Processes Meet IoT

Processes Meet Blockchain
Intermediate Presentation

Christian Friedow, Tom Martensen, Johannes Schneider, Julian Weise

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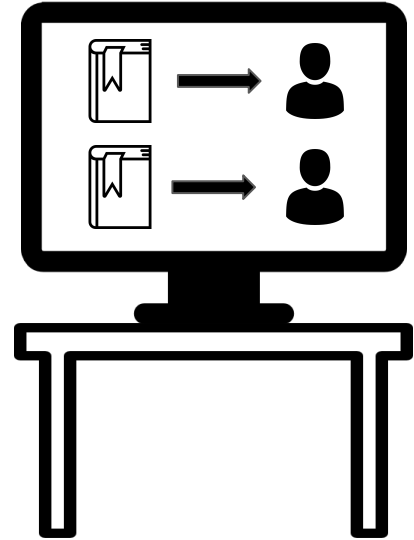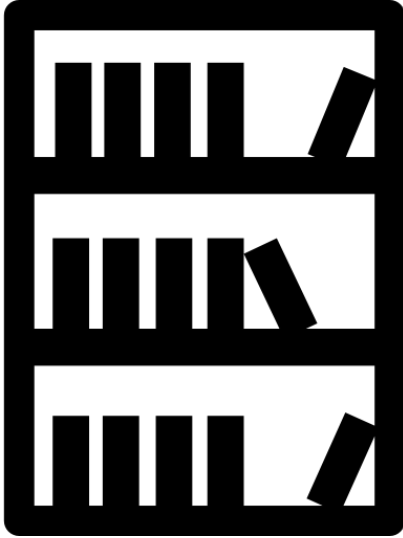
1. Scenario
