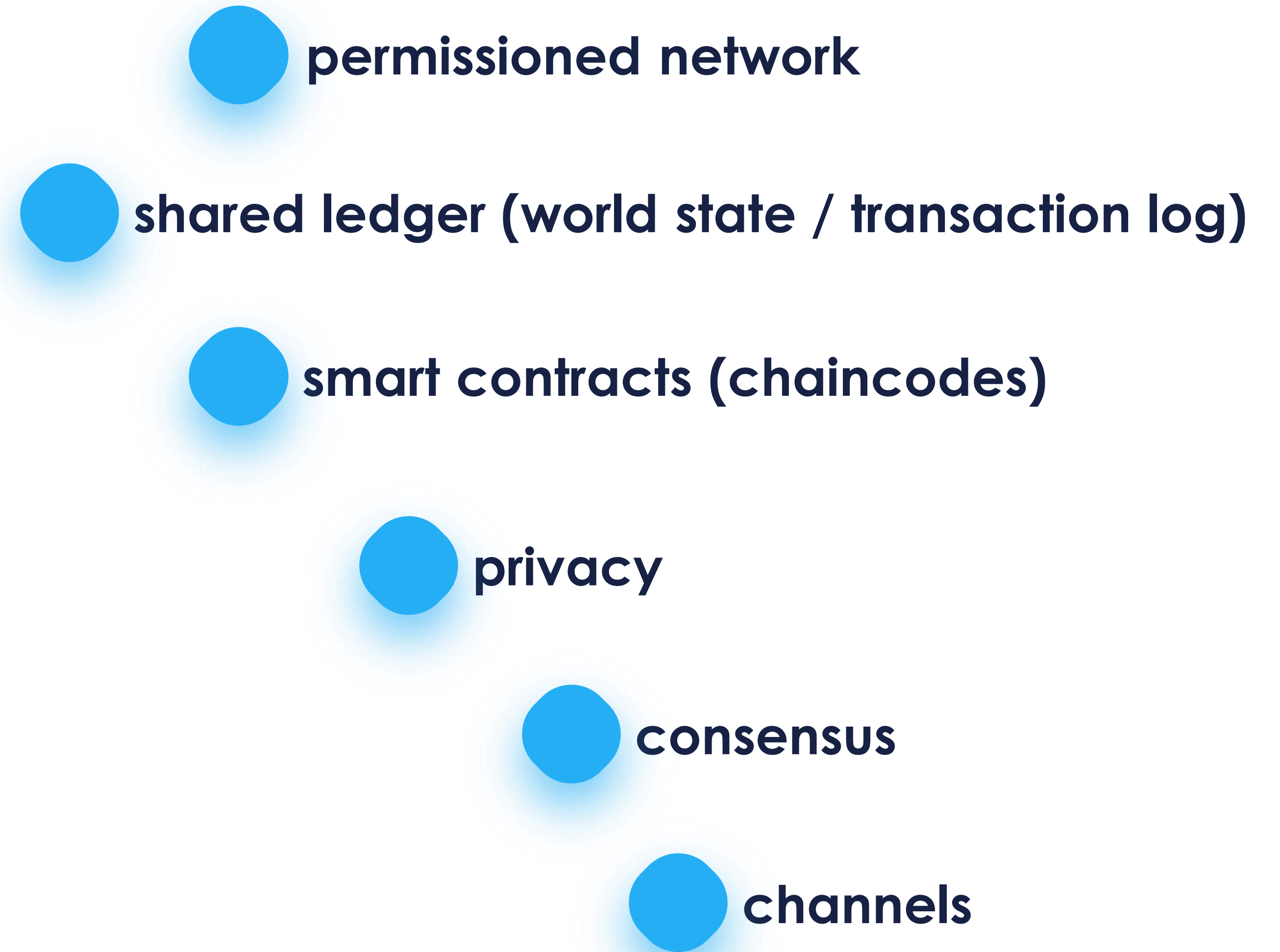
# HLF basics

