

mojaloop

PISP Progress Update

PI 11 - July 2010



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mojaloop

Goal

Overall: Enable 3rd party payment initiation within the Mojaloop Ecosystem.

This Presentation:

- Update the community on our progress
- Key Decisions made
- Account Linking in Detail
- Plans for PI 11
- Demo application

Background

According to PSD2: (PSD2 = Payment Services Directive 2 in Europe which defines this role explicitly)

PISP - Payment Initiation Service Provider

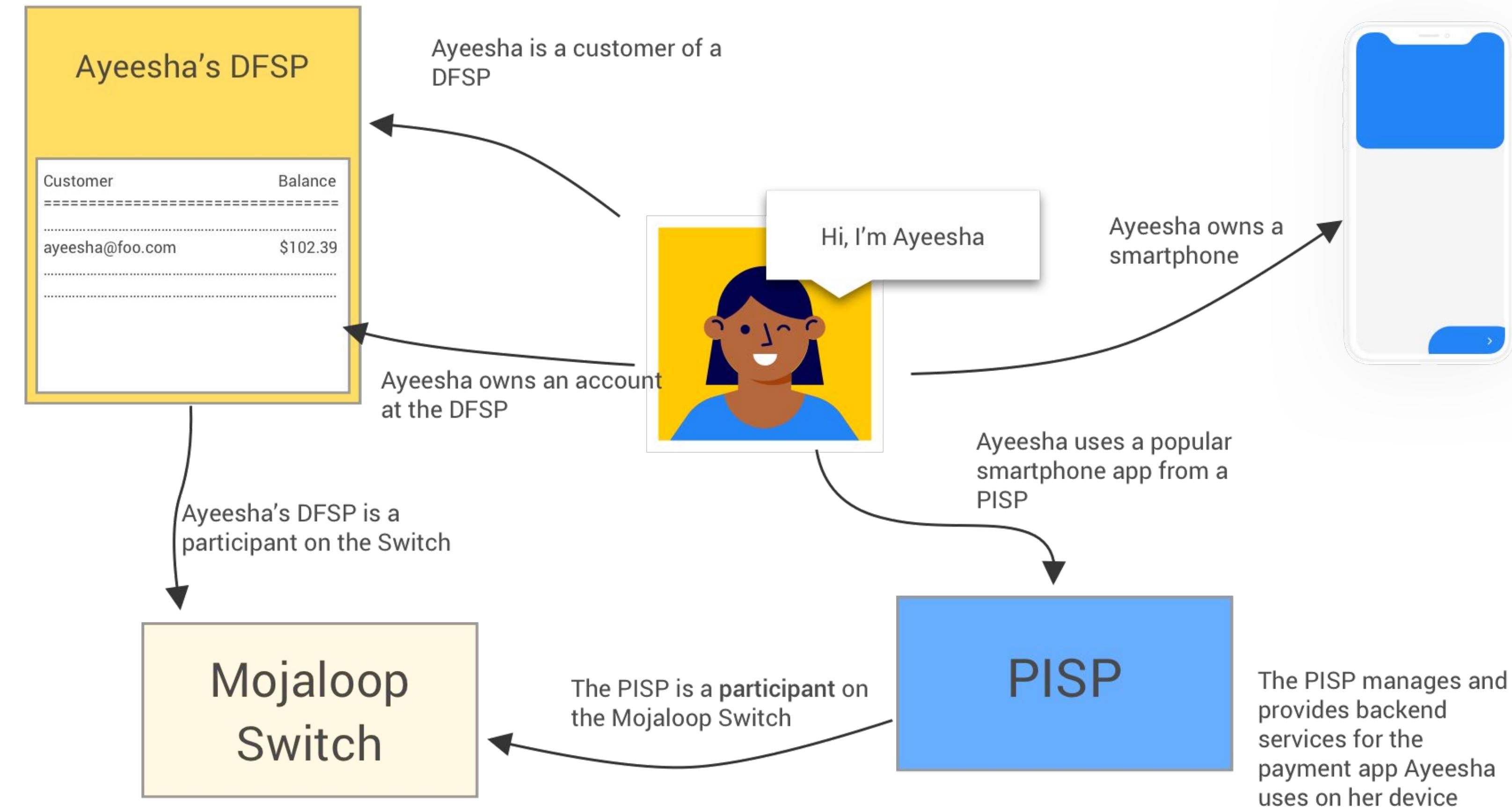
PISPs initiate payments from a user's account (on behalf of the user) to a payee account.

In Mojaloop:

A PISP is a new **participant** role, which:

- Has no liquidity (or settlement) requirements
- Initiates transactions on behalf of users at DFSPs with **RequestToPay**

Background



PI10 Objectives

- 1. End to end PISP transfer (from demo PISP)**
 - a. flow through system exactly as we have designed
 - b. No error scenarios, mocked out account linking services

- 2. A well defined relationship between User, PISP, and their DFSP**
 - a. User delegates permissions to PISP to perform specific actions
 - b. OTP Flow a priority
 - c. Introduction of "source of funds" account

PI10 Objectives

1. End to end PISP transfer (from demo PISP)

- a. flow through system exactly as we have designed **Ongoing**
- b. No error scenarios, mocked out account linking services

2. A well defined relationship between User, PISP, and their DFSP

- a. User delegates permissions to PISP to perform specific actions
- b. OTP Flow a priority **Completed**
- c. Introduction of "source of funds" account

PI10 Objectives (Secondary)

3. PISP Onboarding investigation/discussion

a. API Gateway/Open APIs

4. Define + Design a Lab for full E2E PISP testing/prototyping

PI10 Objectives (Secondary)

3. PISP Onboarding investigation/discussion
 - a. API Gateway/Open APIs

Out of Scope

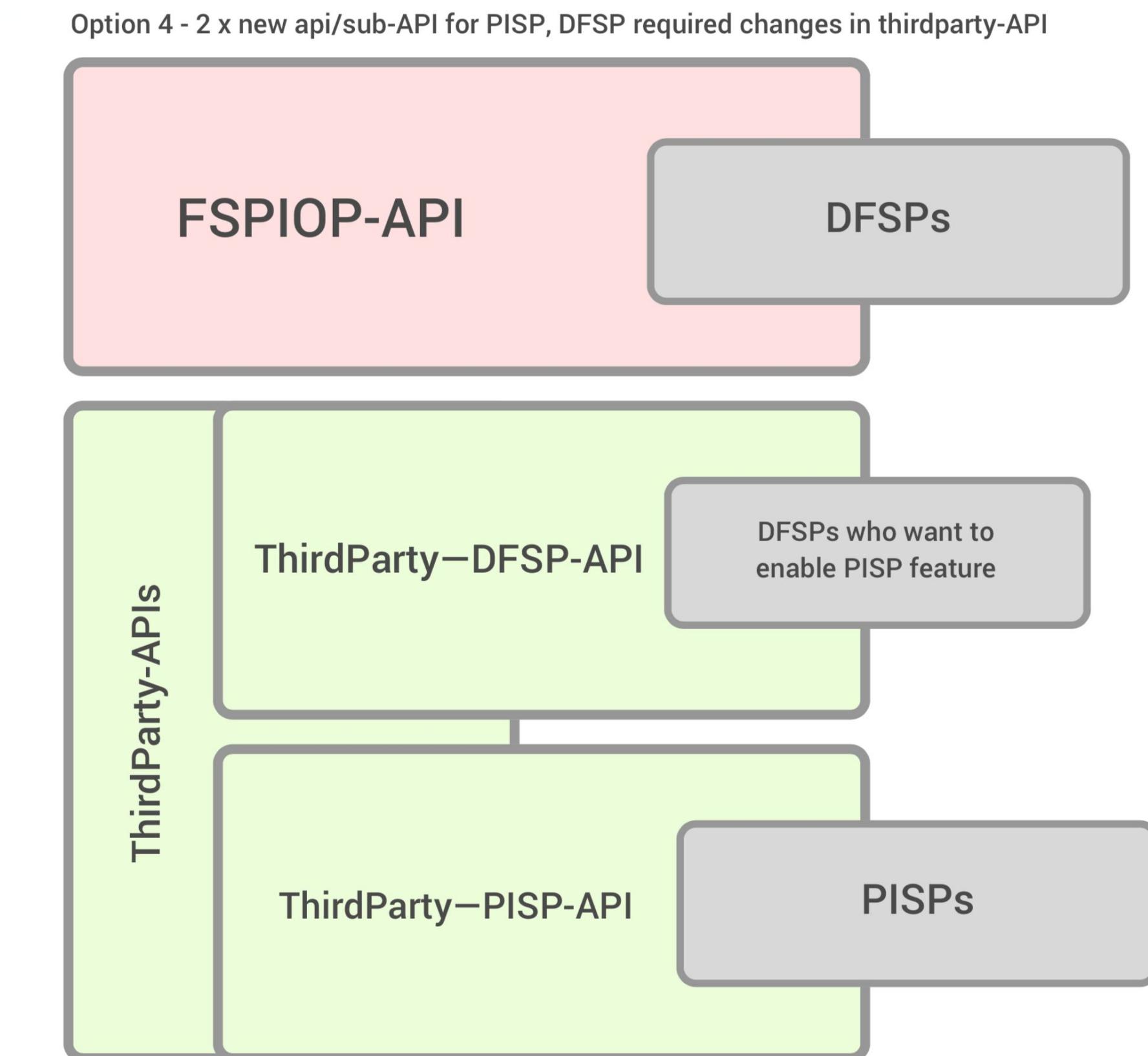
4. Define + Design a Lab for full E2E PISP testing/prototyping

Ongoing

Key Decisions

New functionality will *not* be a part of the FSPIOP-API

- Instead will be broken up into a new '**thirdparty-api**'
 - which itself will be divided into a `thirdparty-pisp-api`, and `thirdparty-dfsp-api`
 - This allows for security to be enforced at the api gateway *per API*



Key Decisions

New Auth-Service:

- Generates challenges for FIDO credential registration
- Source of truth for new **Consent** resource which represents a relationship of trust between User, DFSP, and PISP
- Verifies signed QuoteResponse object from PISP
- (Mojaloop) standard async api
- Hosted by Mojaloop Hub, but DFSPs can host on their own or implement their own according to the OpenAPI Spec

Account linking

Linking - Flows

We have some very long sequence diagrams!