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1. Scenario
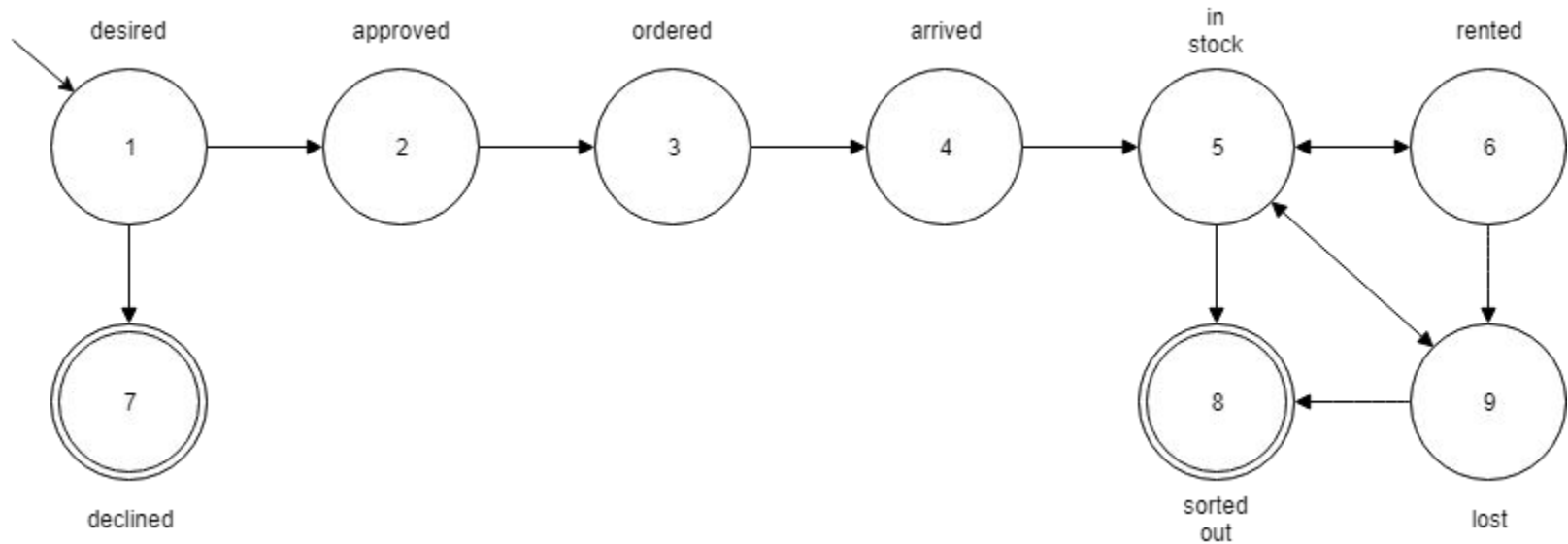
Current State and Motivation
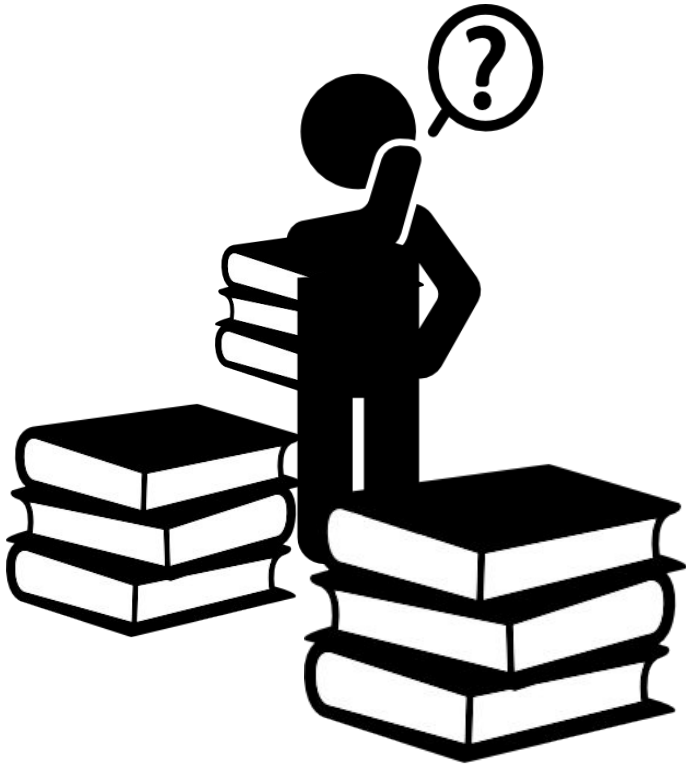
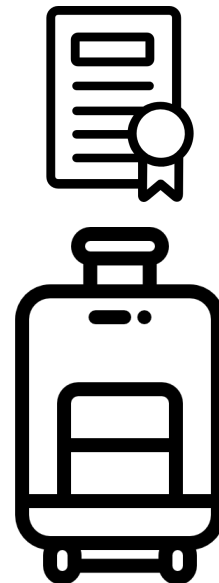# Project Goal
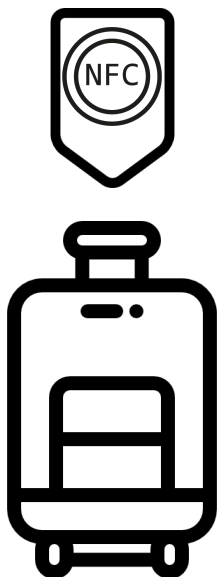
Application of Process Modelling and IoT

