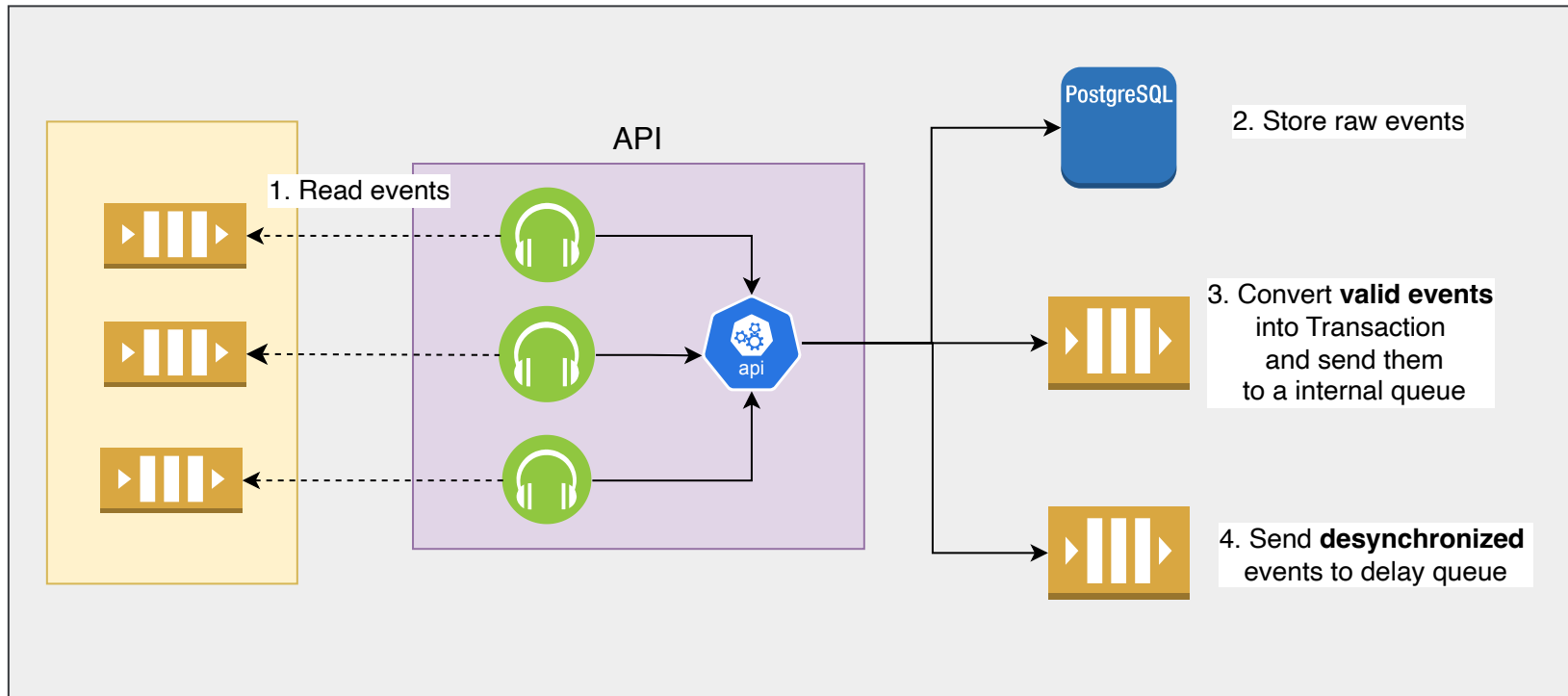# Courier Statement - Challenge

System Design
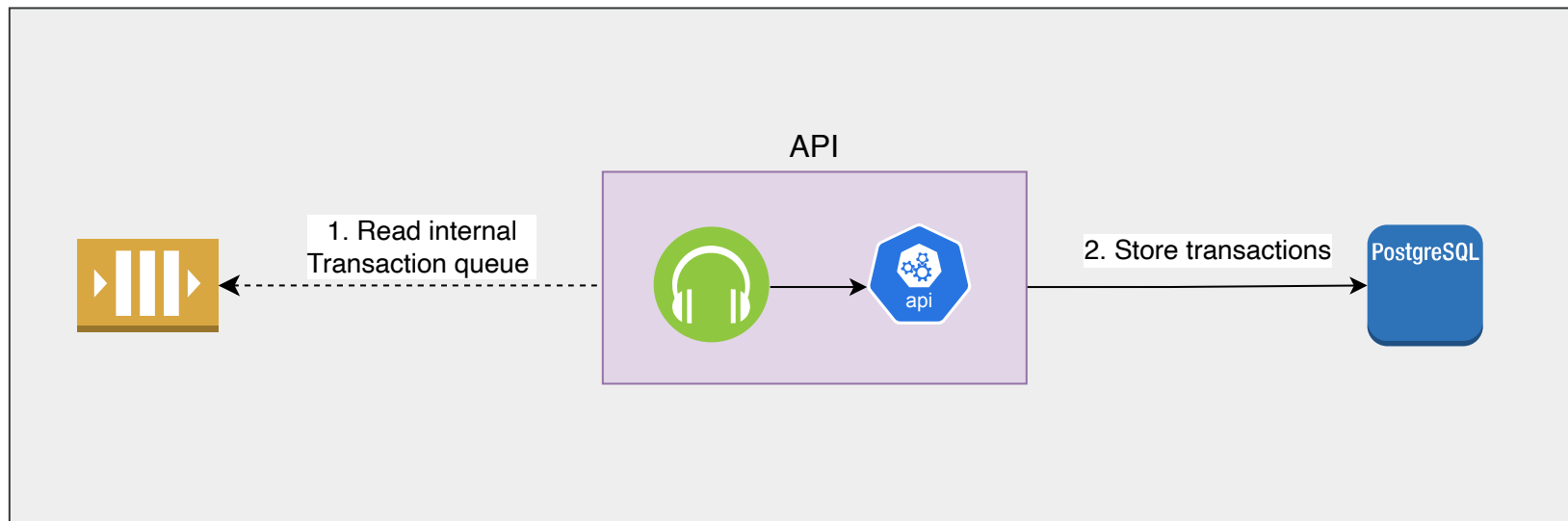
Valid events

Those that are already to be processed without any concern

PostgreSQL
2. Store raw events

1. Read events

API

3. Convert **valid events** into Transaction and send them to a internal queue

4. Send **desynchronized** events to delay queue

Desynchronized events

Adjustment or bonus events unrelated to any created delivery

Transaction

It is a generic representation of a DeliveryCreation, AdjustmentModified, or BonusModified event.

A unified representation of them makes calculation easier because we can retrieve and group them by delivery, courier, or week number.

API

1. Read internal Transaction queue

2. Store transactions

PostgreSQL

Database schema

Delivery

id

courier_id (index)

Transaction

id

delivery_id (index)

type

reference_id (index)

occurred_at (index)

value

inserted_at

Event

id

reference_id (index)

raw

status