

Software Requirement Specification

Online Book Store

Version	Initial Date	Revision Content
1.4	April 04, 2020	Update EER
		Update enum values
		Update Authorization Endpoint API
		Add Workflow Shipment

1. Technology Stack

- Java 1.8 or above
- Apache Maven 3.5 or above
- Postgresql 9.6 or above
- Spring Framework 5.x
- Spring Boot 2.x
- Spring Security 2.x
- Hibernate 5.x
- Lombok 1.18.x
- JUnit 4
- Gson 2.8.x
- Swagger 2.x
- Apache Commons Lang 3.x

2. Architecture

- Monolithic

3. Tools

- Eclipse IDE or similar
- pgAdmin 4
- Postman
- Git

4. Repository

- Github

5. Deployment

- Heroku Cloud

6. Scopes

1. Role
 - Admin
 - User

2. Master Data

- Book Category
- Book
- User
- Role
- Favourite Book
- Cart
- Transaction
- Shipment

7. Features

1. Role Admin

- Login and Logout
- CRUD Book Category
- CRUD Book
- Report User
- Report Transaction
- Report Revenue
- Report Shipment
- Approve Payment
- Approve Shipment

2. Role User

- Register
- Login and Logout
- Add Book to Favourite
- Add Book to Cart
- Checkout and Payment
- Report Transaction

8. Deletion Model

Soft Delete, with flag status

- ACTIVE means record is not deleted
- NOT_ACTIVE means record is deleted

9. Enum Values

Module Name	Enum	Description
All	ACTIVE	Record is not deleted
	NOT_ACTIVE	Record is deleted
Book	FOR_SELL	Book is displayed on the main page and available to purchase
	OUT_OF_STOCK	Book is displayed on the main page but not available to purchase
	HIDE	Book is not displayed on the main page
Role	ROLE_ADMIN	Role for administrator
	ROLE_USER	Role for customer
	ROLE_CLIENT	Role for client, e.g: front end apps
Cart	CARTED	Book is in cart of the user
	TRANSACTIONED	Book is in transaction list
Transaction	PENDING	Transaction awaits for payment
	SETTLED	Transaction is settled
	EXPIRED	Transaction is expired
	BANK_TRANSFER	Payment method is using Bank Transfer
	CASH_ON_DELIVERY	Payment method is using COD
	VIRTUAL_ACCOUNT	Payment method is using VA Bank

10. User Login Configuration

Username	Password	Role
admin	admin123	ROLE_ADMIN
customer	customer123	ROLE_USER
clientapps	clientapps123	ROLE_CLIENT