2. GoodsTag

Vision

"Digitize your physical goods today and build your own IoT ecosystem with GoodsTag's enterprise SaaS."

Smart Product Service Platform (SaaS)
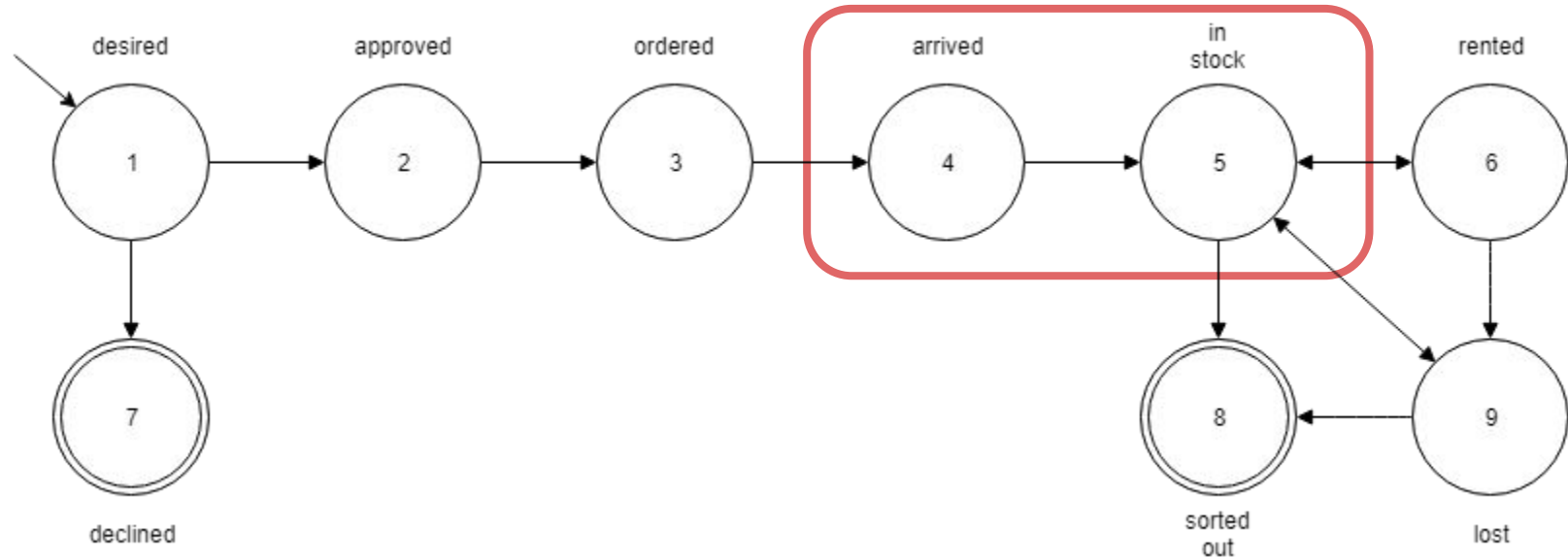
GoodsTag Meets Books

