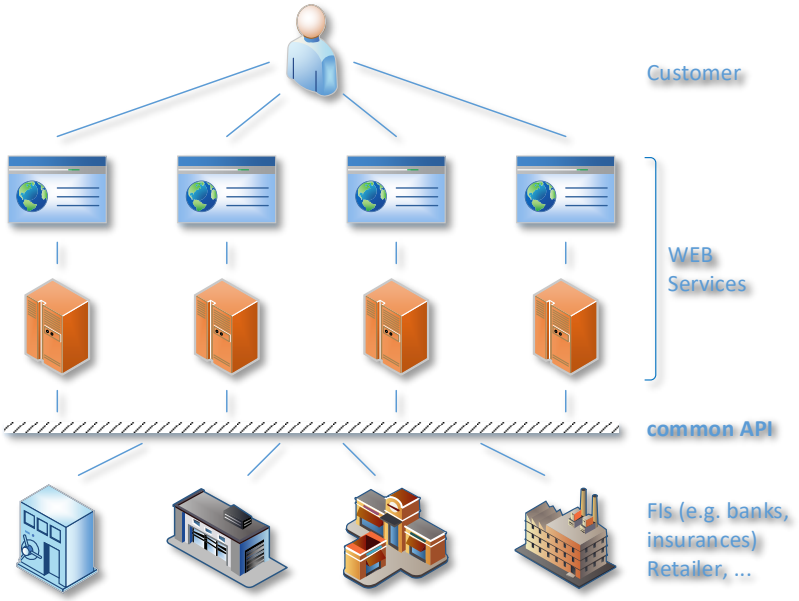
SFTI - working group 'Common API'

Payment API

API Specification and Implementation Guidelines



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This API specification for automatically usable multi-company-capable banking and insurance APIs (hereinafter: Common API) was developed on behalf of *Swiss Fintech Innovations* (SFTI) for the Swiss banking and insurance industry.

This document is available on the Internet at www.sfti.ch and at www.sksf.ch

Change Log

Version	Date	Author/s	Comments
0.01	8.12.2017	Dima Dimitrova (Avaloq); Markus Emmenegger (Avaloq); Tarmo Ploom (Finnova); Ronny Fuchs (Finstar); Jeetesh Khodiyara (Temenos), Patrick Schaller (red-tec); Jürgen Petry (SFTI)	Document creation
0.02	20.12.17ff	Dima Dimitrova (Avaloq); Markus Emmenegger (Avaloq); Tarmo Ploom (Finnova); Ronny Fuchs (Finstar); Jeetesh Khodiyara (Temenos), Patrick Schaller (red-tec); Jürgen Petry (SFTI)	Use Cases "Payments"
0.03	05.04.18ff	Jürgen Petry (SFTI)	Adjustments
0.04	14.6.2018	Markus Emmenegger (Avaloq), Alexander Streule (Avaloq), Tarmo Ploom (Finnova), Ronny Fuchs (Finstar), Patrick Schaller (RED-tec), Jürgen Petry (SFTI)	Review, Adjustments

About SFTI
Swiss Fintech Innovations (SFTI) is an independent association of Swiss financial institutions committed to drive collaboration and digital innovations in the financial services industry. For more information about *Swiss FinTech Innovations*, please refer to http://www.sfti.ch.

Content

1. Preface

This document covers the banking business domain *Payments*.

In the payment context, ISO20022 is the underlying message standard (which has already been adopted to Swiss characteristics by SIX), and the pan-European association *The Berlin Group* is a leader in API standardization regarding payments. Therefore, the SFTI working group carefully examined whether *The Berlin Group*'s payment API recommendations could contribute to the Swiss API standard.

This approach has shown that their concepts are of high quality and form a good basis for our further work. That's why the SFTI working group decided to integrate the respective results as foundation for the Swiss payment API standard. Additions have been included to reflect Swiss peculiarities where necessary (e.g. for SIC and ESR payments). This approach is closely coordinated with the responsible task force leaders at "The Berlin Group" for substantive and legal reasons.

1.1 Contents and limitations

The use cases described in the following chapters relate exclusively to the core processes of banking. This serves to get an idea of the process's services. Aspects of security and privacy are excluded at this point and will be addressed separately.

Wherever it's necessary for the current core business process to include security and/or privacy aspects, a respective placeholder will be set. The same approach also applies to other non-functional requirements and/or constraints.