Let's switch to GitHub for this:

<https://github.com/mojaloop/pisp/tree/master/docs/linking>

Plan for PI11

PI 11

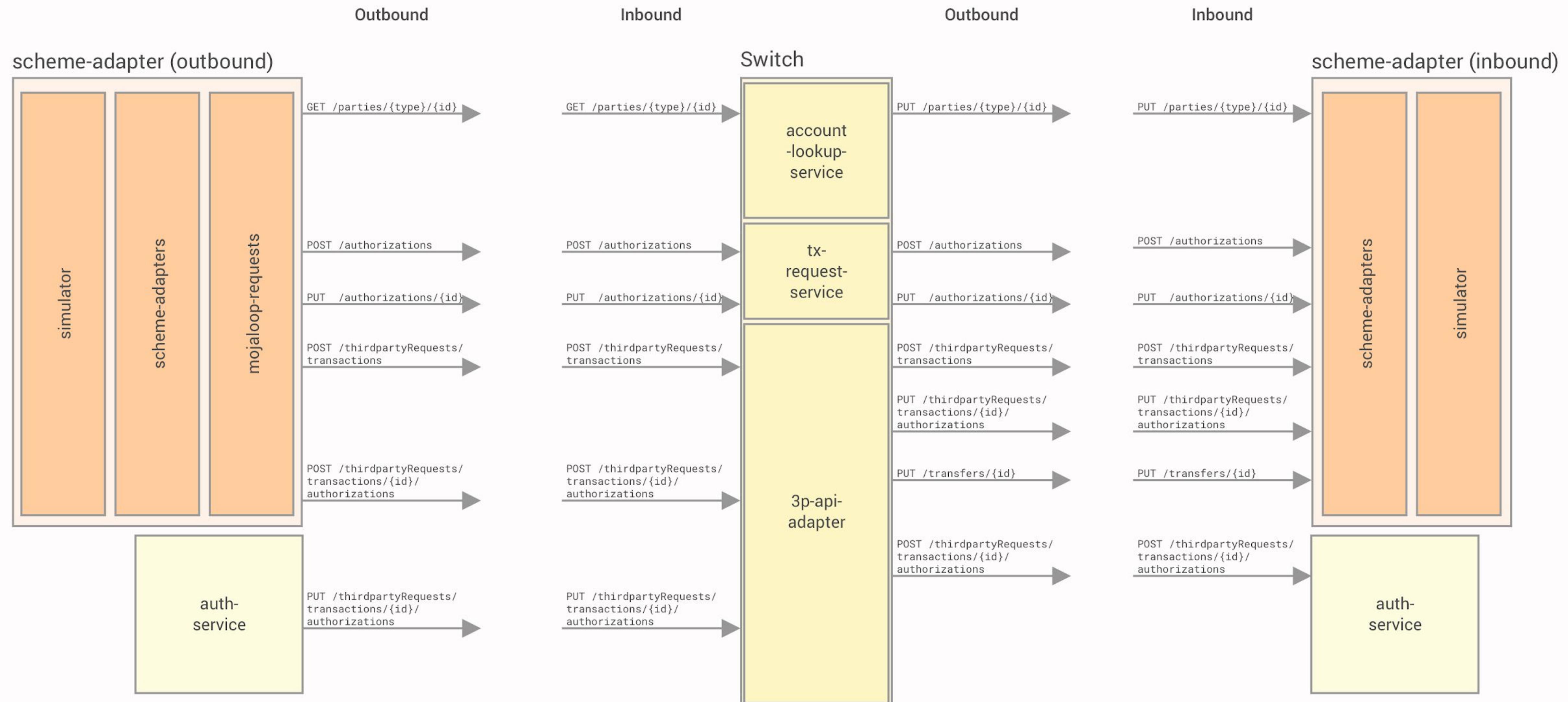
1. End to End transaction flow (mocked Consent Object)
2. Transfers: Scheme Adapter (3p and sdk) and mojaloop-simulator implemented with E2E Tests
 - i. This is for CI/CD requirements, since we can't test the simulators without it
 - ii. Regression testing: Make sure we don't break golden path tests
3. *Fully implemented* Auth Service with integration tests
 - i. Transfers Flow
 - ii. Account Linking

(This was planned to be mocked, but is fully functional thanks to Google summer interns.)
4. thirdparty-api-adapter: Implement account linking calls

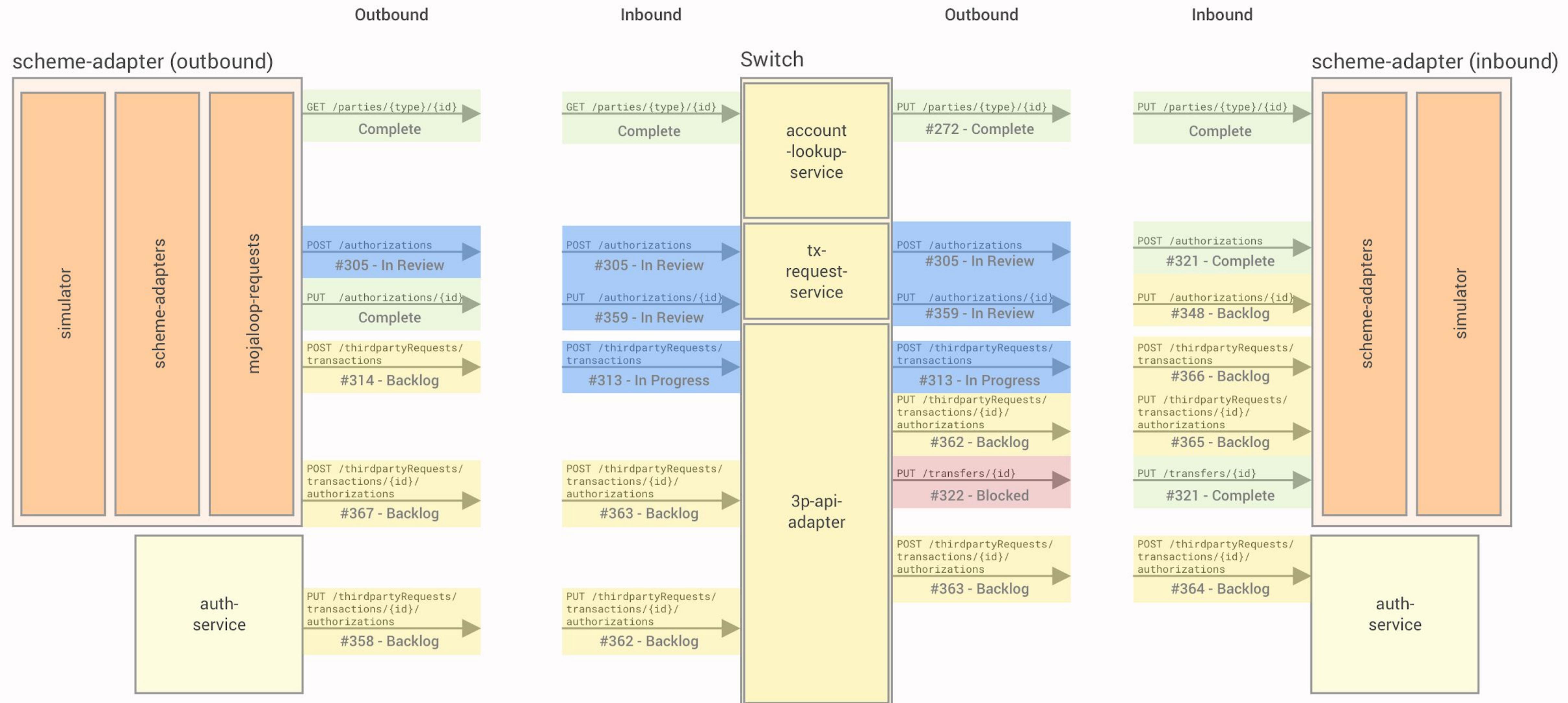
PI 11 - Secondary

1. Account Linking: Scheme Adapter (3p and sdk) and mojaloop-simulator implemented with E2E Tests
2. Deploy PISP Lab environment
 - i. We Will need eventually, but let's focus on doing things inside CI/CD first