- Ultra-High-Frequency (UHF)
  - high range (up to 15 m), e.g.: inventory
- Near-Field-Communication (NFC)
  - low range (up to 15 cm), e.g.: renting
- Scanning a tag produces an event
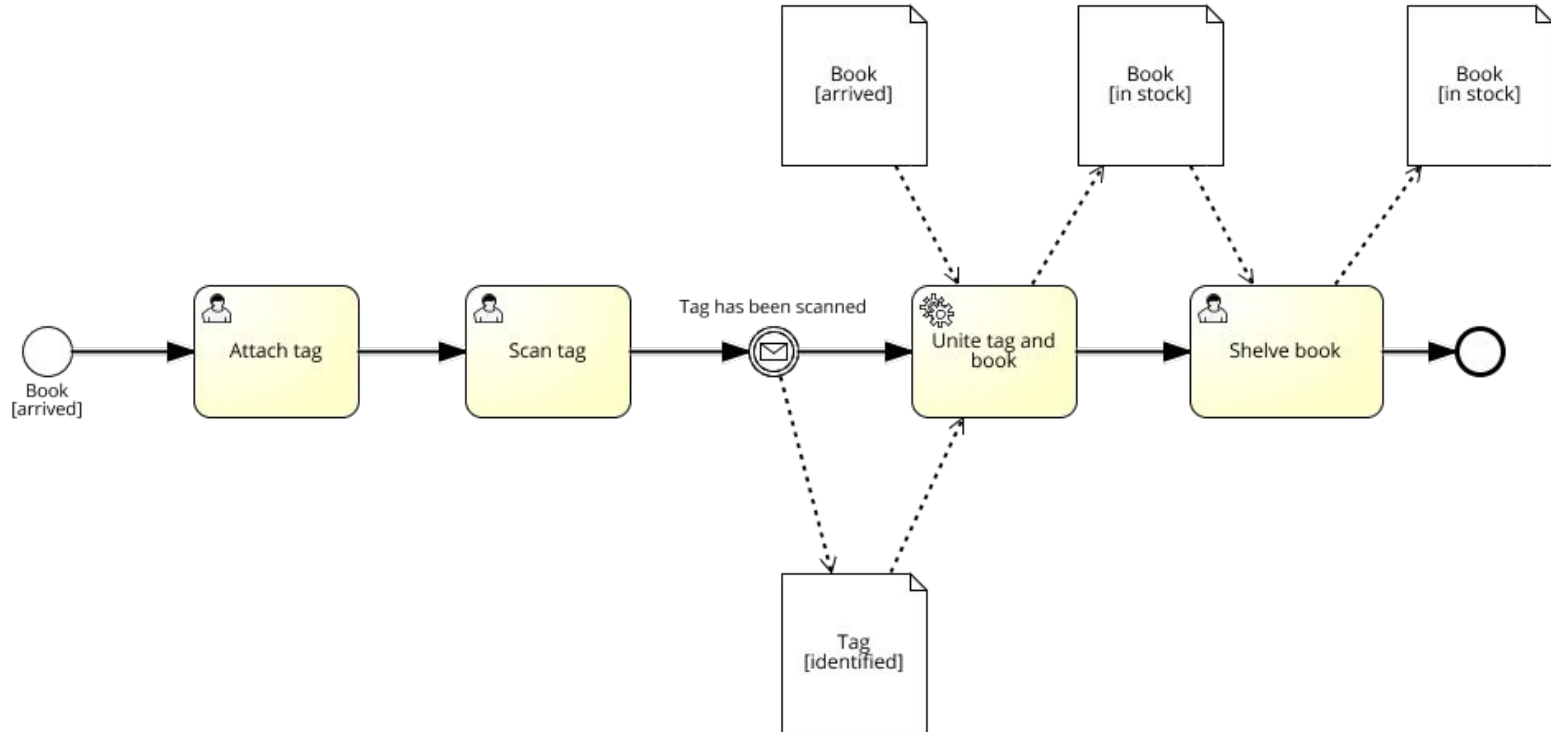 - Events trigger OLC transitions