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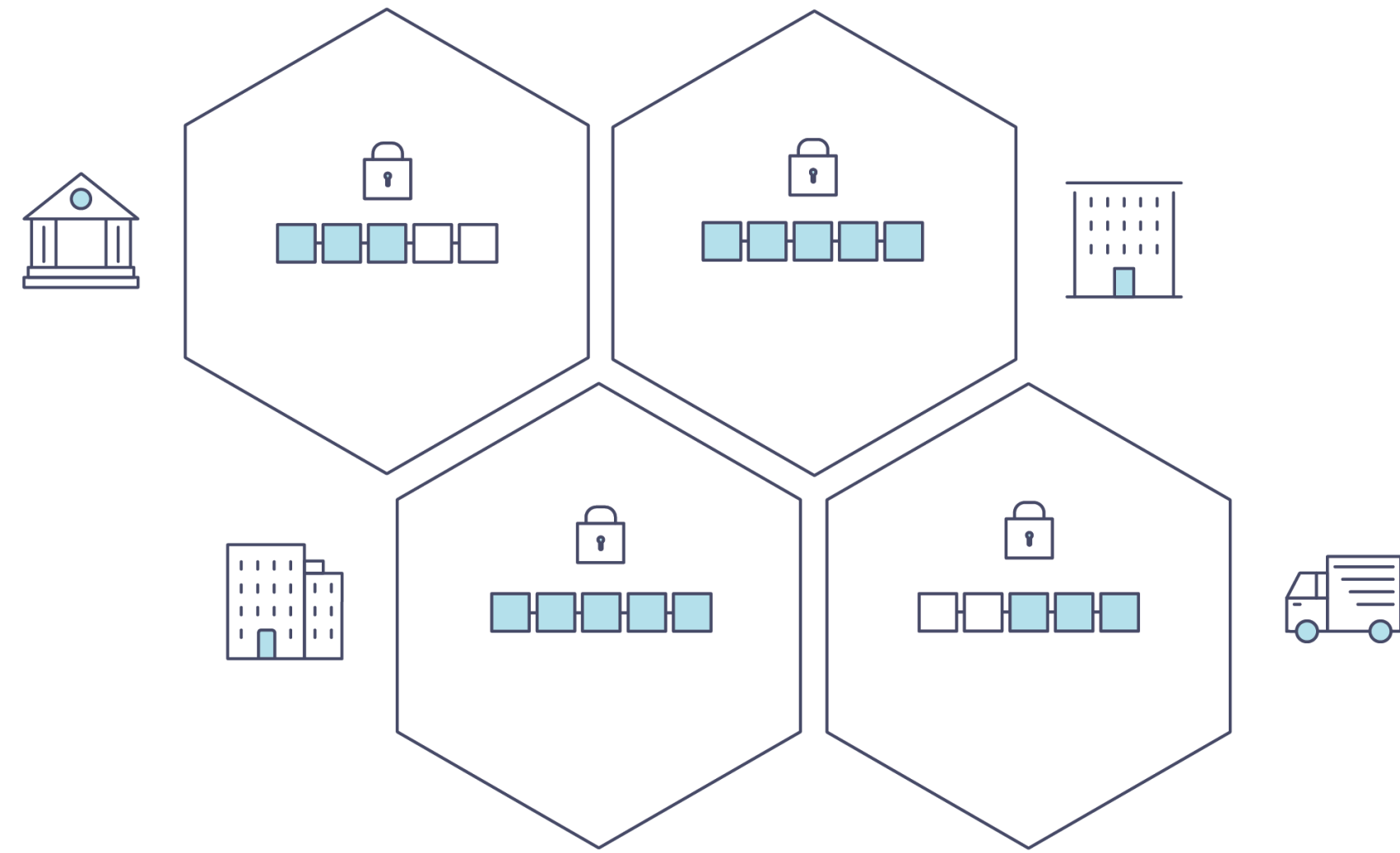