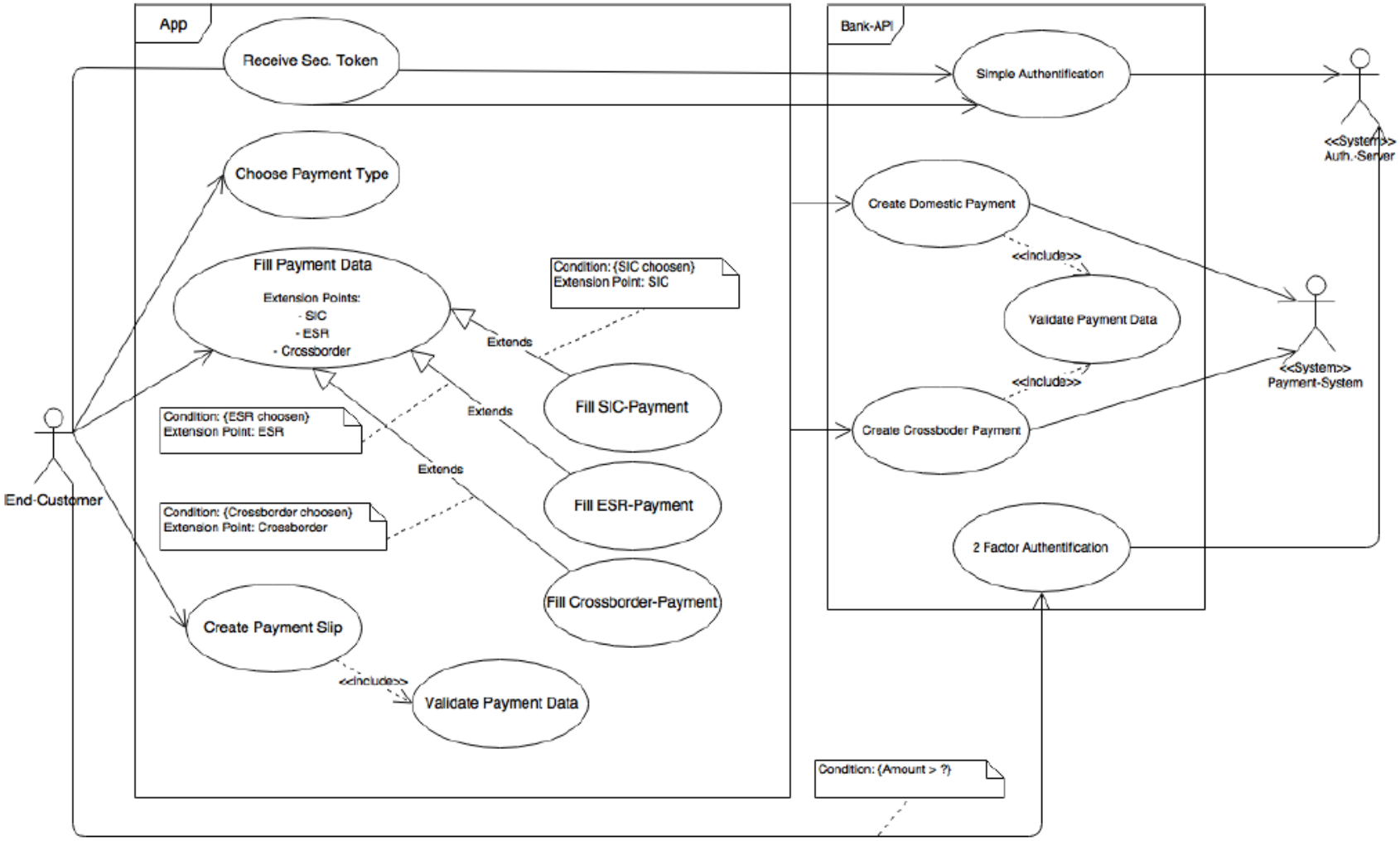
1.2 Use Case Overview

The following list shows all payment related use cases to be covered in this document:

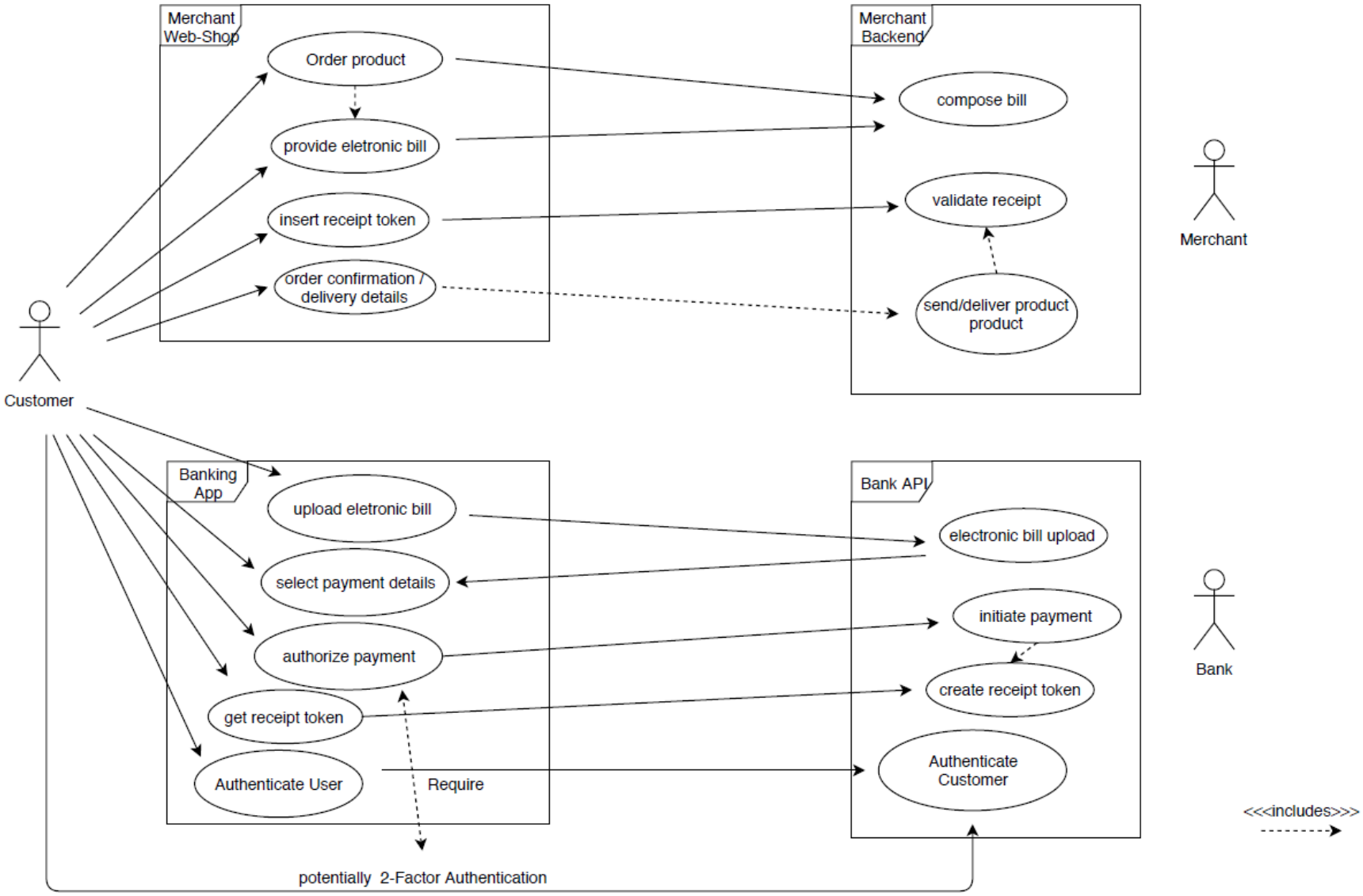
1. Customer initiates payment at bank (similar to e-banking)
2. Customer initiates payment at merchant and authorizes it at bank
3. Customer pays to another end customer (Peer-to-peer)
4. Customer initiates batch of payments at bank
5. Customer manages standing orders (Daueraufträge)
6. Customer approves direct debit at bank
7. Customer views/inspects/modifies/deletes pending payment orders