11. OAuth 2.0 Configuration

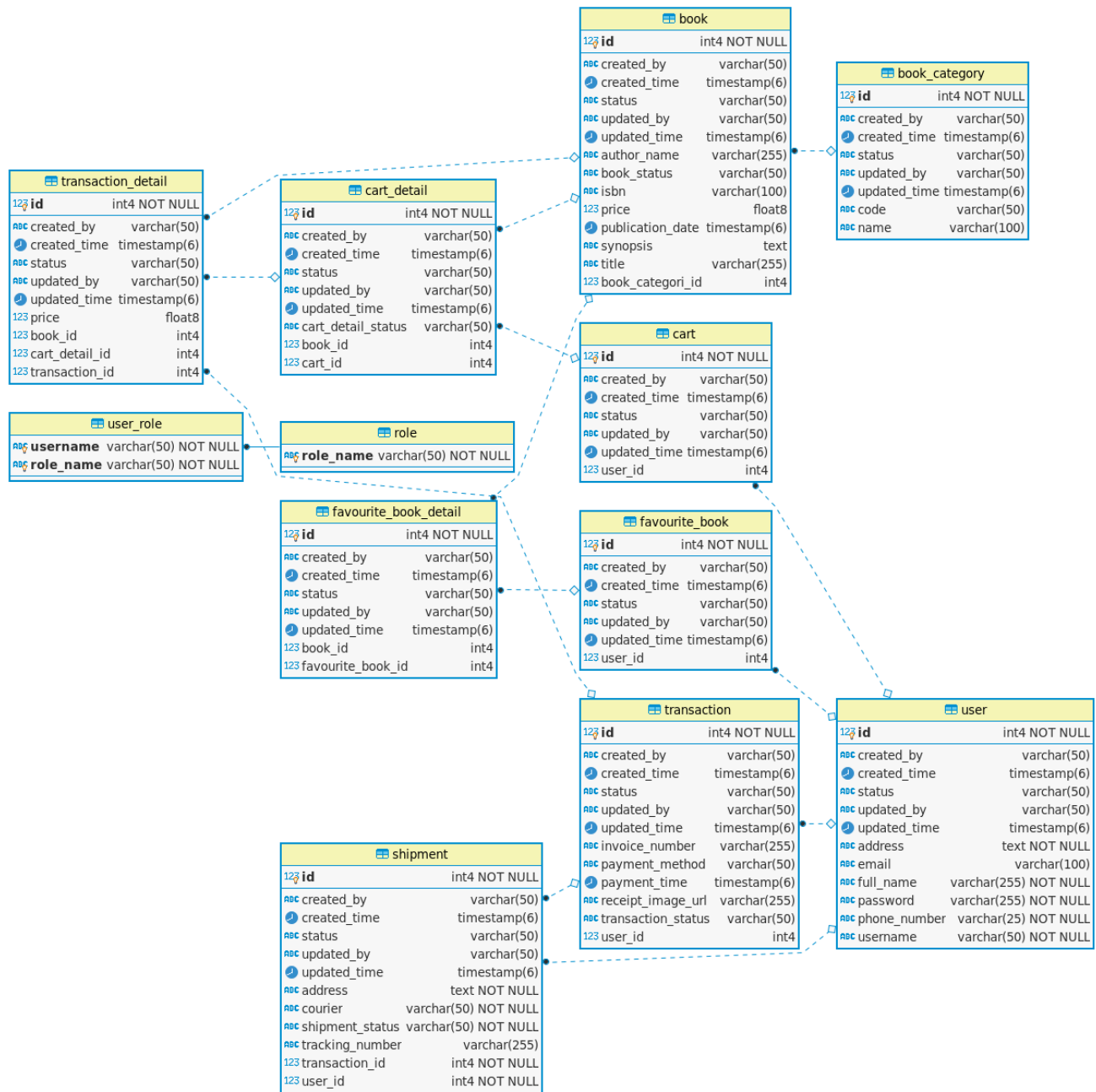
Name	Value	Description
Resource Id	obstore-resource-id	
Client Id	obstore-client-id	
Client Secret	obstore-secret#do-not-tell-anyone	
Access Token Validity Seconds	43200	12 hours
Refresh Token Validity Seconds	2592000	30 days
Authorized Grant Types	password,authorization_code,refresh_token	
Scopes	read,write	