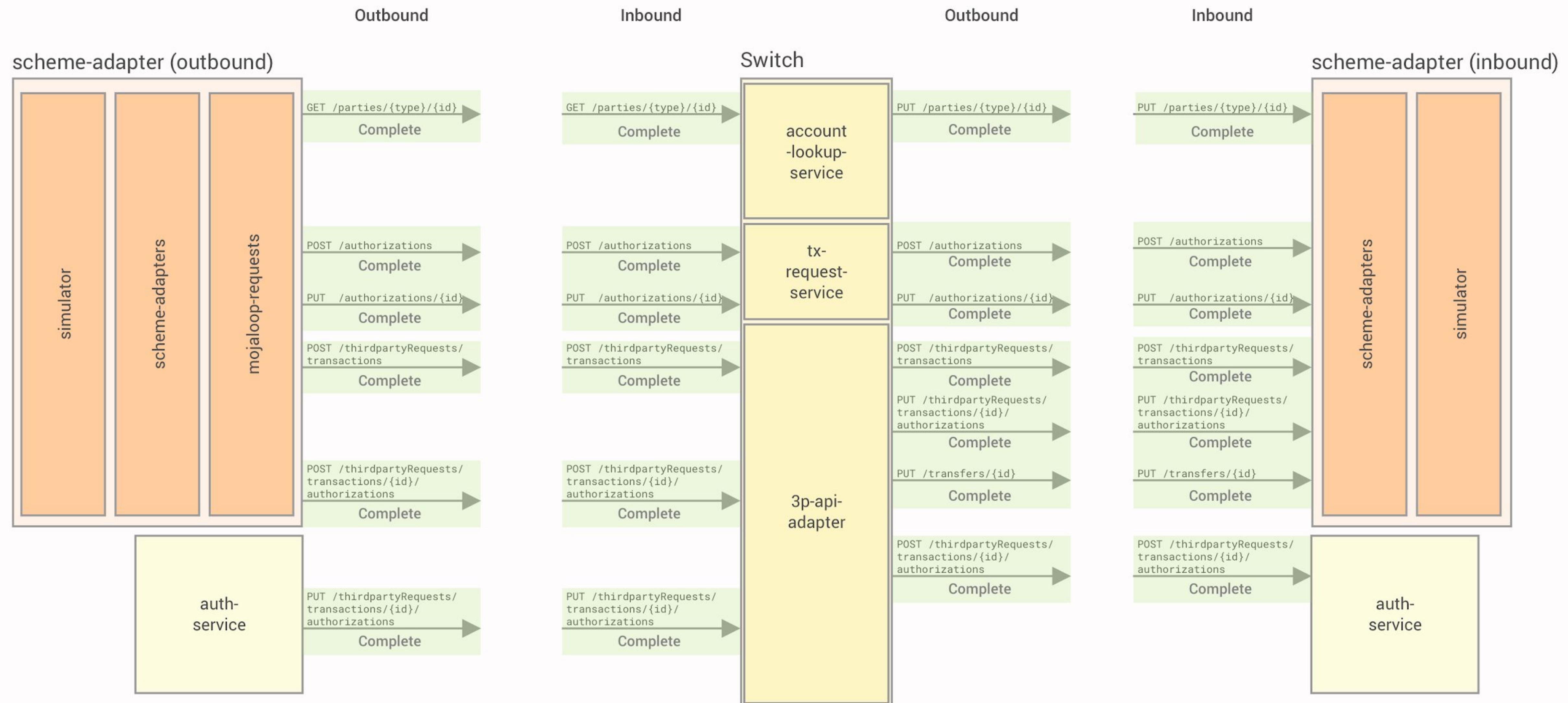
Transfers End To End Request Overview



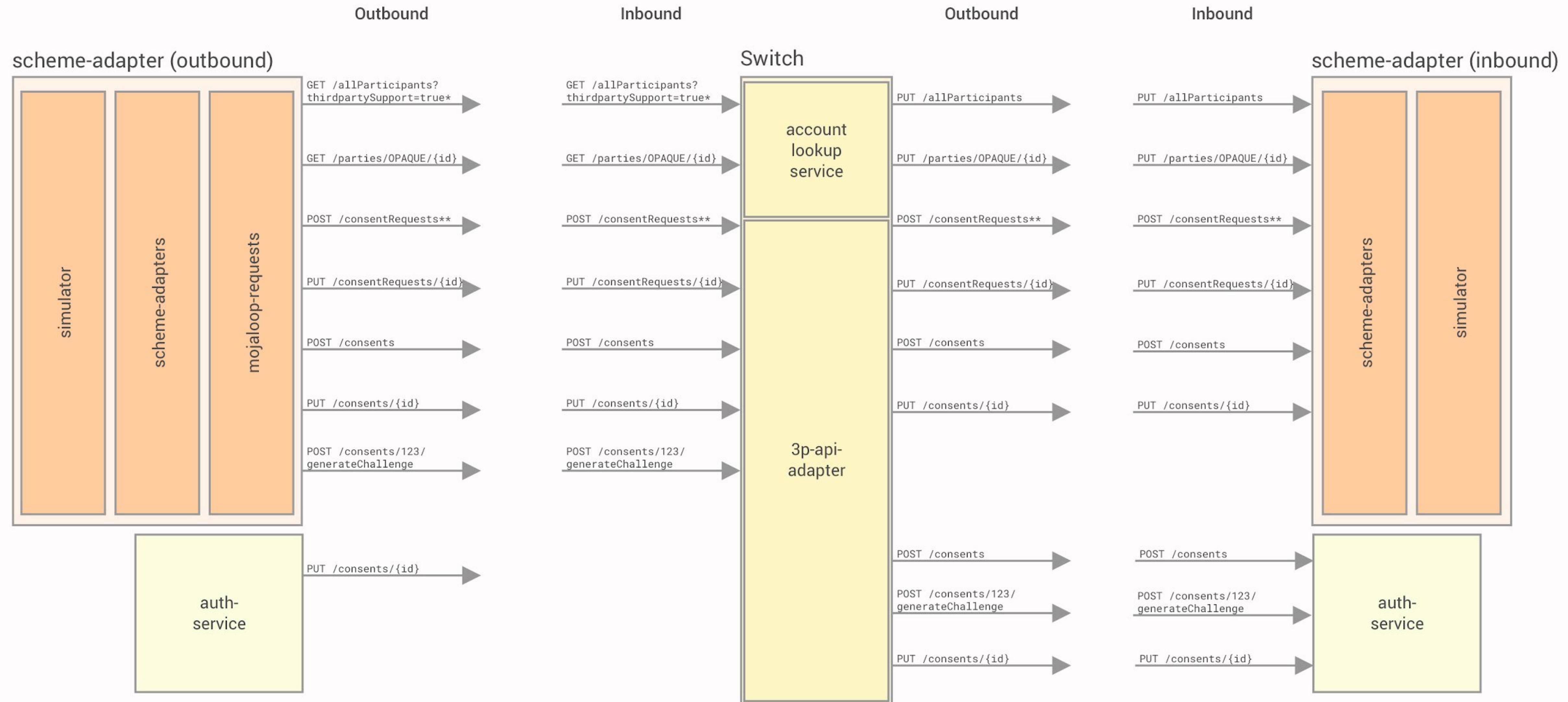
Transfers End To End Request Overview



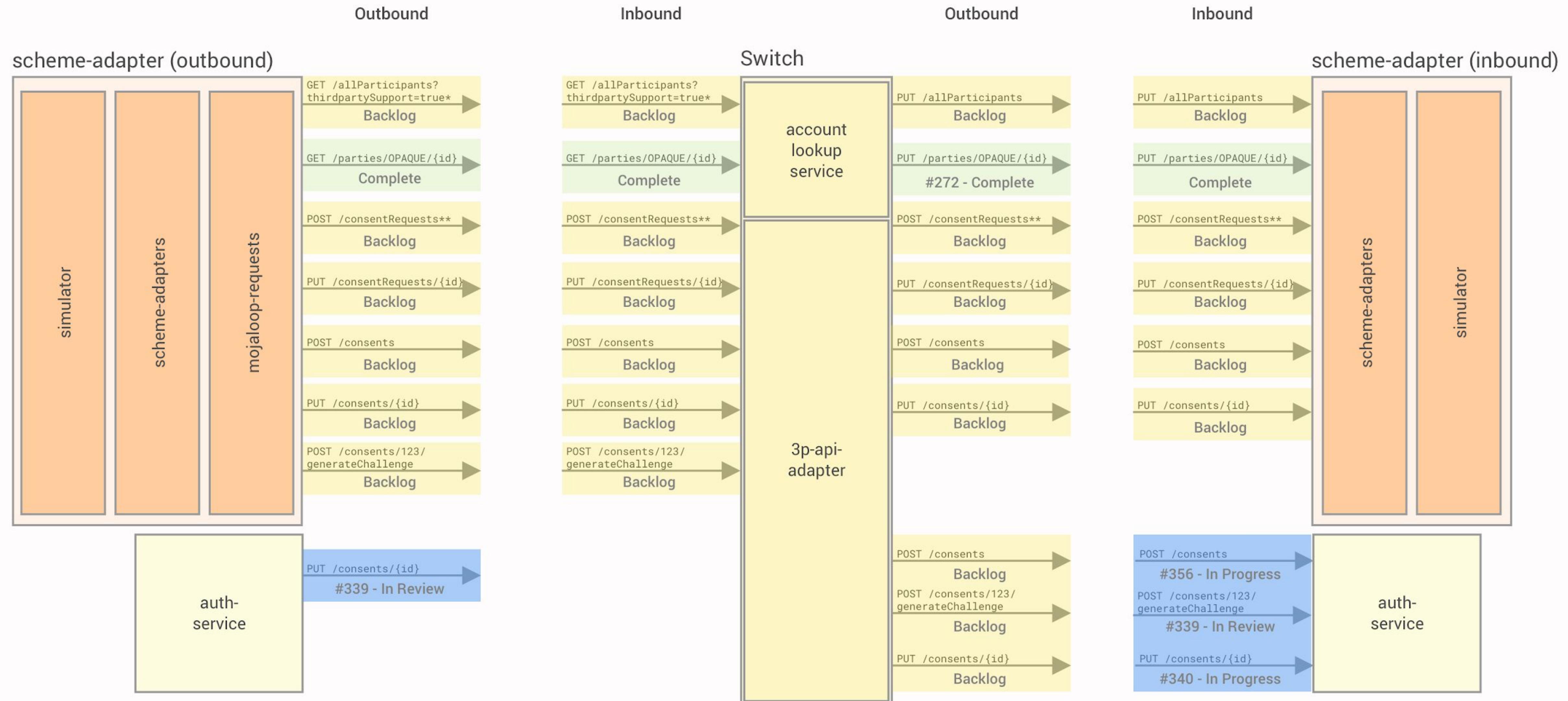
