Transaction Management

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@mogronalol

Overview

What is a transaction?

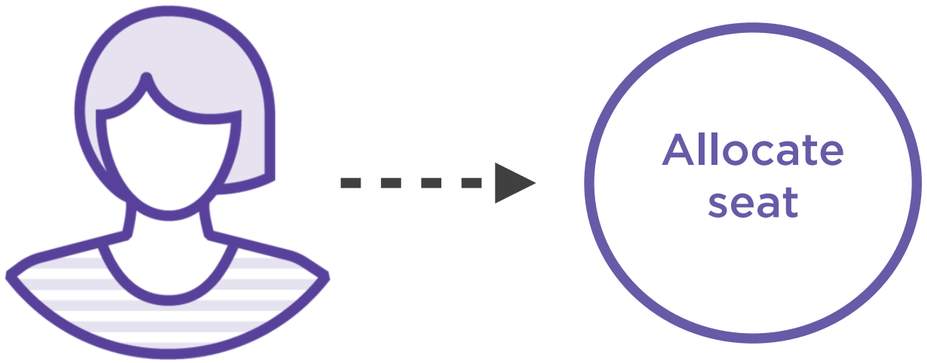
What's the problem with coding our own transactions?

Learning how to use Spring Data to manage our transactions

Why We Need Transactions

Book ticket

Why We Need Transactions



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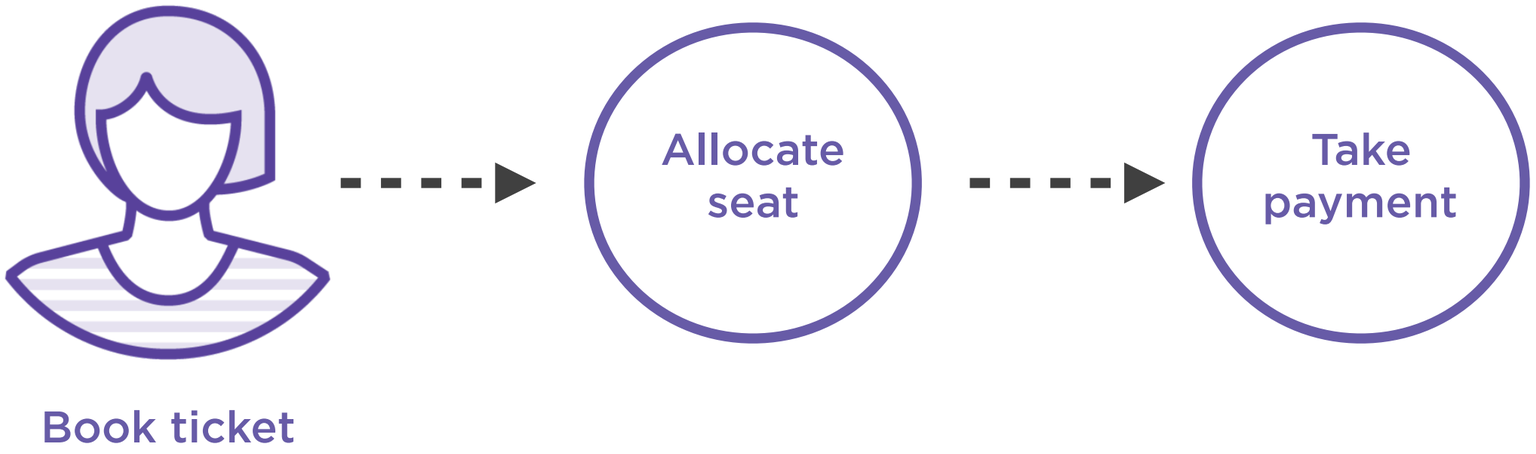