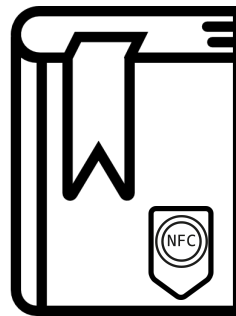
⇒ each physical book is mapped to an instance of data object "book"
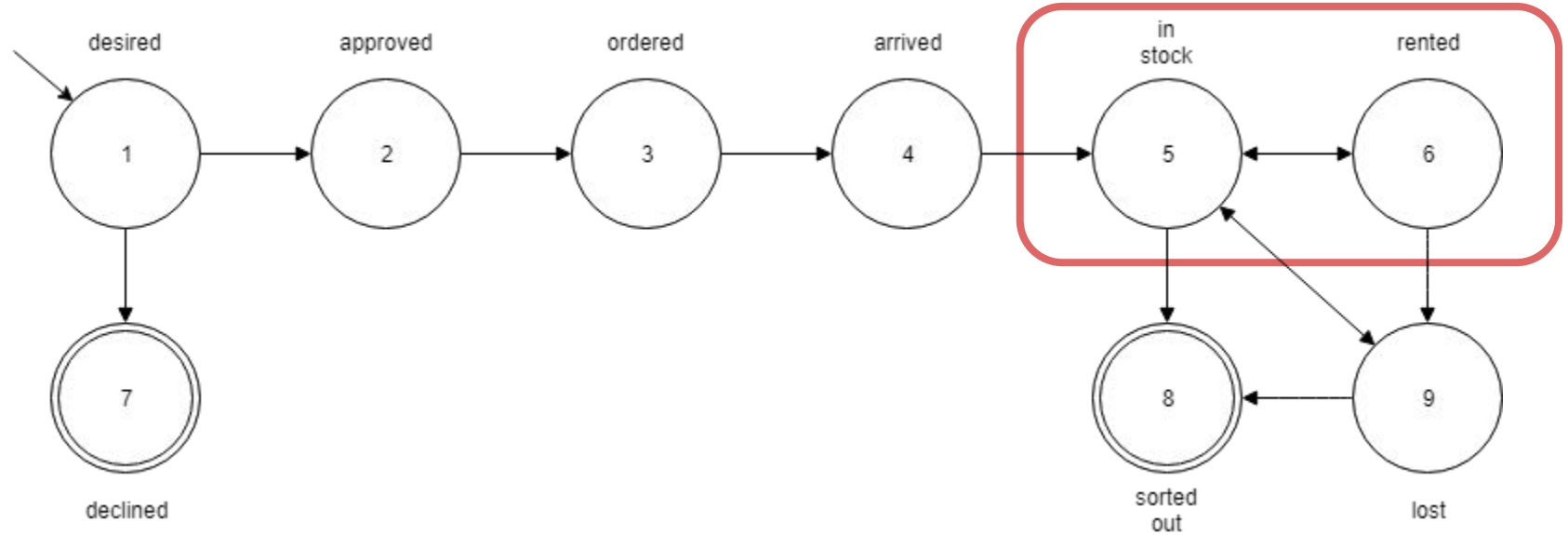
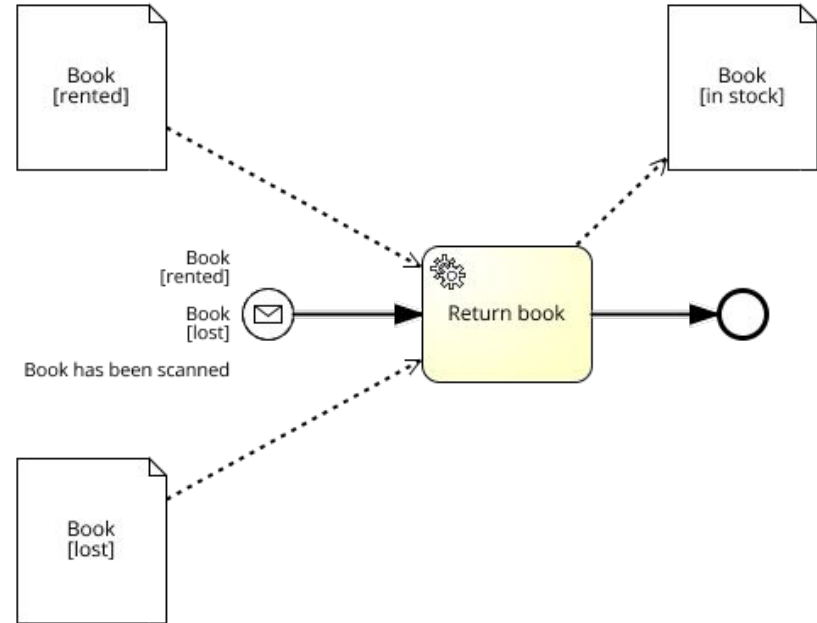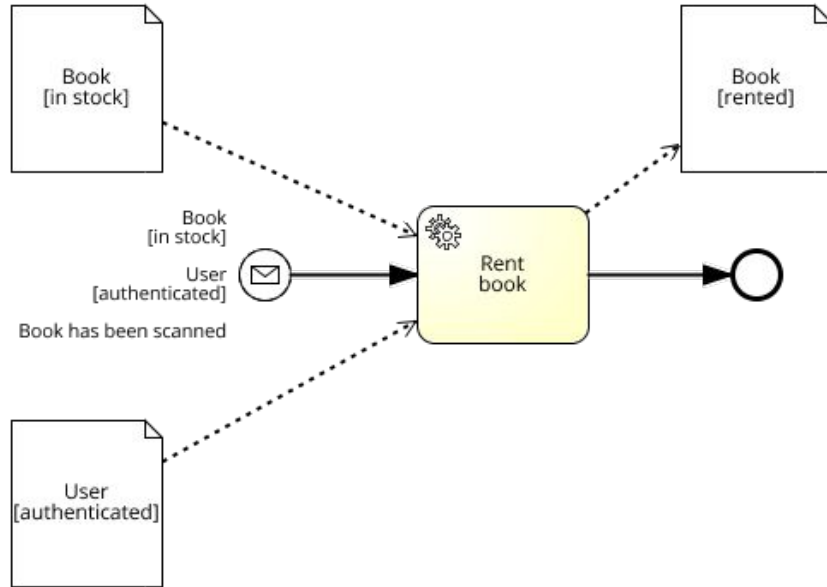# 3. Solution Approach