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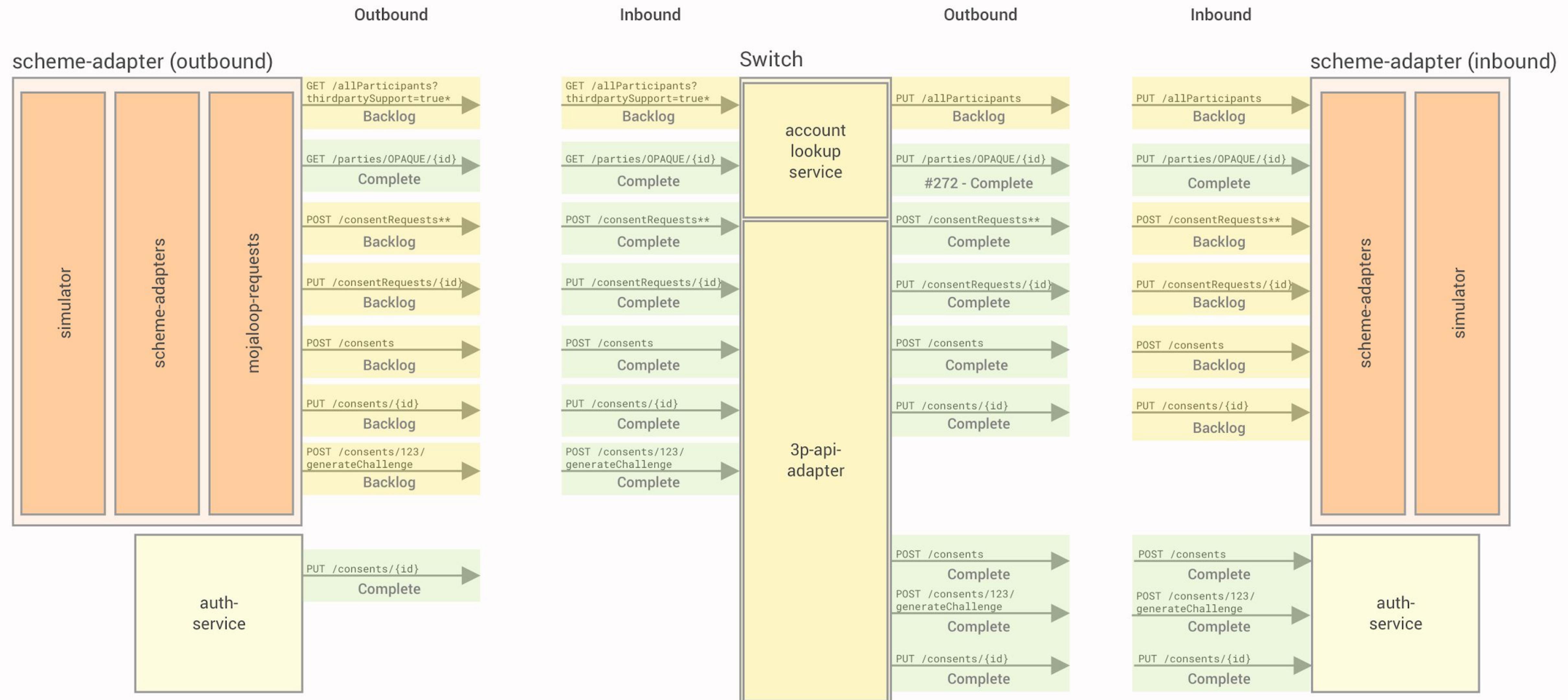
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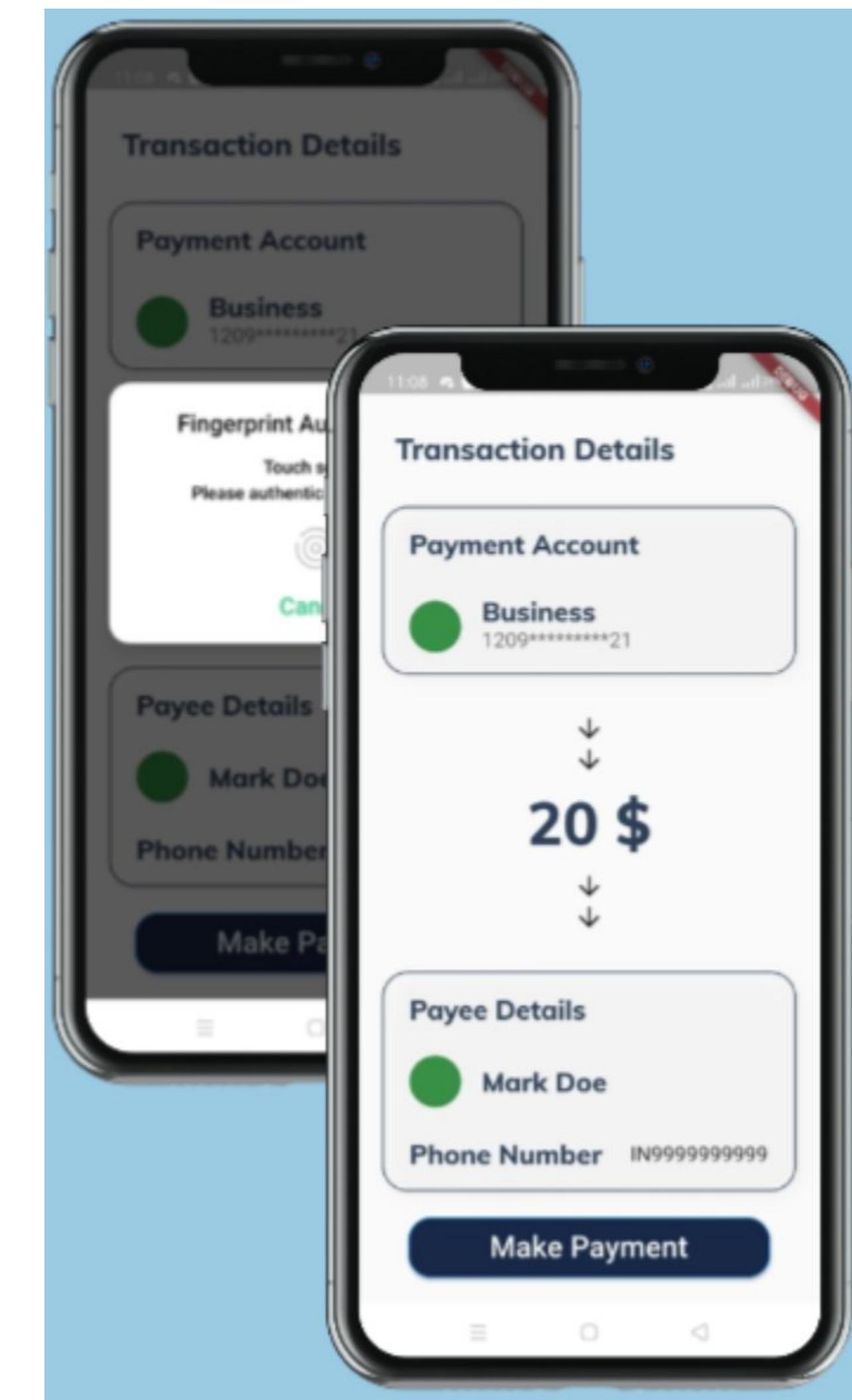