## What is Hyperledger Fabric ?

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# Channels

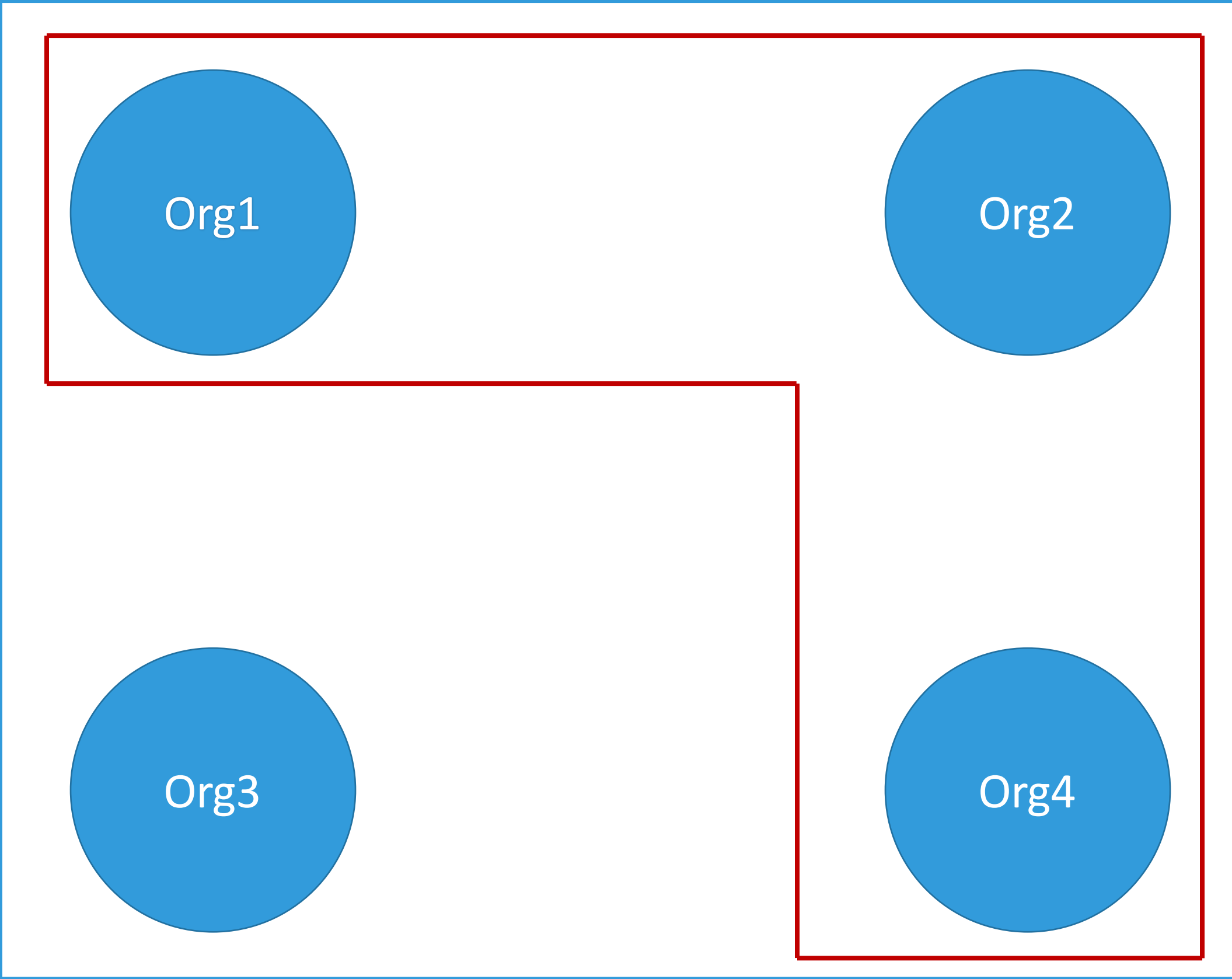


# Channels



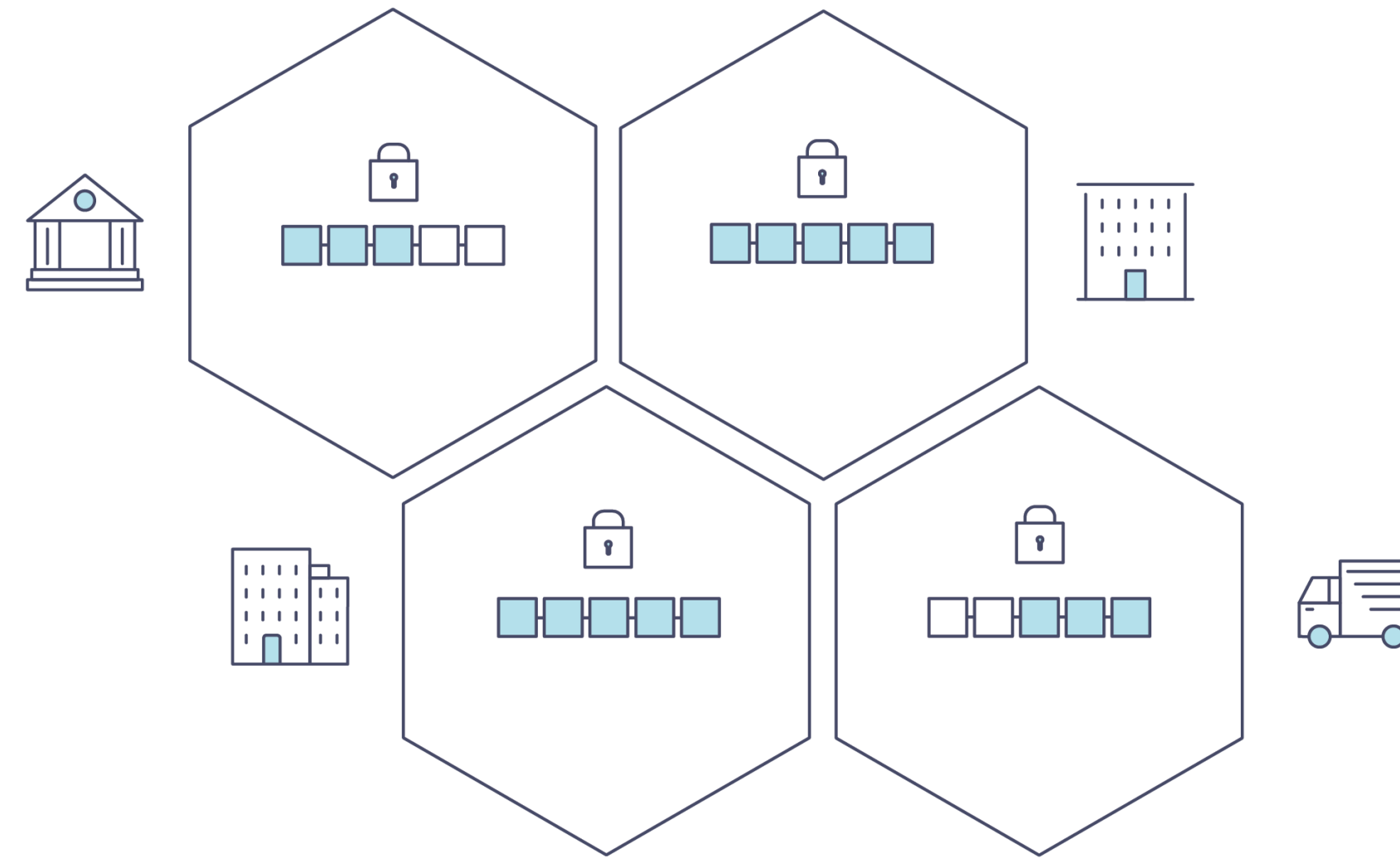
Channel 1