2. UML Diagrams for "Payment" Use Cases

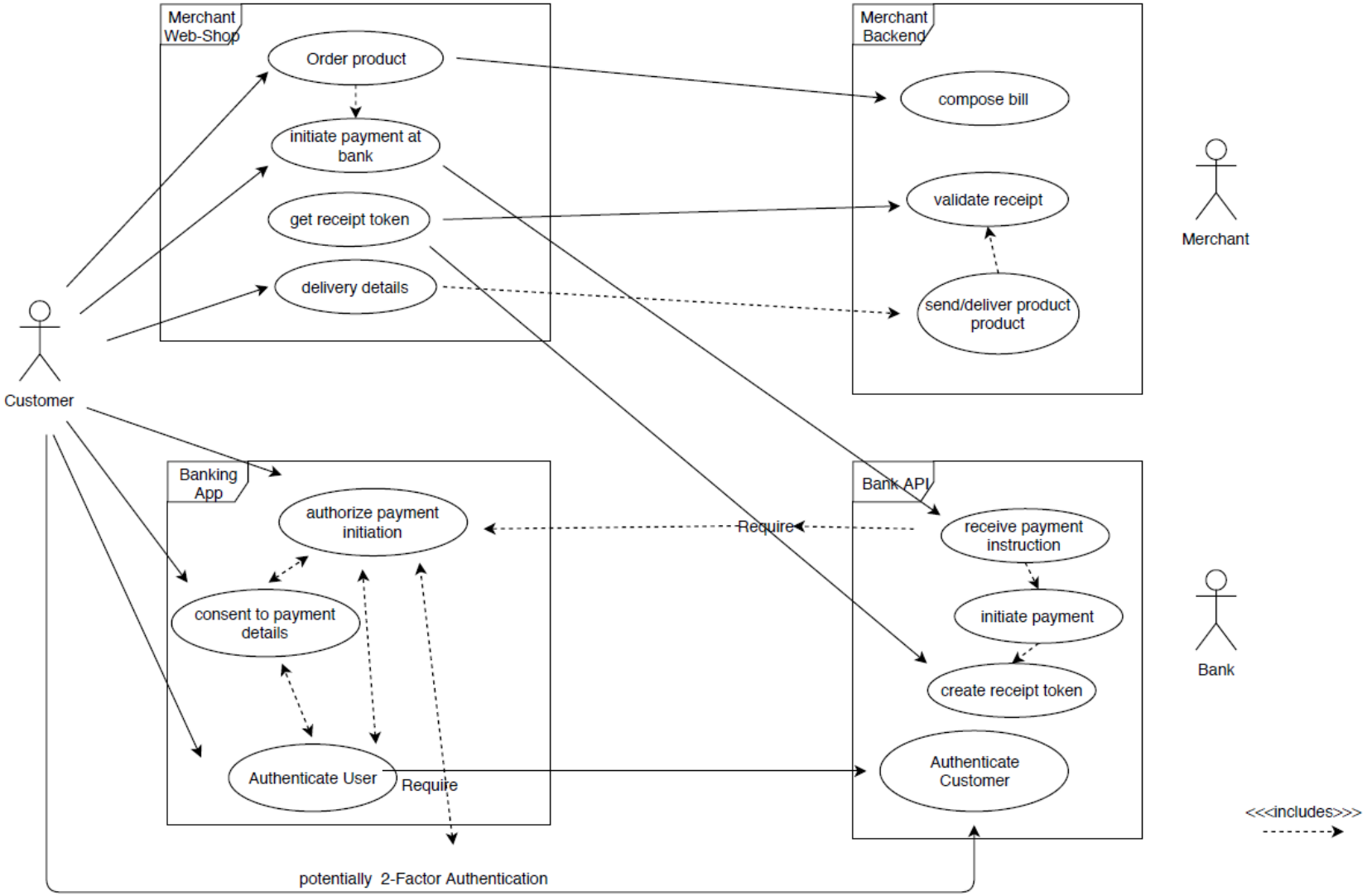
2.1 Use Case 1: "Customer initiates payment at bank (similar to e-banking)"



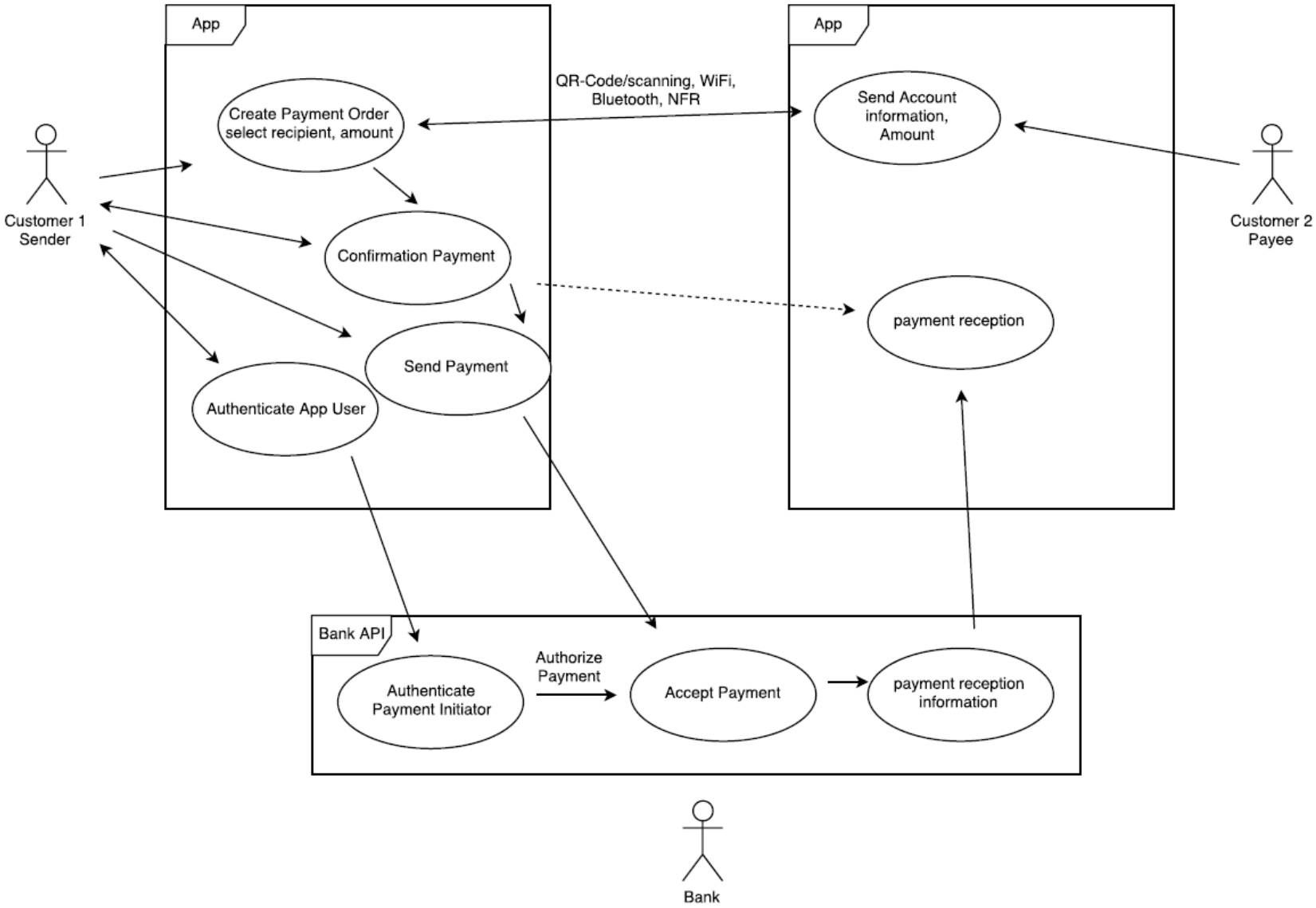
2.2 Use Case 2: "Customer initiates payment at merchant and authorizes it at bank", v1