Account Linking End To End Request Overview

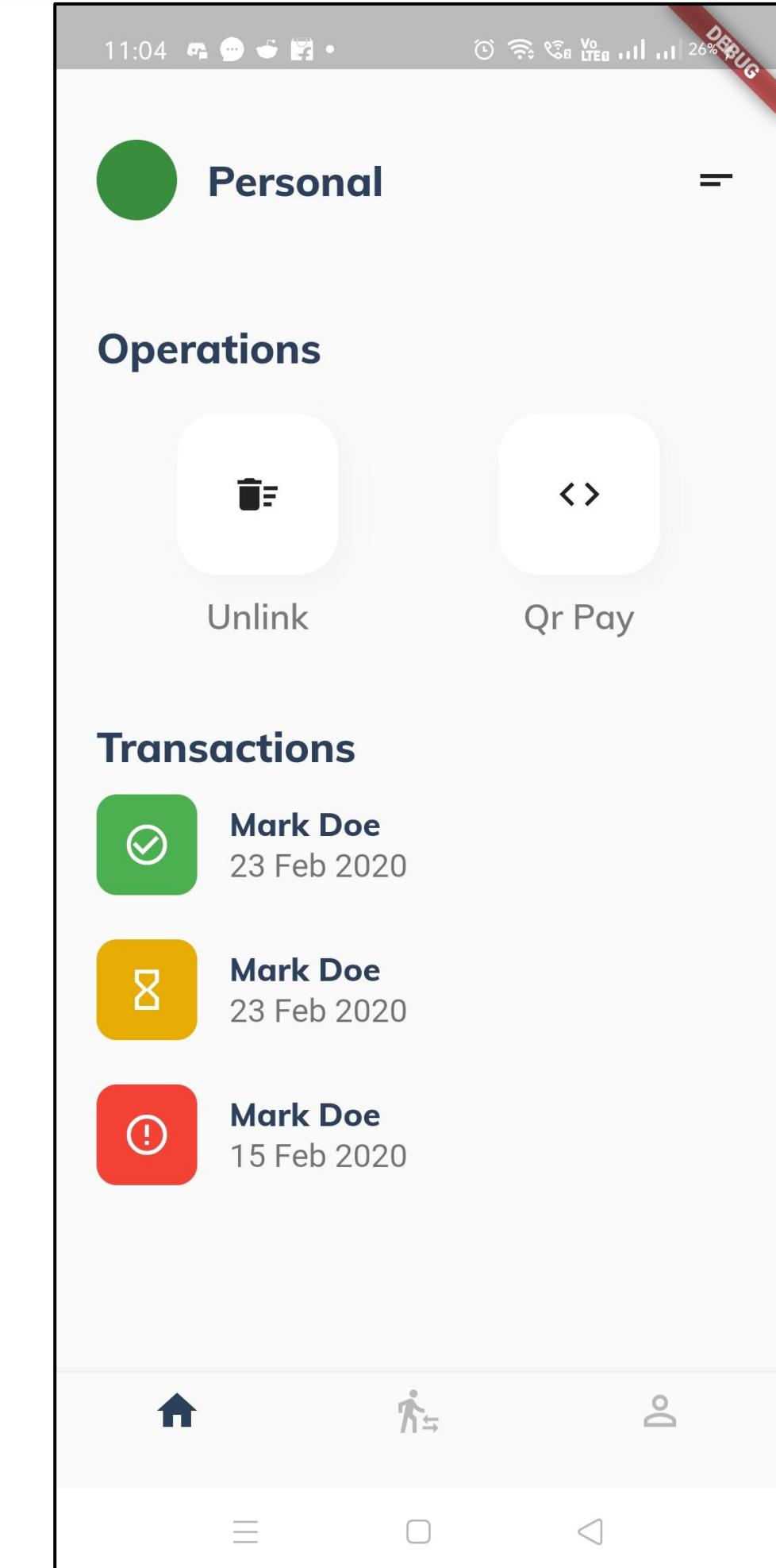
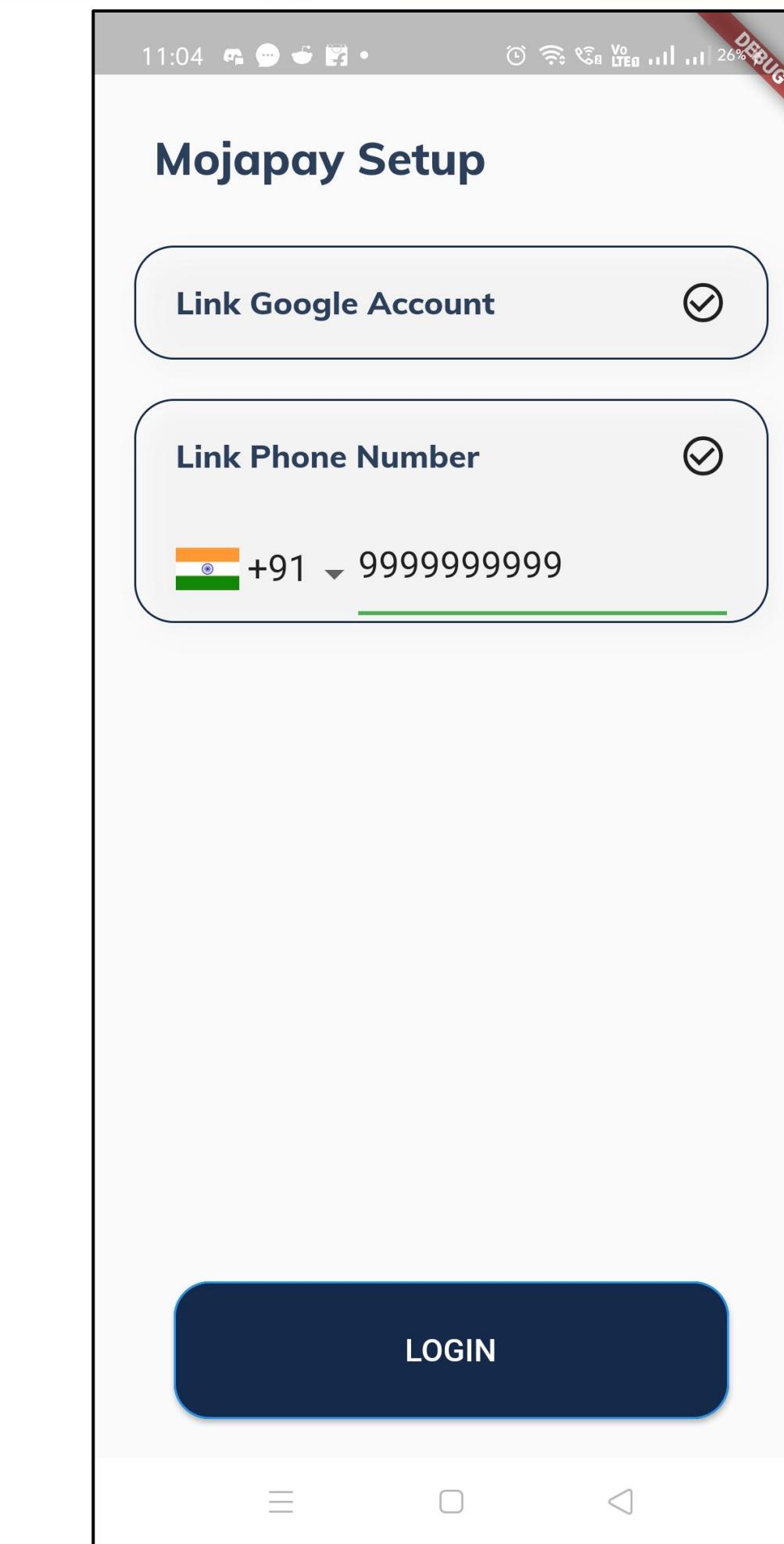
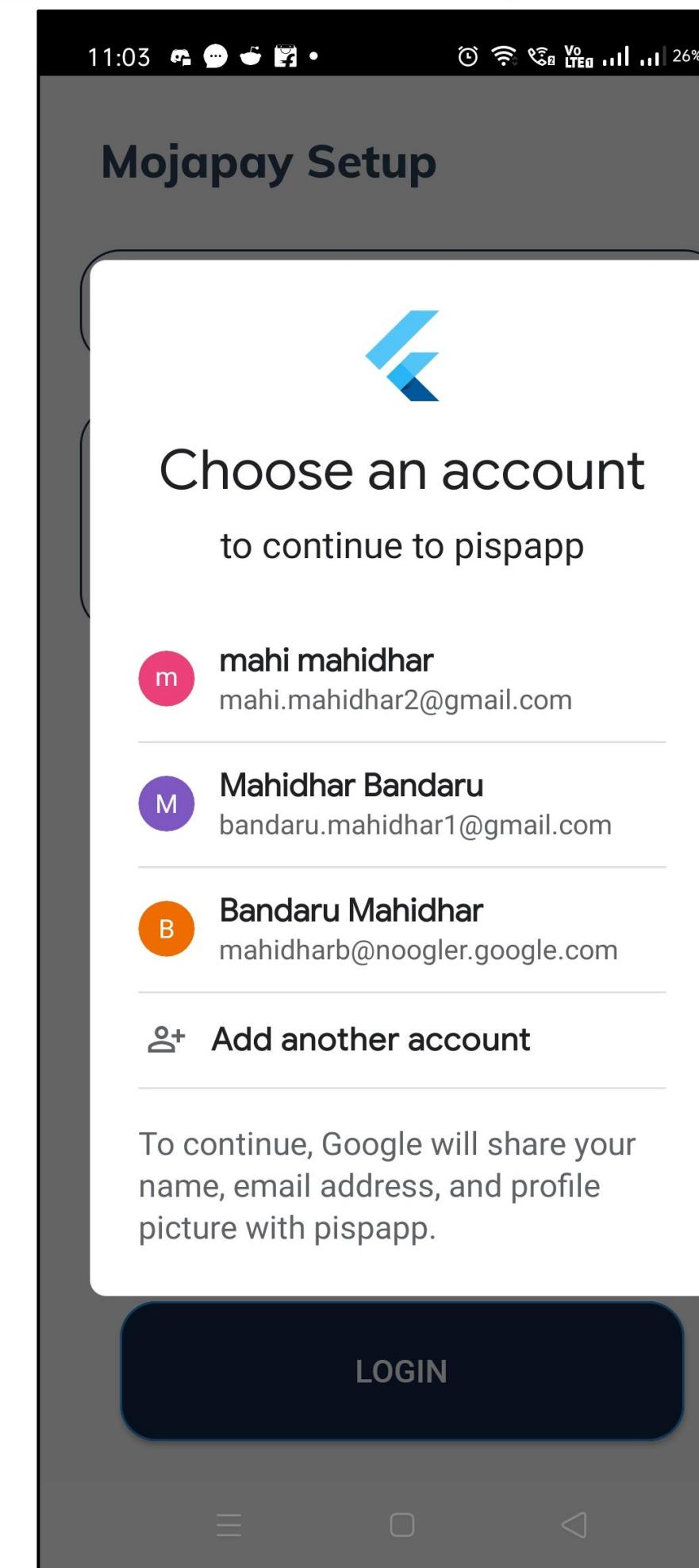
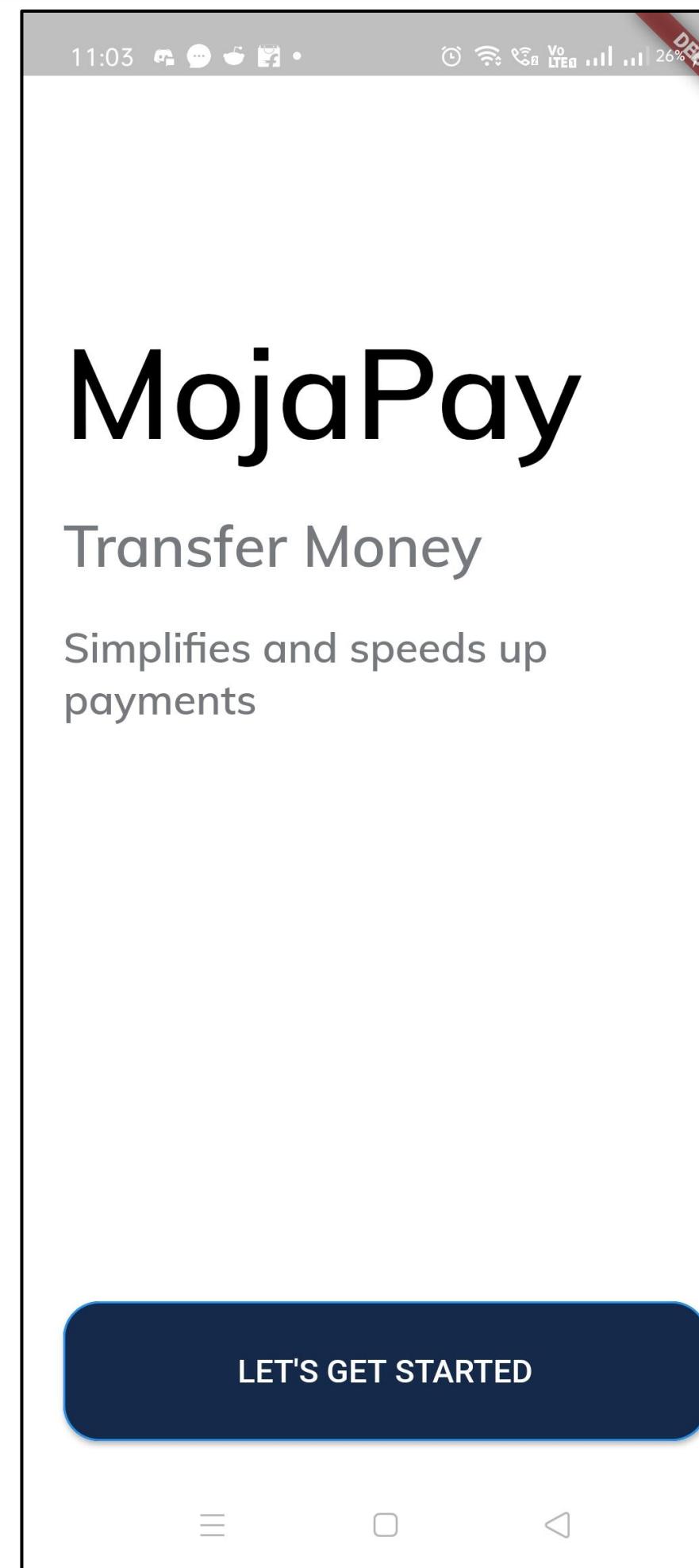