Channel 2



# Smart contracts (chaincodes)

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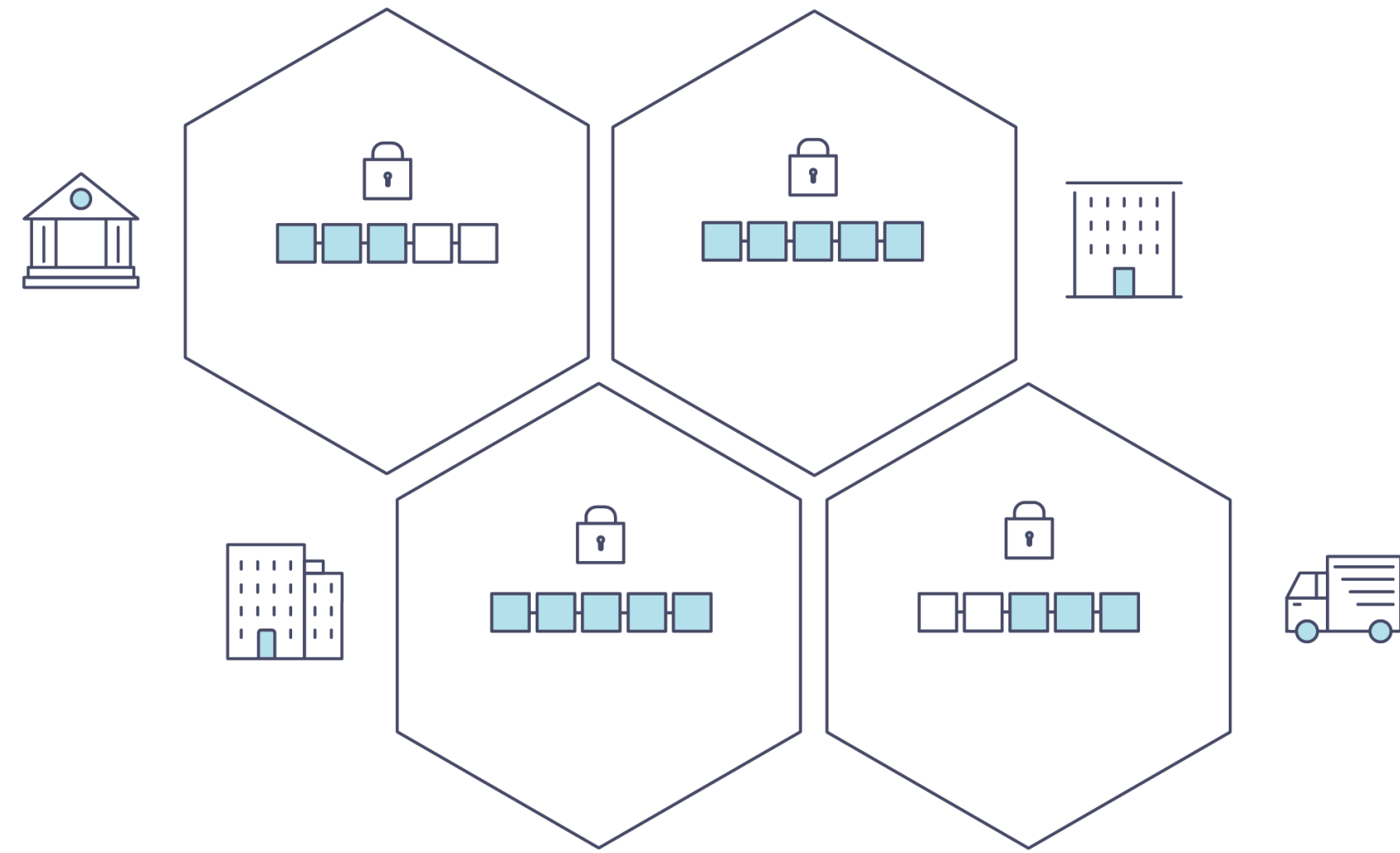


# chaincode lifecycle

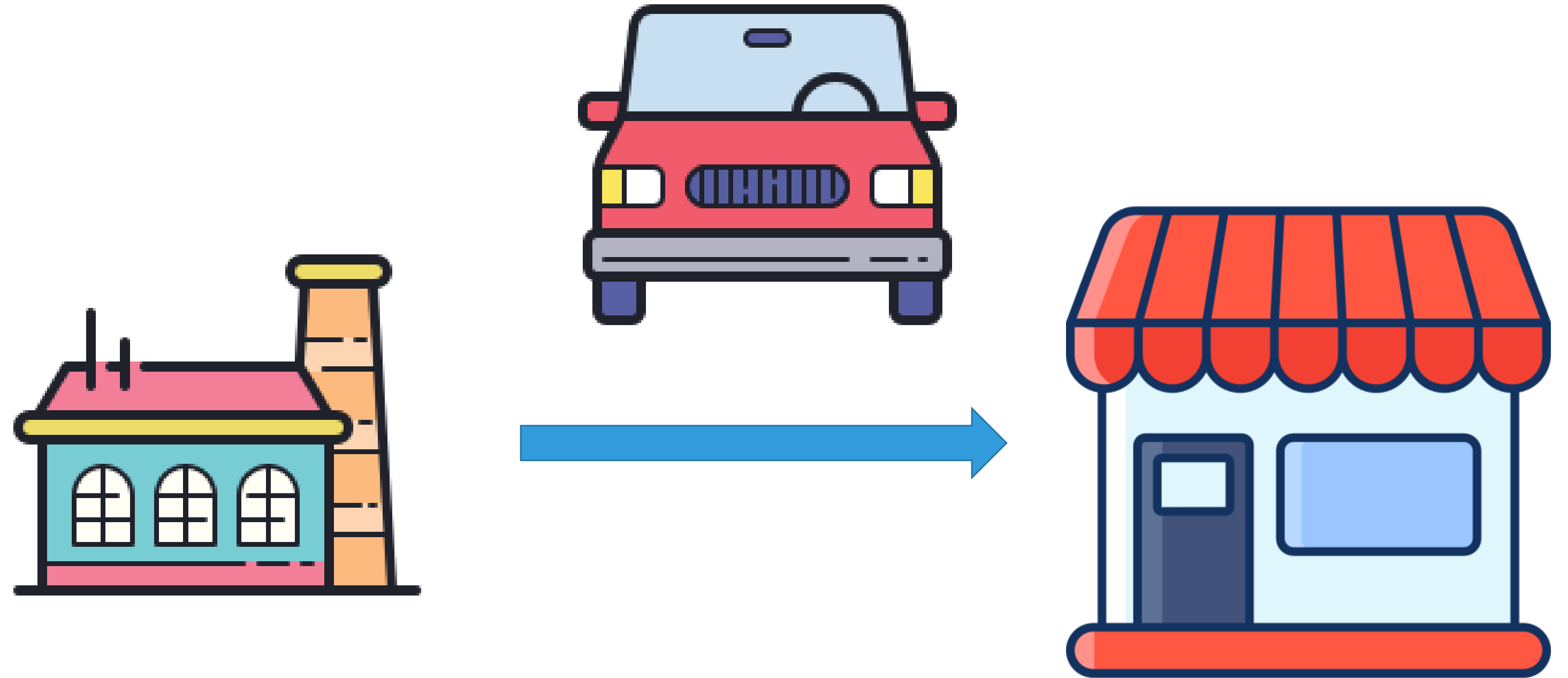
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- **package**
- **install**
- queryinstalled
- getinstalledpackage
- **approveformyorg**
- queryapproved
- checkcommitreadiness
- **commit**
- querycommitted