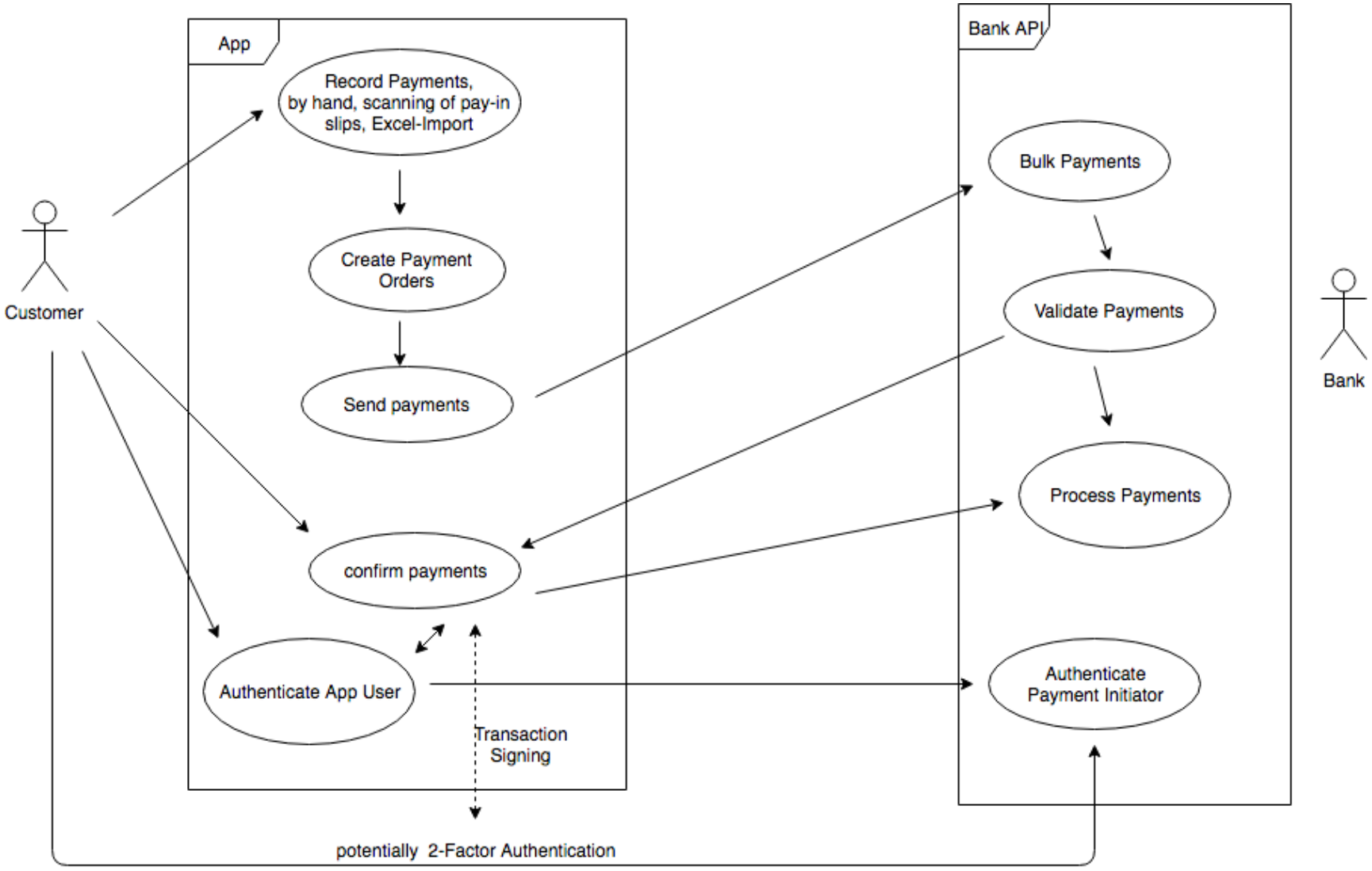
2.3 Use Case 2: "Customer initiates payment at merchant and authorizes it at bank", v2