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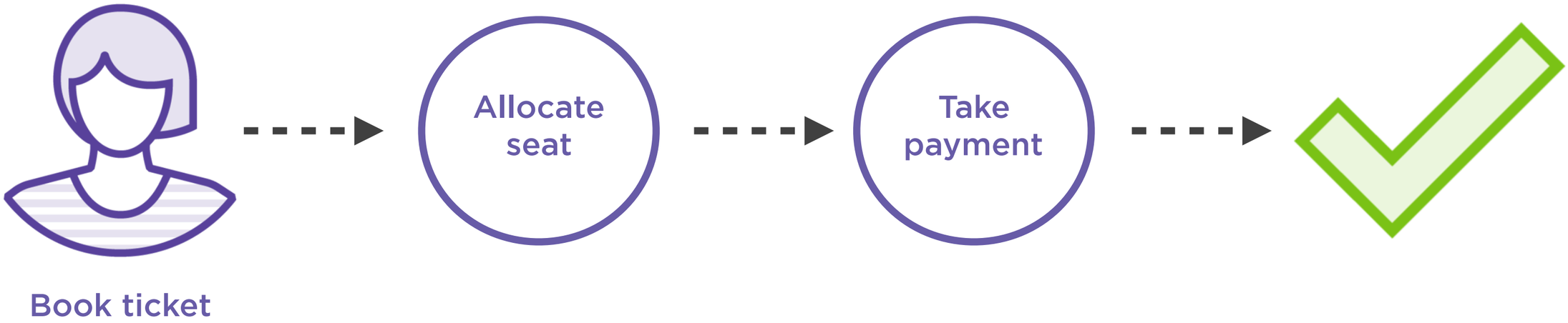

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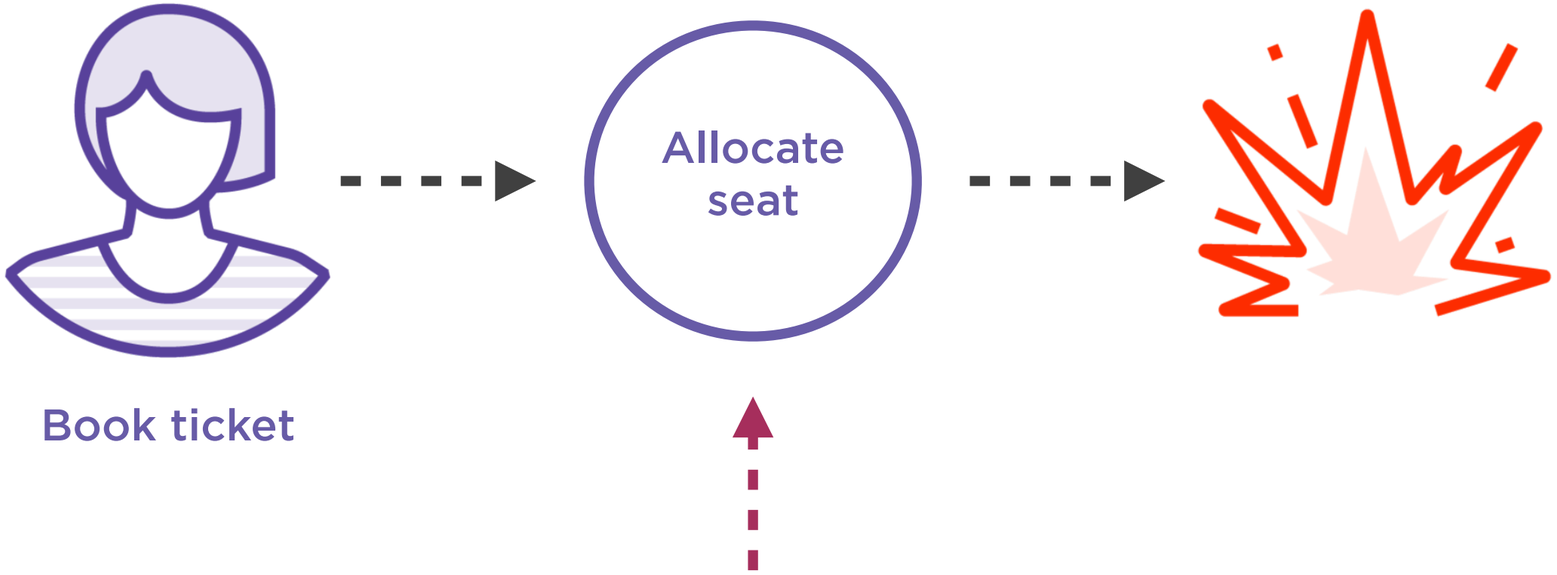