# Example

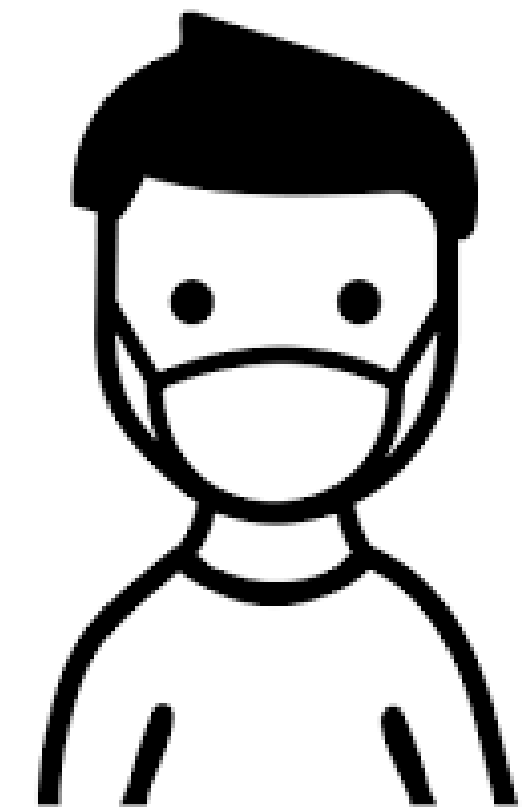
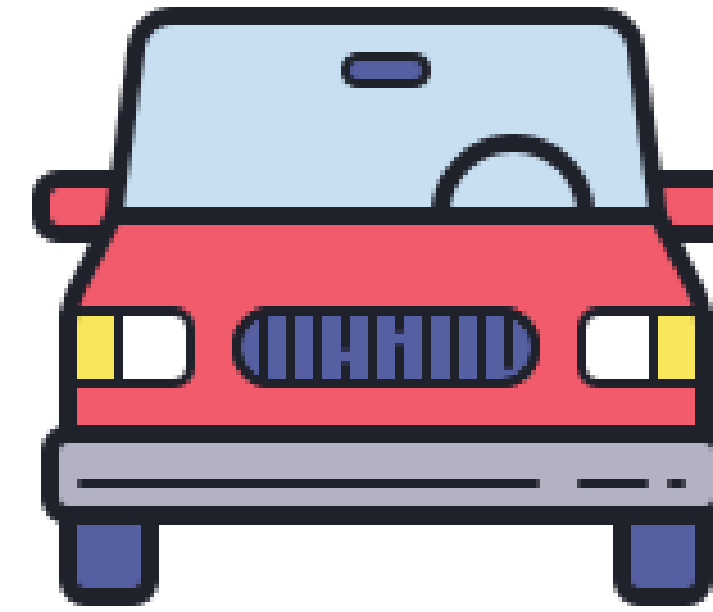