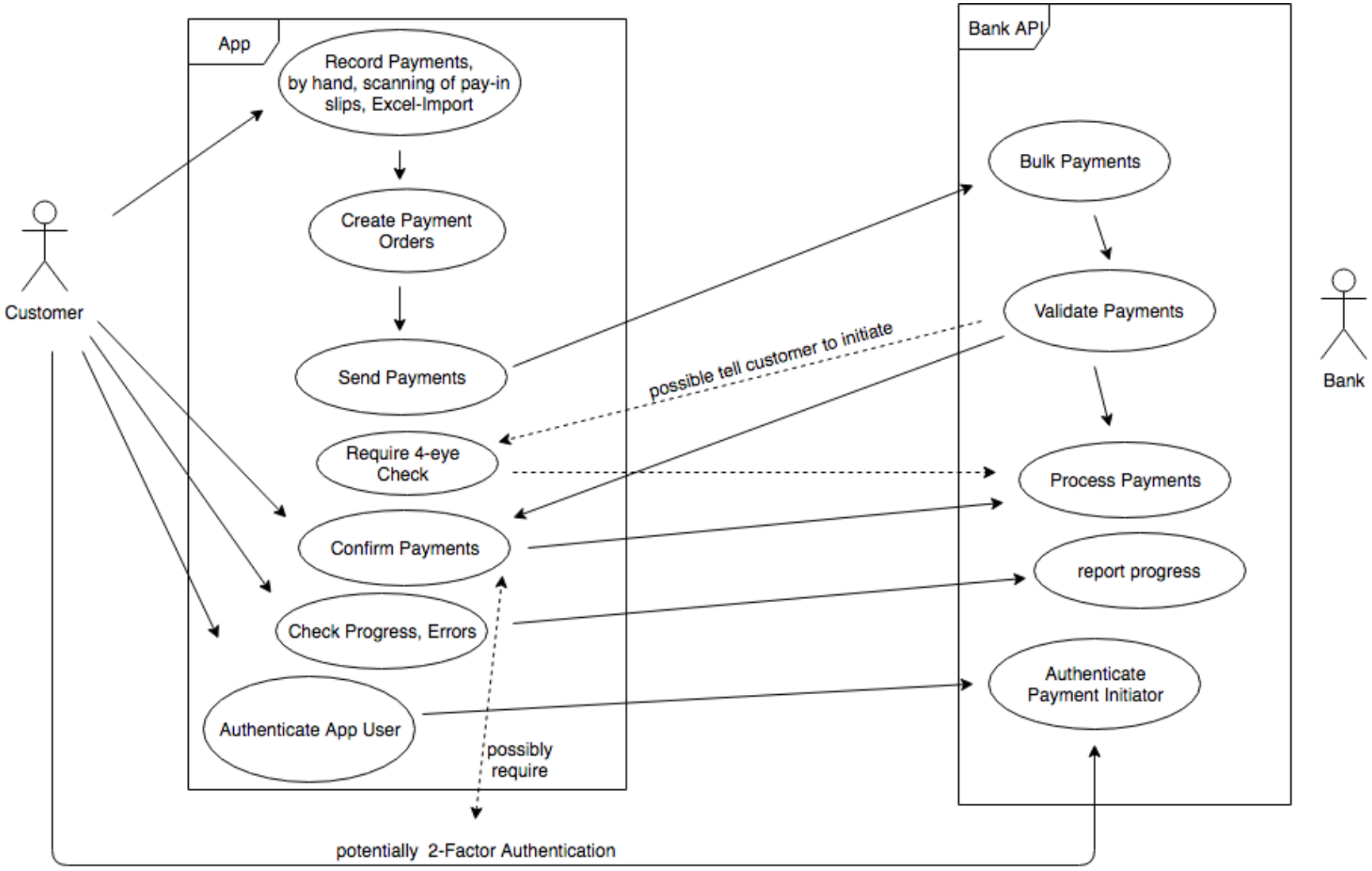
2.4 Use Case 3: "Customer pays to another end customer (Peer-to-peer)"



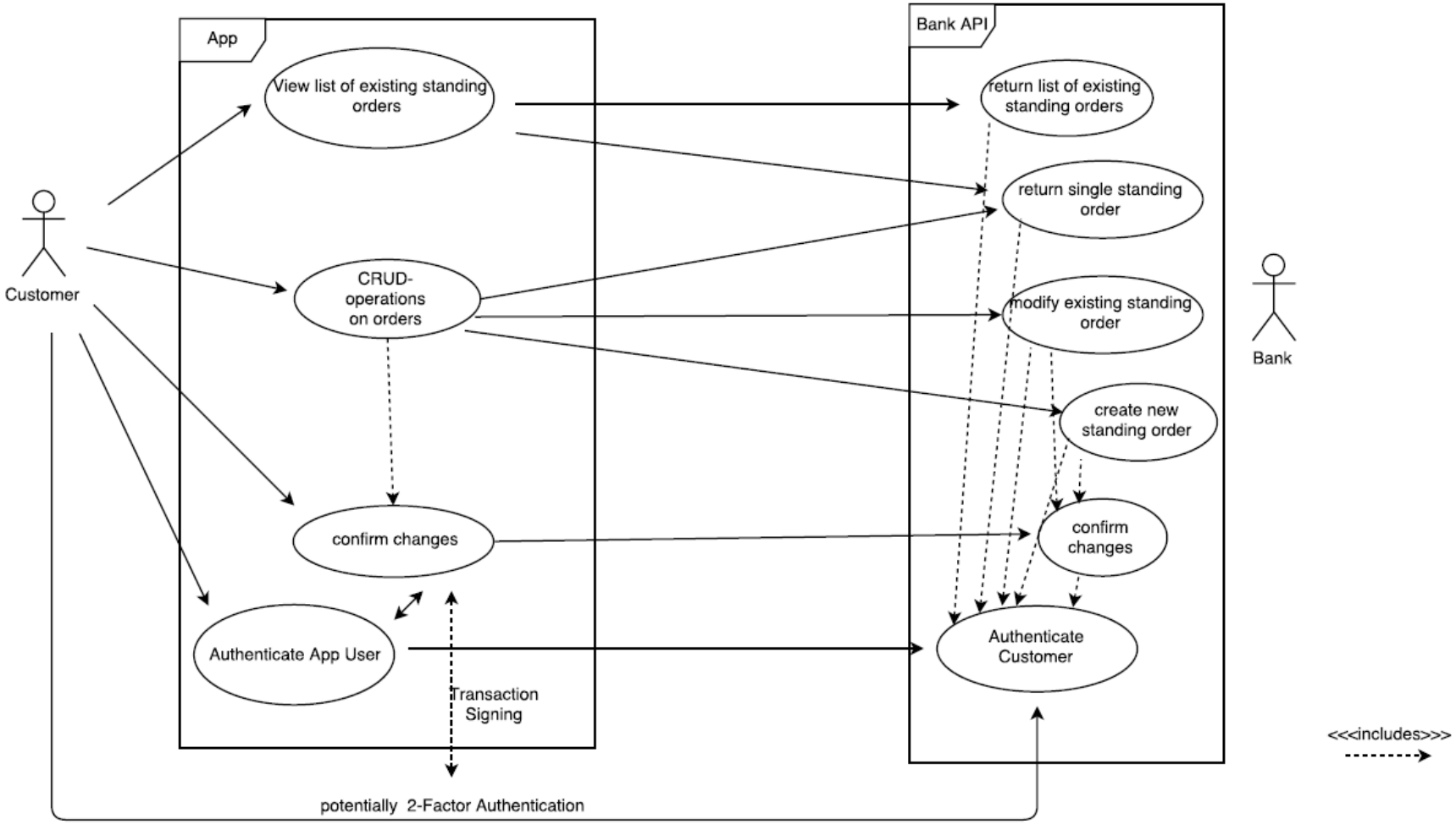
2.5 Use Case 4: "Customer initiates bulk payments at bank", v1