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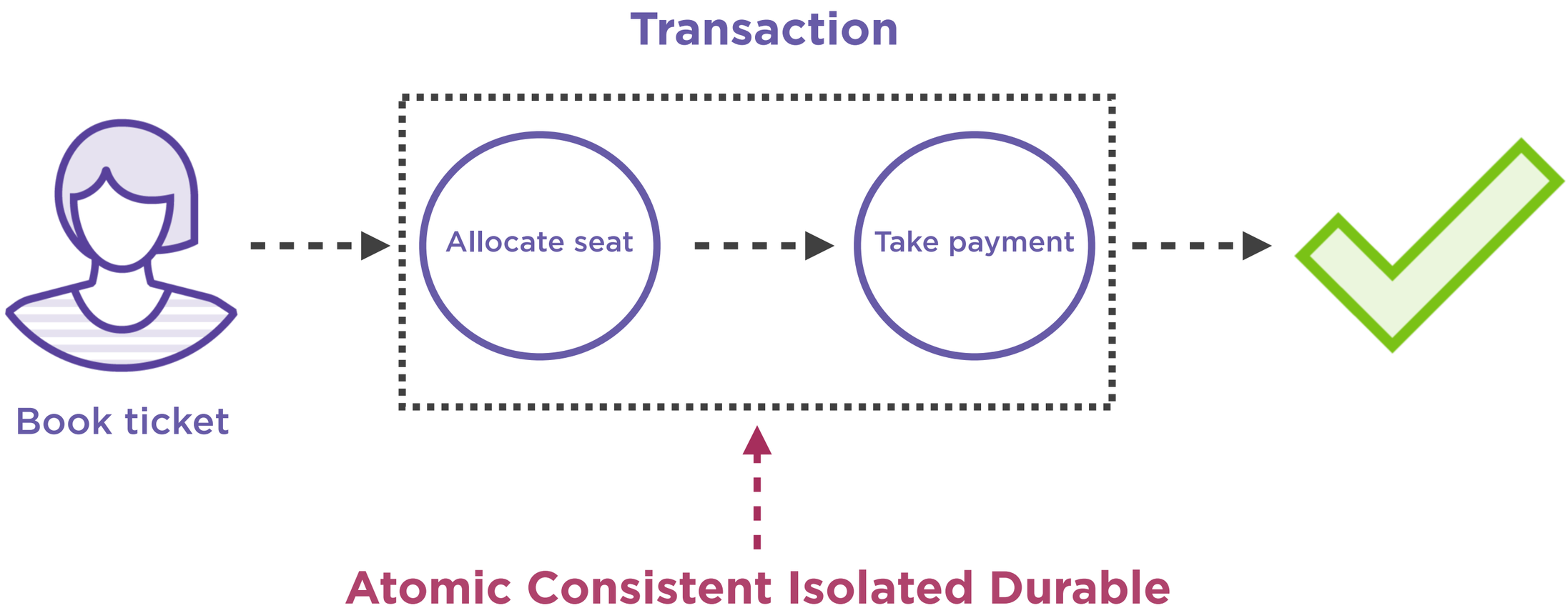

```
bookTicket(ticket, payment);
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```
Session sess = factory.openSession();
Transaction tx;
try {
    tx = sess.beginTransaction();

    bookTicket(ticket, payment);

    tx.commit();
}
catch (Exception e) {
    if (tx!=null) tx.rollback();
    throw e;
}
finally {
    sess.close();
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- **Gotta start it**

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- **Gotta commit it**

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- Gotta start it
- Gotta commit it
- **Remember it's in a try-catch so we can rollback!**

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- Coupled to Hibernate
- Gotta start it
- Gotta commit it
- Remember it's in a try-catch so we can rollback!
- **Must remember the finally block!**

The Transactional Annotation

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public void bookTicket(Booking booking) {
  allocateSeat(booking.getSeat())
  makePayment(booking.getCardDetails())
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The Transactional Annotation

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@Transactional
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The Transactional Annotation

Does it all for us!

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No more boilerplate

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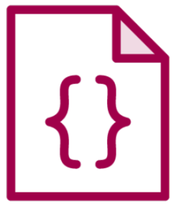

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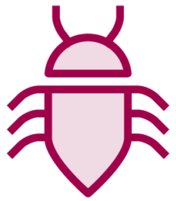

Bugs less likely

Benefits of Transaction Management

No more boilerplate

Declarative and non-invasive

Bugs less likely

Data-store agnostic

Demo

Creating a transactional method

Verify it is transactional by triggering rollback

Summary

Transaction code can produce too much boilerplate

The transactional annotation is a better alternative

We can use it by simply annotating the method that we want to be executed in a transaction