PISP Demo App

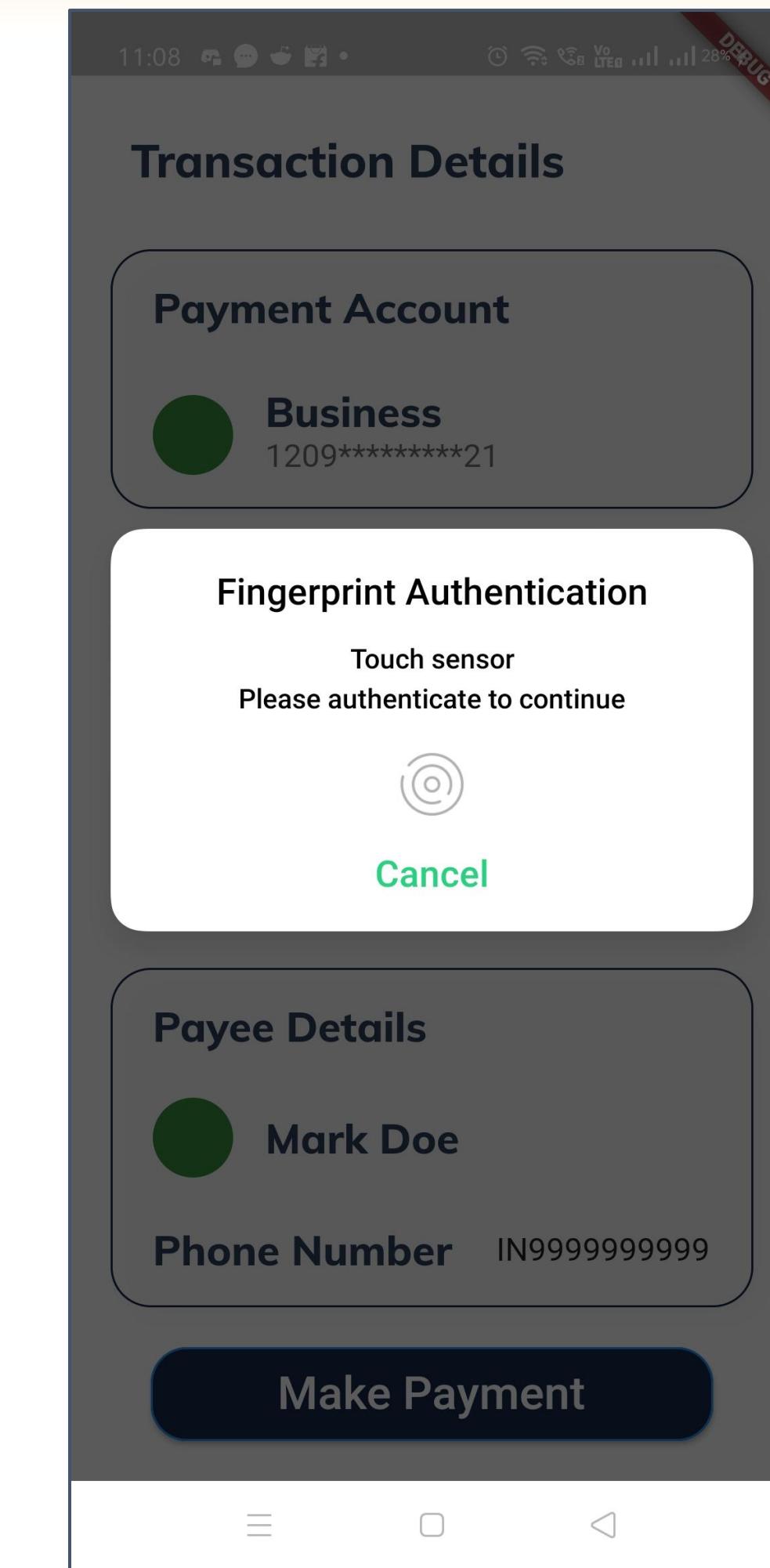
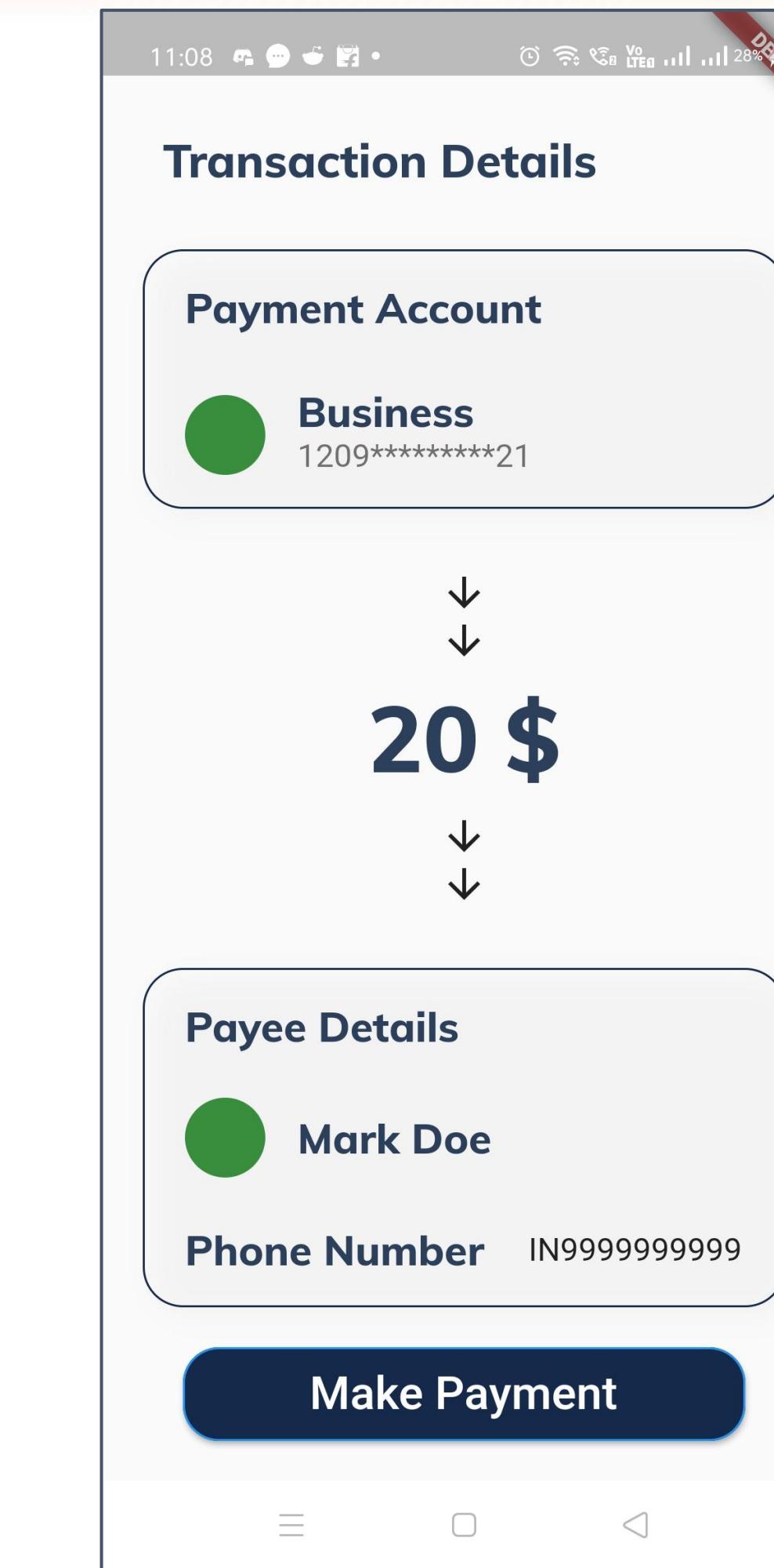