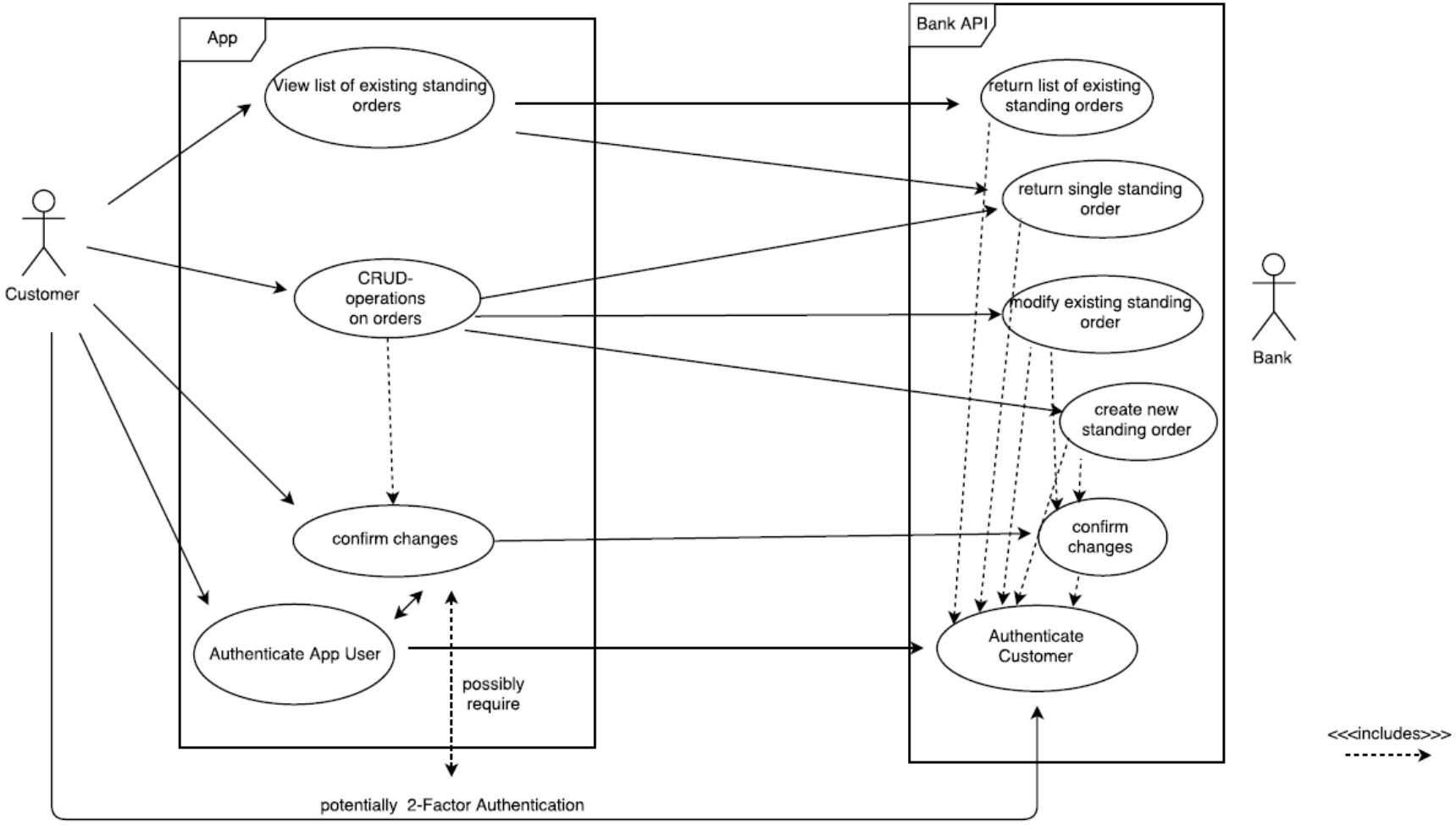
2.6 Use Case 4: "Customer initiates bulk payments at bank", v2