12. Authorization Endpoint API per Role

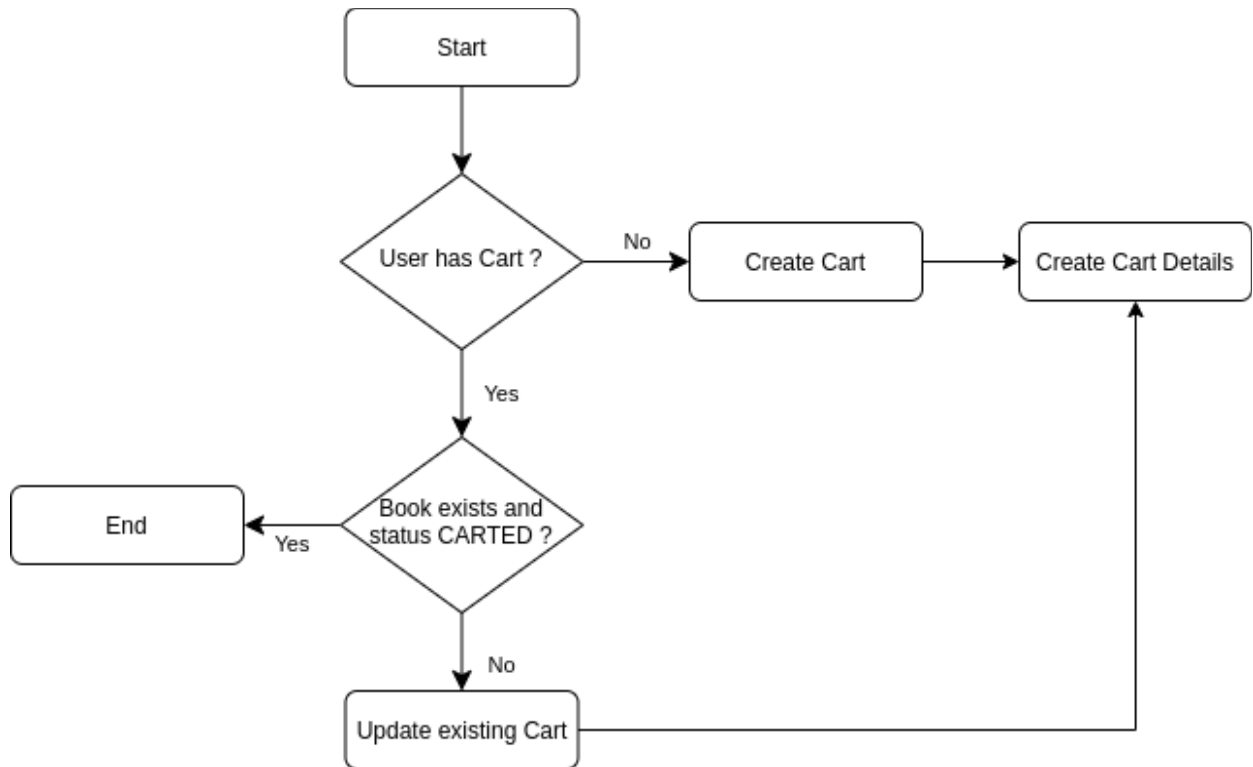
Module	Endpoint API	Role
Book Category	/api/rest/book-category/save	ROLE_ADMIN
	/api/rest/book-category/update	
	/api/rest/book-category/deleteById/{id}	
	/api/rest/book-category/findAll	ROLE_ADMIN, ROLE_CLIENT, ROLE_USER
	/api/rest/book-category/findById/{id}	
Book	/api/rest/book/save	ROLE_ADMIN
	/api/rest/book/update	
	/api/rest/book/deleteById/{id}	
	/api/rest/book/findAll	ROLE_ADMIN, ROLE_CLIENT, ROLE_USER
	/api/rest/book/findById/{id}	
Favourite Book	/api/rest/favourite-book/saveOrUpdate	ROLE_ADMIN, ROLE_USER
	/api/rest/favourite-book/deleteByFavouriteBookDetailId/{detailId}	

	/api/rest/favourite-book/findAll	
	/api/rest/favourite-book/findById/{id}	
	/api/rest/favourite-book/findByUserId/{userId}	
Cart	/api/rest/cart/saveOrUpdate	ROLE_ADMIN, ROLE_USER
	/api/rest/cart/deleteByCartDetailId/{detailId}	
	/api/rest/cart/findAll	
	/api/rest/cart/findById/{id}	
	/api/rest/cart/findByUserId/{userId}	
User	/api/rest/user/register	ROLE_ADMIN, ROLE_CLIENT
Transaction	/api/rest/transaction/checkout	ROLE_ADMIN, ROLE_USER
	/api/rest/transaction/payment	
	/api/rest/transaction/findById/{id}	
	/api/rest/transaction/findByUserId/{userId}	
	/api/rest/transaction/findAll	ROLE_ADMIN
Shipment	/api/rest/shipment/create	ROLE_ADMIN
	/api/rest/shipment/update	
	/api/rest/shipment/findAll	
	/api/rest/shipment/findById/{id}	
	/api/rest/shipment/findByUserId/{userId}	
Transaction Report	/api/rest/report/transaction/load	ROLE_ADMIN
	/api/rest/report/transaction/loadByUserId/{userId}	ROLE_ADMIN, ROLE_USER