# Car History

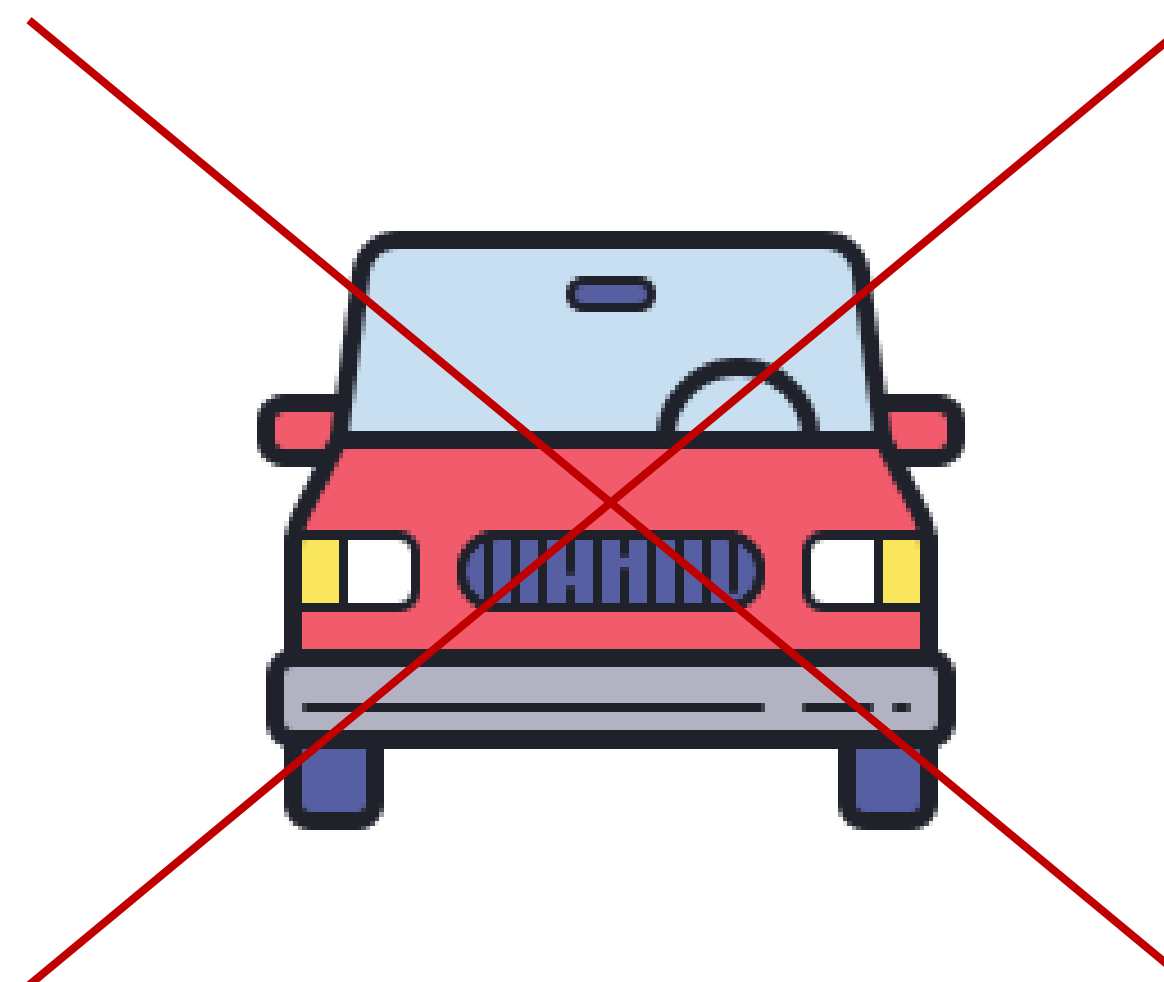




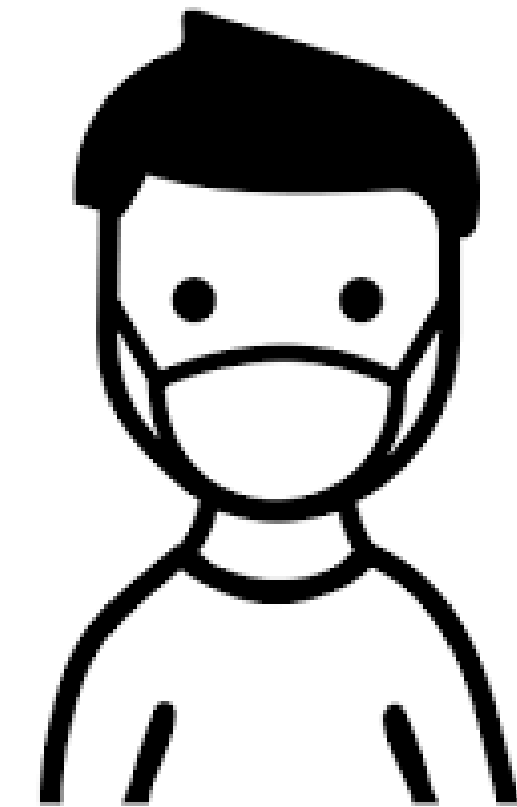
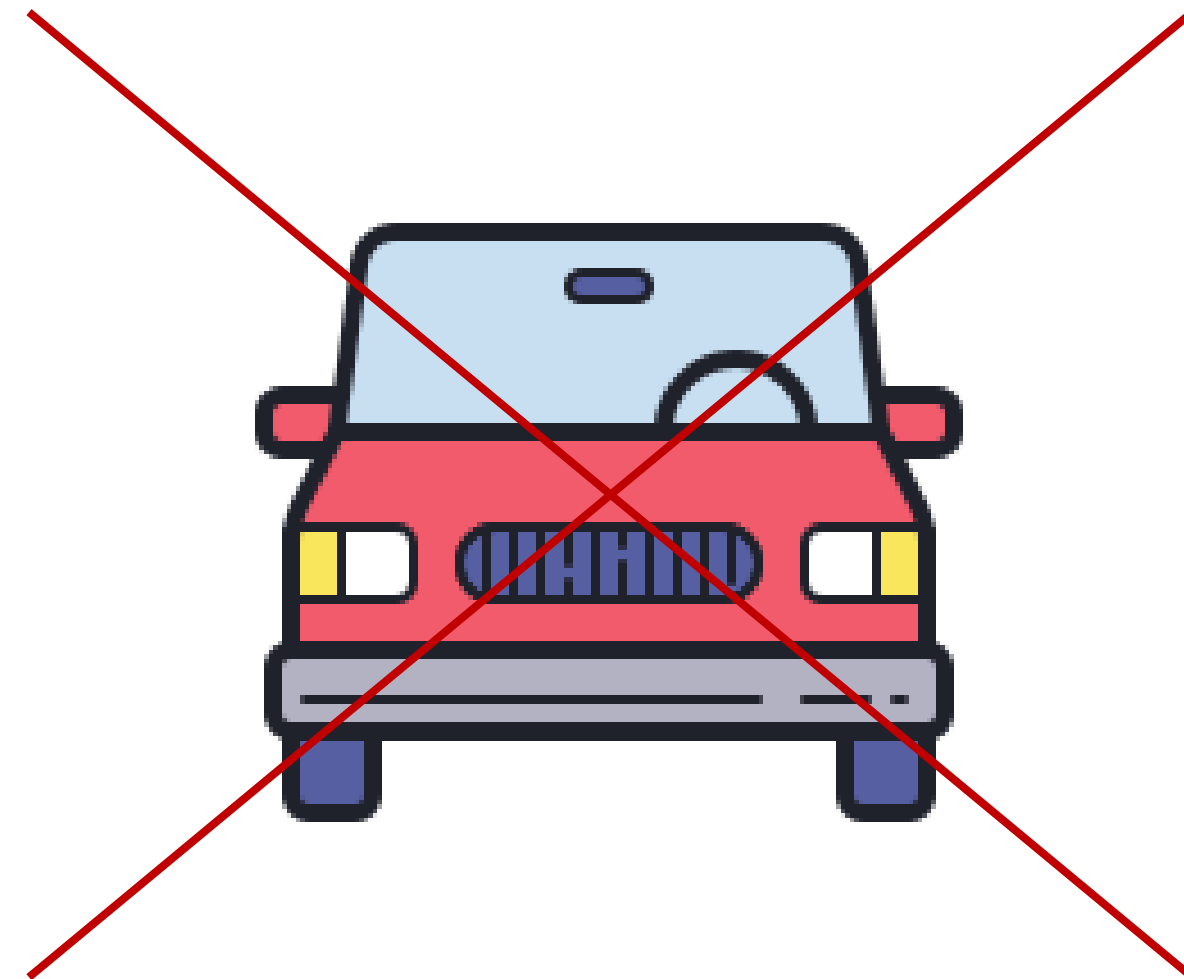
# Car History



# Car History



# Car History



**Example:**

<https://github.com/kortelyov/hyperledger-car-service>

<https://github.com/kortelyov/hyperledger-fabric-samples>

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**Thanks!**