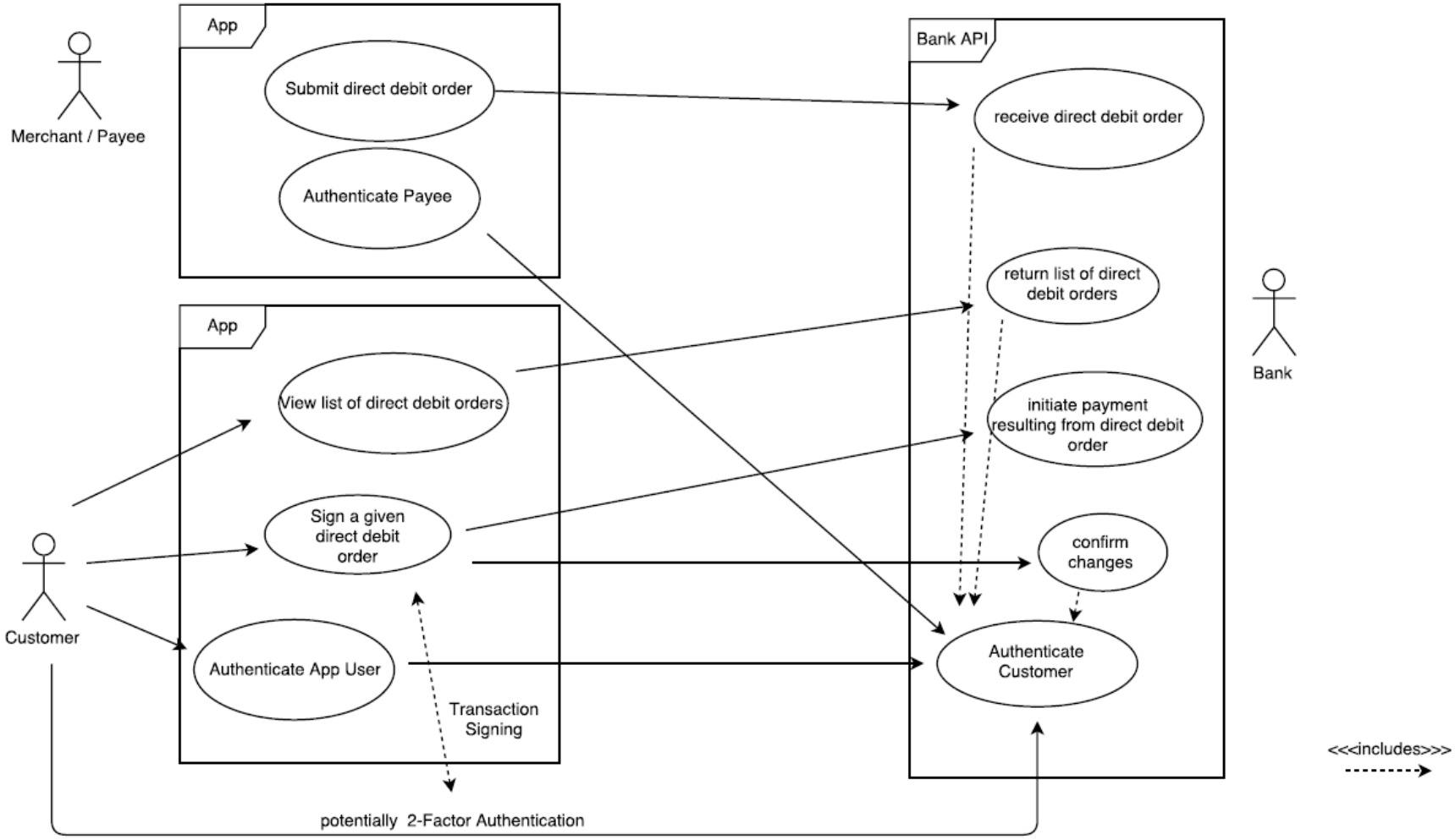
2.7 Use Case 5: "Customer manages standing orders (Daueraufträge)", v1



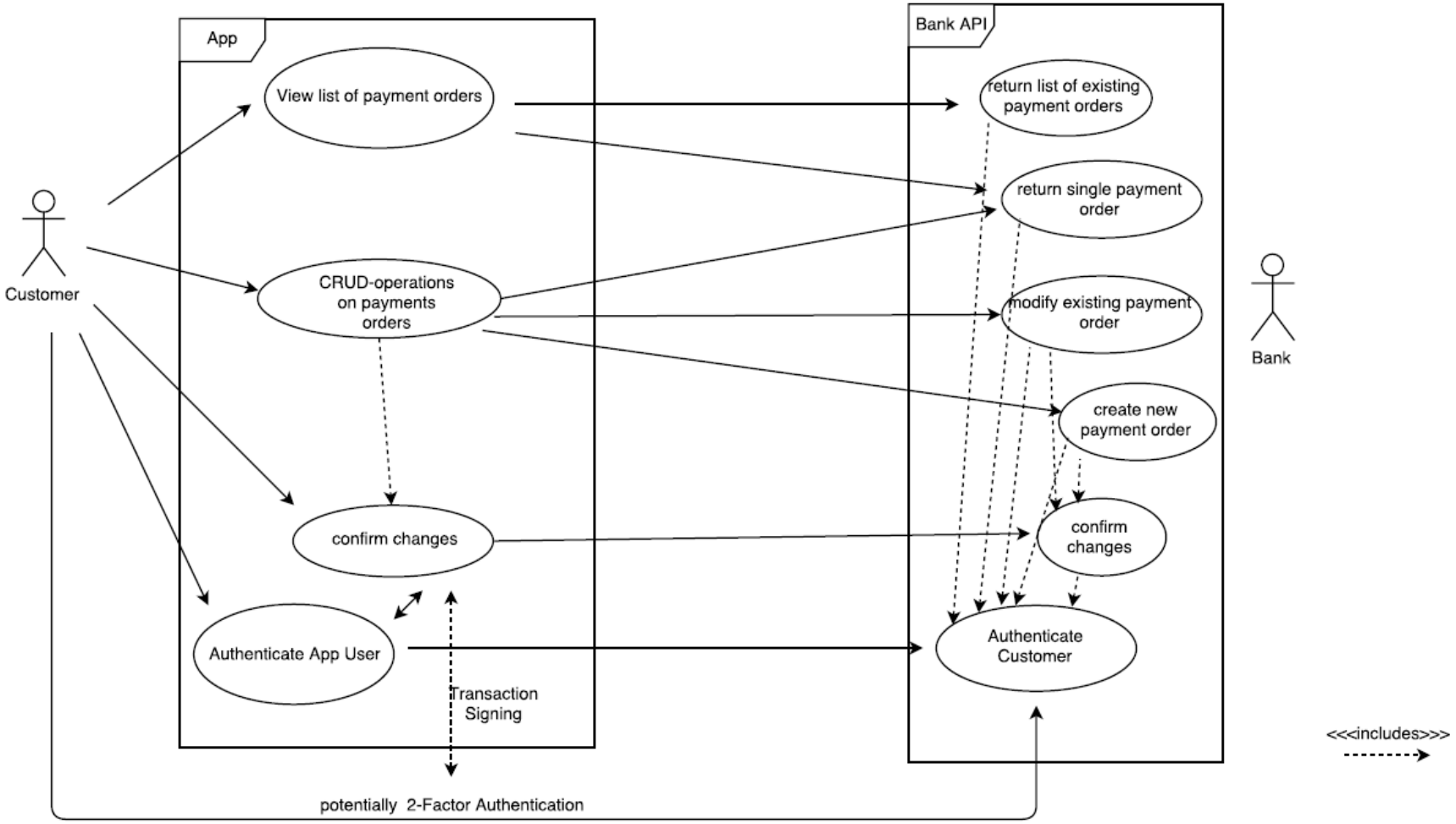
2.8 Use Case 5: "Customer manages standing orders (Daueraufträge)", v2