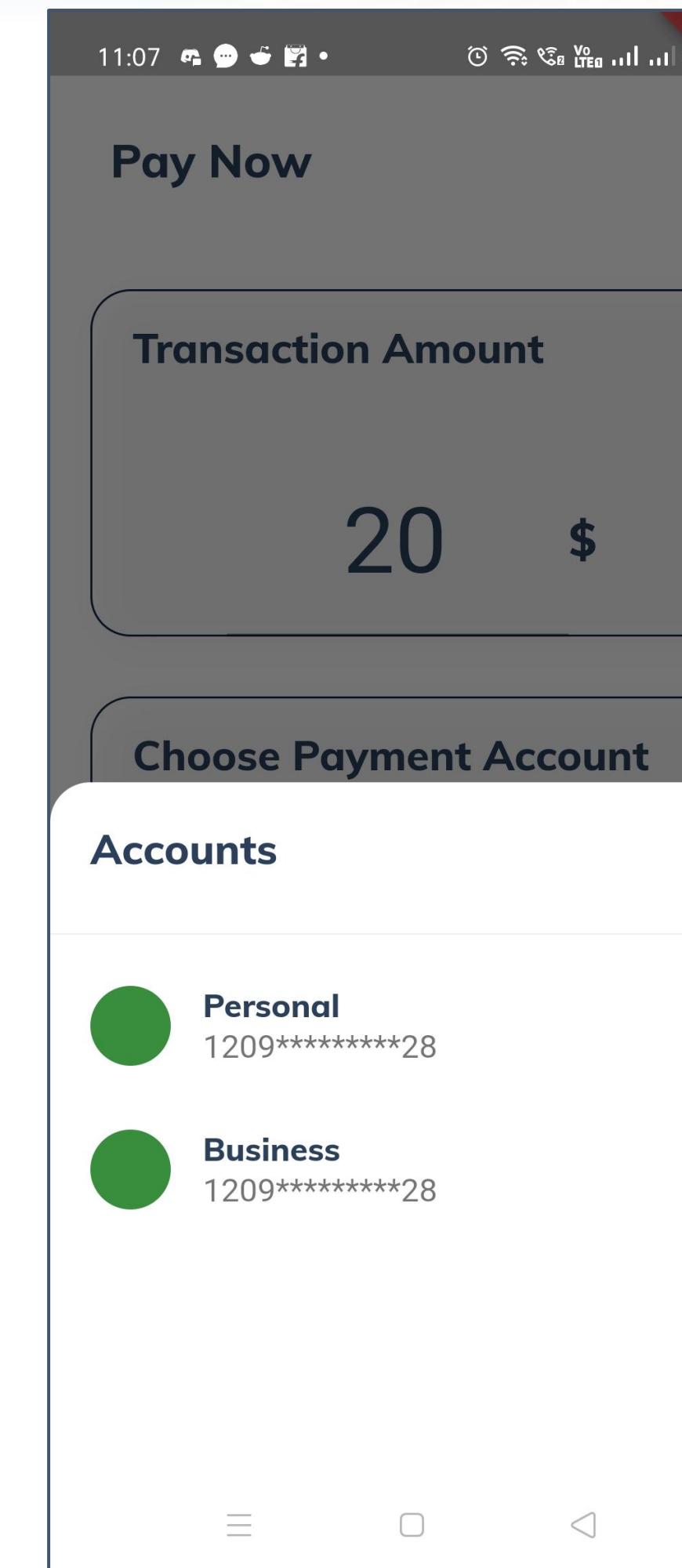
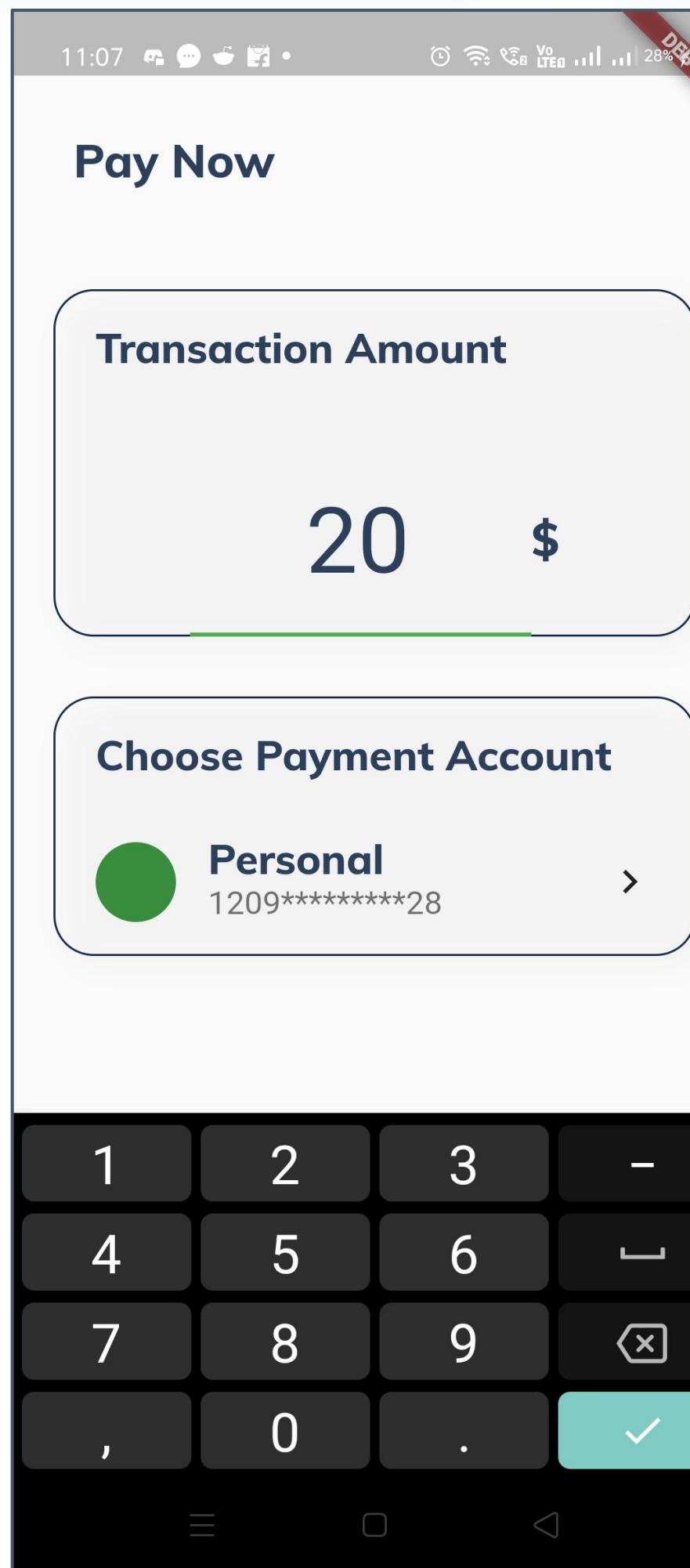
PISP Demo App: MojaPay