Process Fragments | Inventory Book

Process Fragments | Inventory Book

Process Fragments | Rent and Return Book

Process Fragments | Rent and Return Book

System Architecture
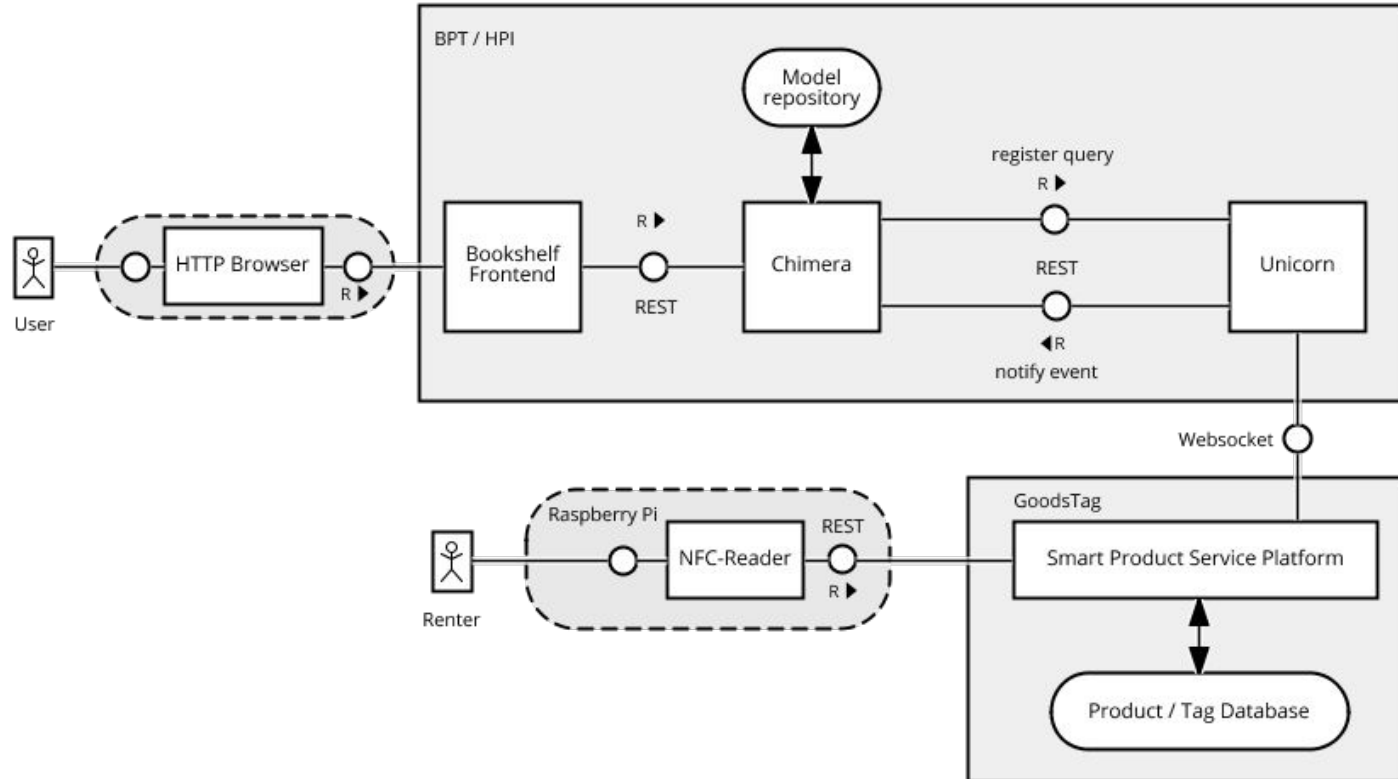
4 Next Steps

Future Work

- Unicorn
  - Add websocket event adapter
  - Add GoodsTag event adapter
- Chimera
  - Add query interface for data objects
  - Implement/deploy process fragments
- NFC Reader (Raspberry Pi)
  - Implement GoodsTag client
- GoodsTag
  - Deploy book/user identification
  - Implement event scripts
- Bookshelf Frontend

Icon Source

- Book / Man thinking / student / Man user / luggage / bookshelf: Flaticon.com - Author: https://www.flaticon.com/authors/freepik
- Screen: Flaticon.com - Author: https://www.flaticon.com/authors/icon-works
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Process Fragments | User Login/-out