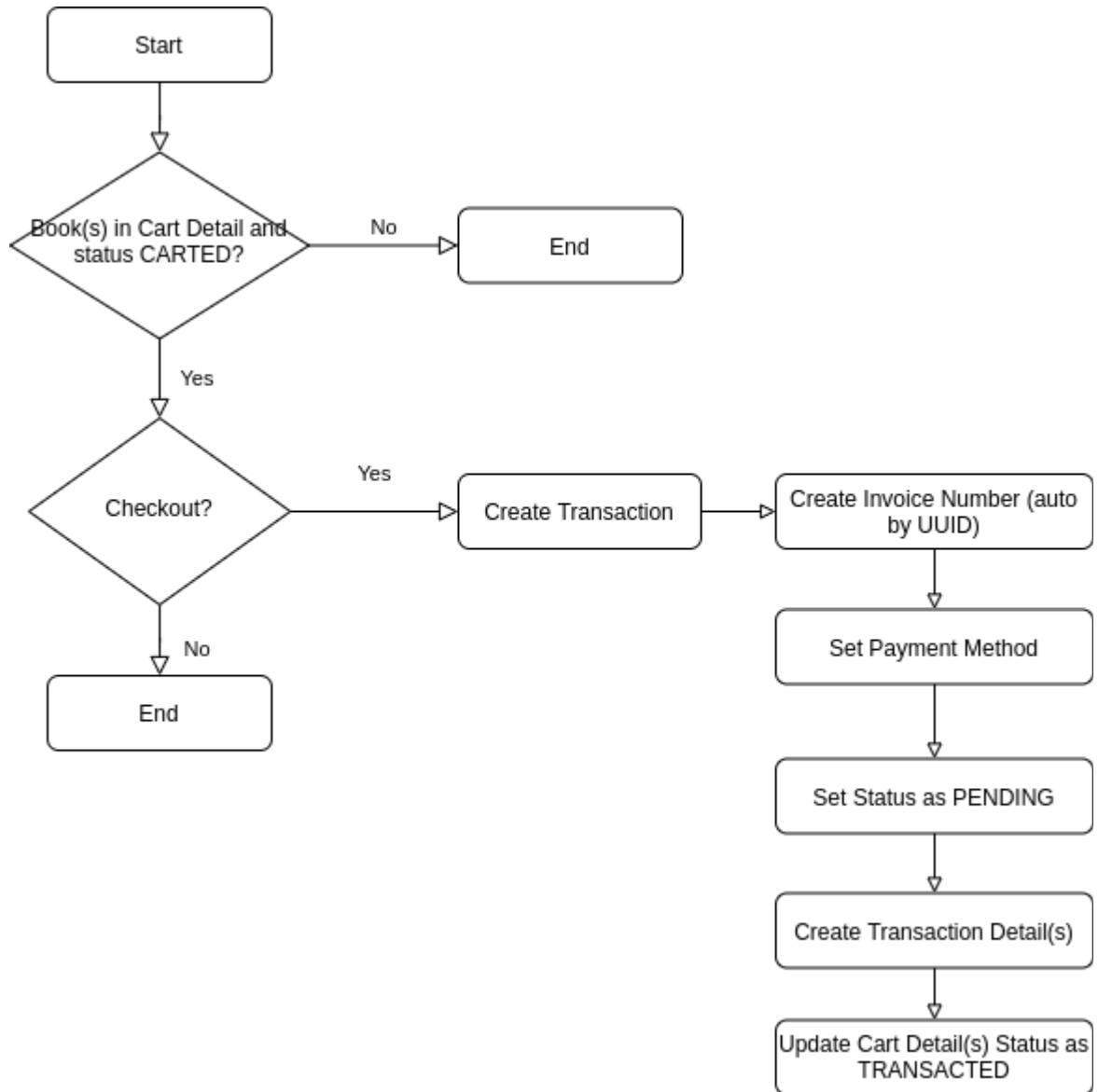
13. Enhanced Entity Relationship Model



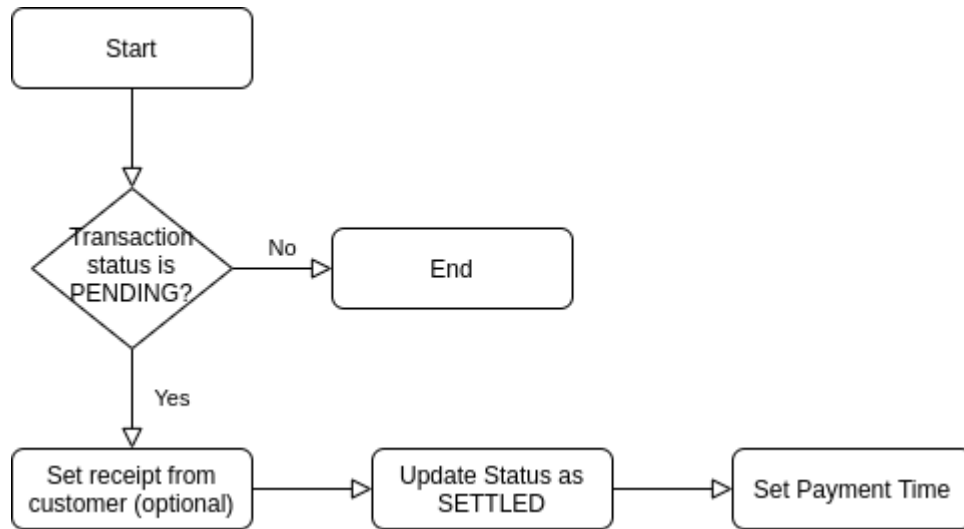
14. Workflow Cart Module