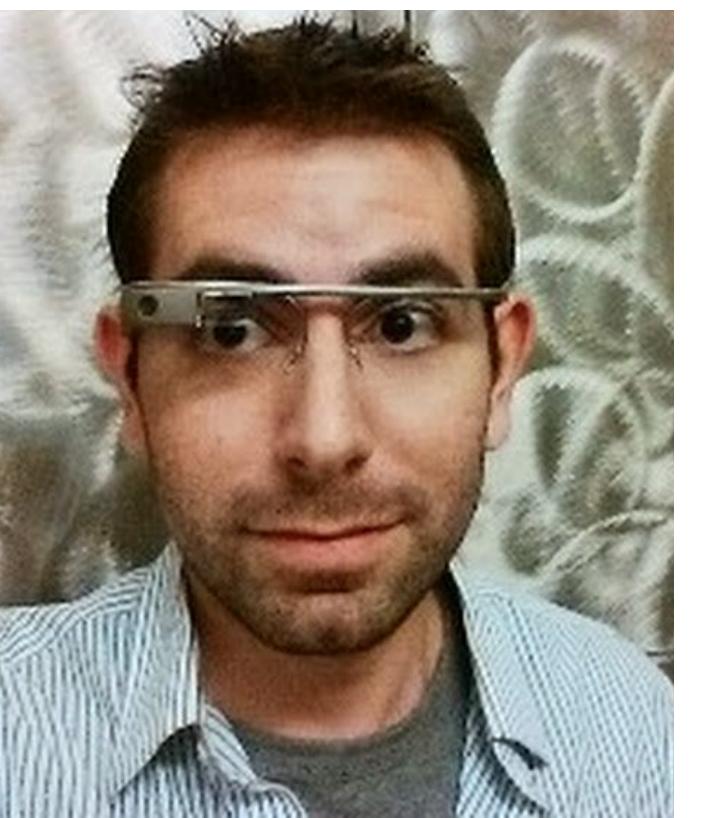
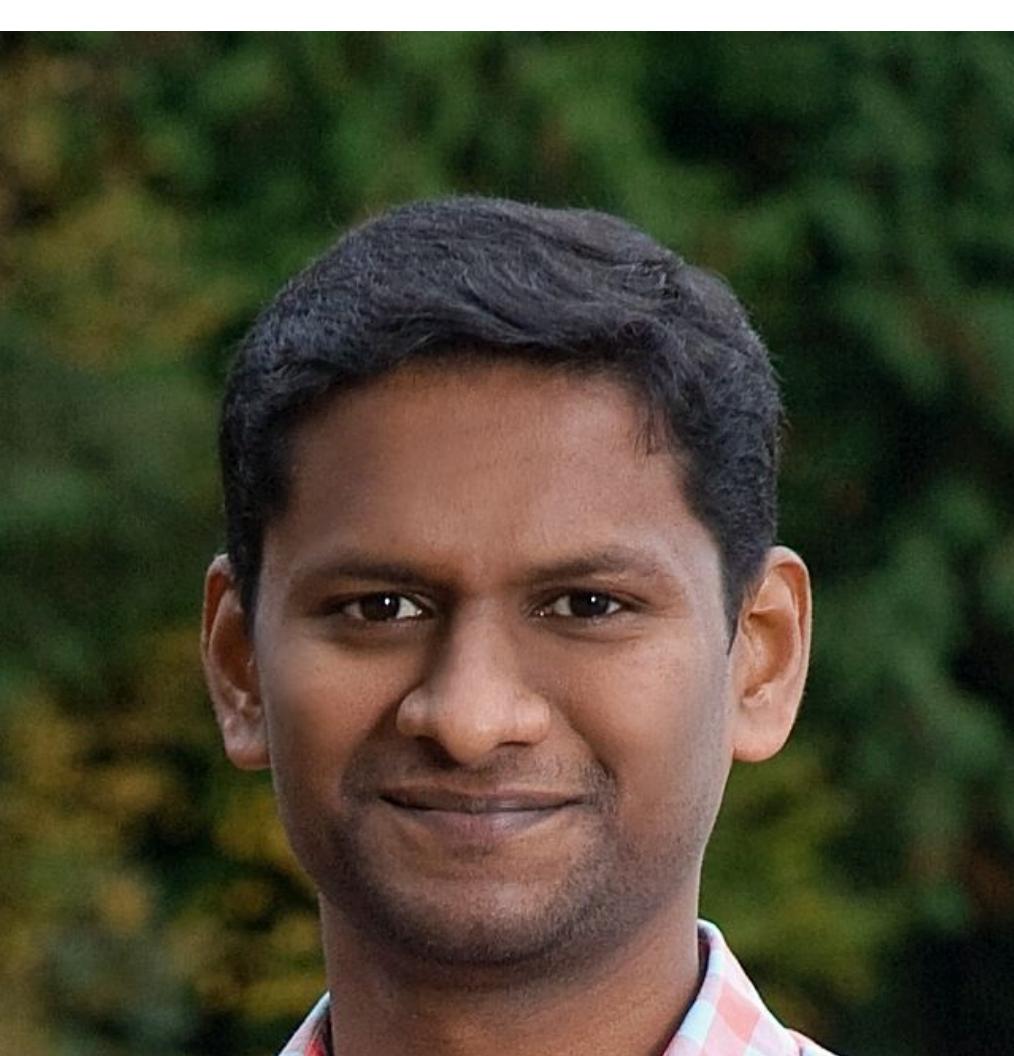
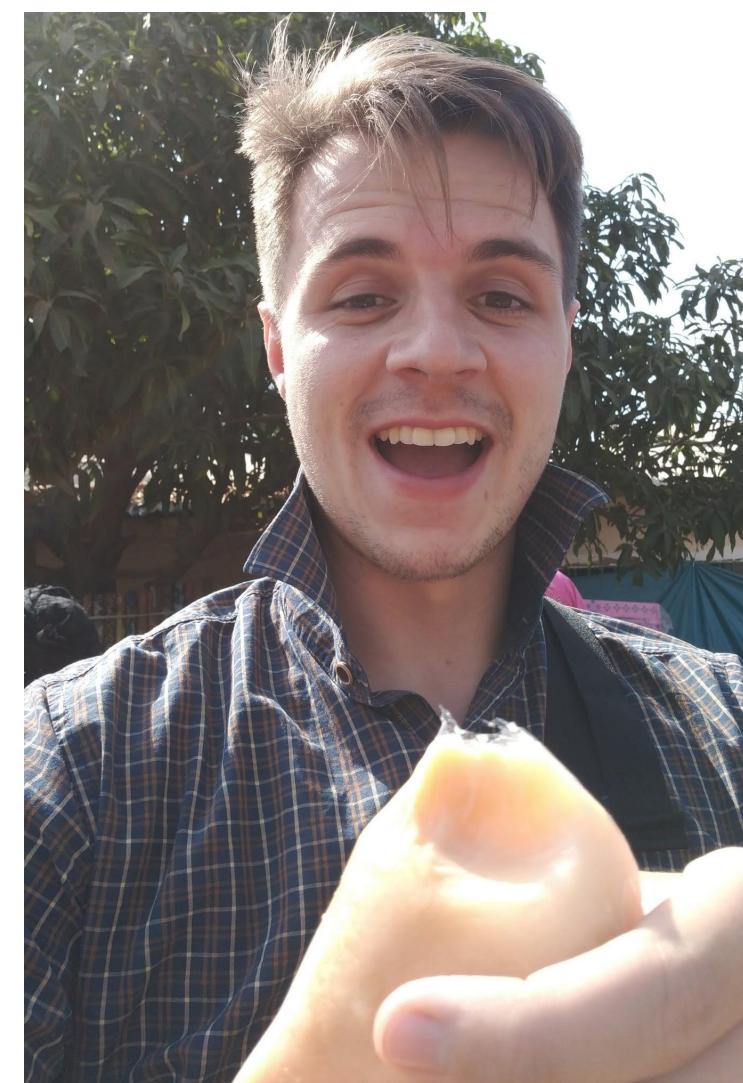
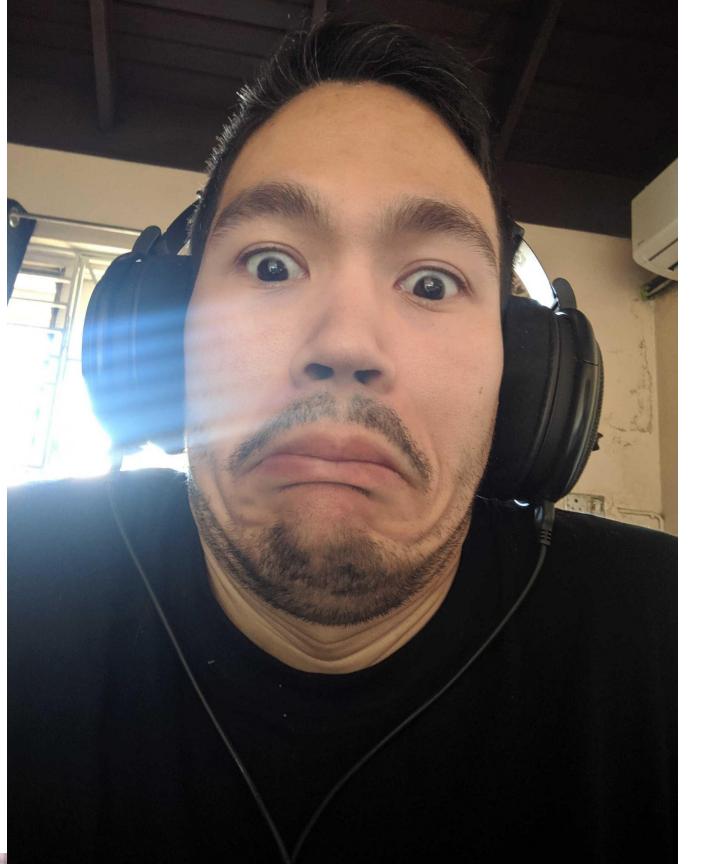
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Humans of the PISP workstream



Questions? Comments?

Thanks