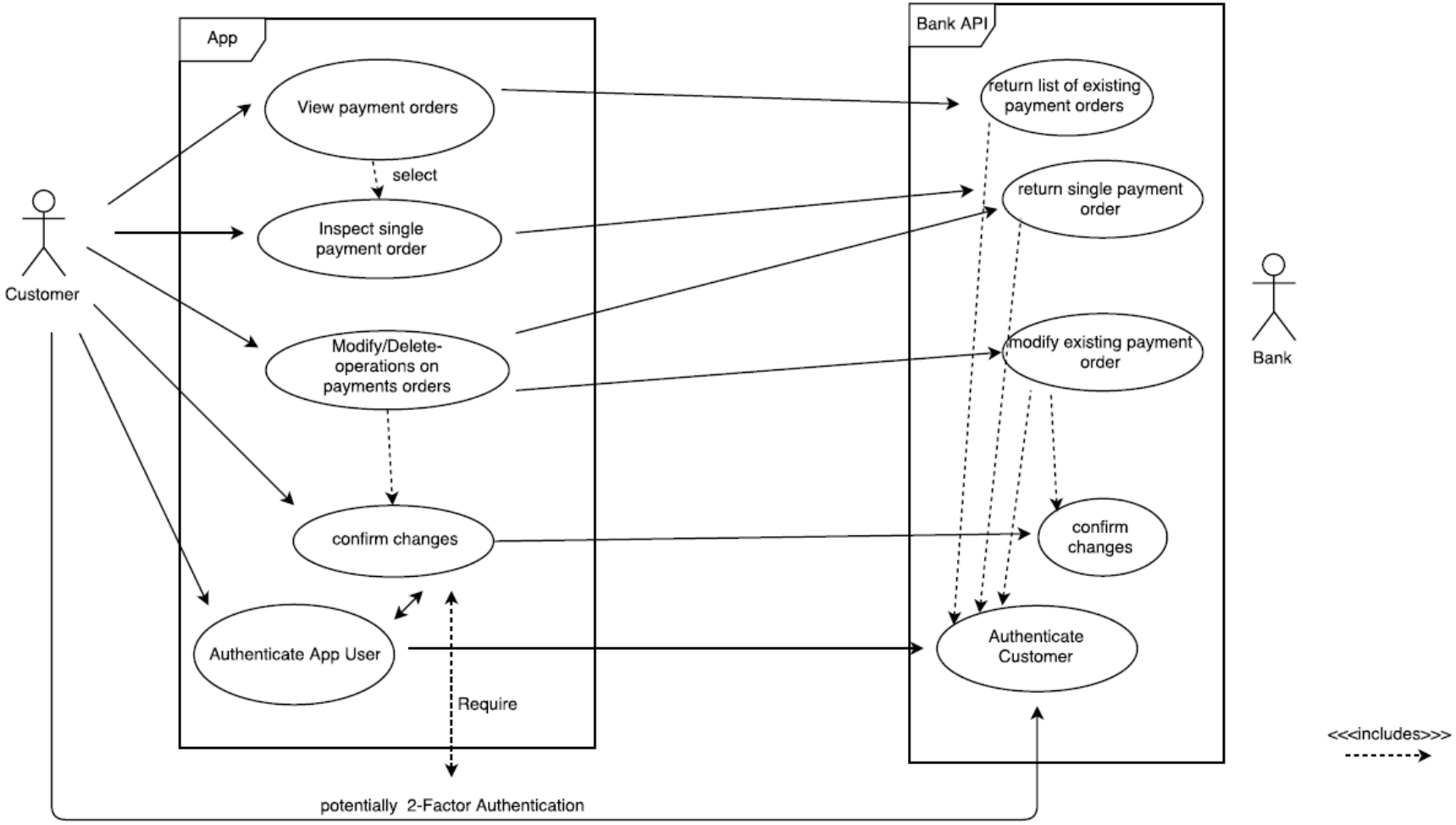
2.9 Use Case 6: "Customer approves direct debit at bank"



2.10 Use Case 7; "Customer views/inspects/modifies/deletes pending payment orders" v1



2.11 Use Case 7; "Customer views/inspects/modifies/deletes pending payment orders" v2



3. Payment API

This payment API currently supports the following payment types.

- **ISR Payment**
  ISR stands for inpayment slip with a reference number (orange payment slip). Payments with a reference number are processed automatically and therefore more quickly. ISR is a very widely used payment methods among merchants in Switzerland as the reference makes invoicing and sales ledger accounting easier.

- **SIC Payment**
  The Swiss Interbank Clearing (SIC) payment enables banks to process their payments traffic in Swiss francs continuously and efficiently. It facilitates the cash-side settlement of securities transactions within seconds. Aside from large value payments, the SIC system will also process direct debits and card transactions.
  SIC is based on the ISO 20022 message standard, which significantly lowers the number of technical interfaces between participants and the central Swiss financial market infrastructure, reducing the complexity that has grown over time.

- **SEPA Credit Transfer**
  SEPA[1] Credit Transfer can be used for making any type of euro payment within the SEPA area.[2] A SEPA Credit Transfer always includes the bank accounts of the payer and payee in the international IBAN format and the payee's bank in the BIC code format.

All payment types named above are described in a corresponding Swagger file. Therefore and to best possible avoid inconsistencies, no further documentation is present in this document. In particular, this includes the following

[1] *SEPA* stands for *Single Euro Payments Area*.

[2] The *SEPA* area consists of the following 34 countries:

- EU member states: Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom
- EEA countries: Iceland, Liechtenstein, Norway, Monaco and San Marino
- Switzerland