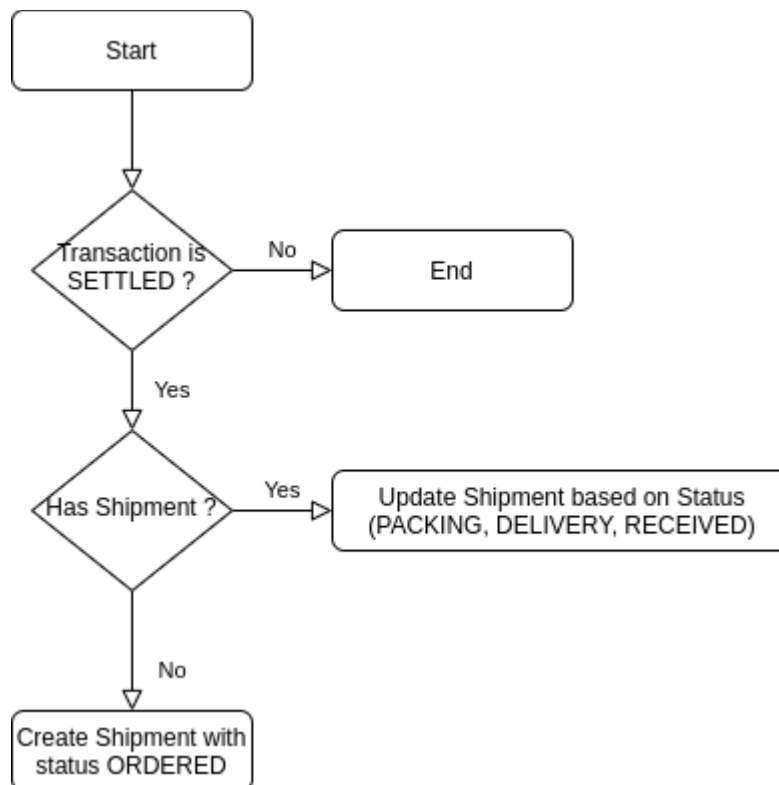
15. Workflow Checkout



16. Workflow Payment



17. Workflow Shipment



18. Apps Architecture

