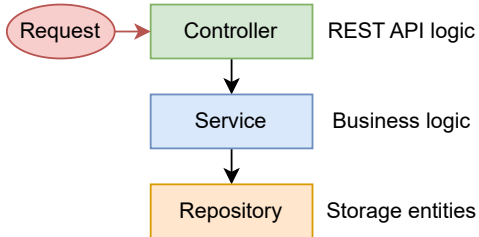


Bank transaction API

Controller-Service-Repository Pattern

Separates API logic from business logic



REST APIs

Authentication: JWT Token

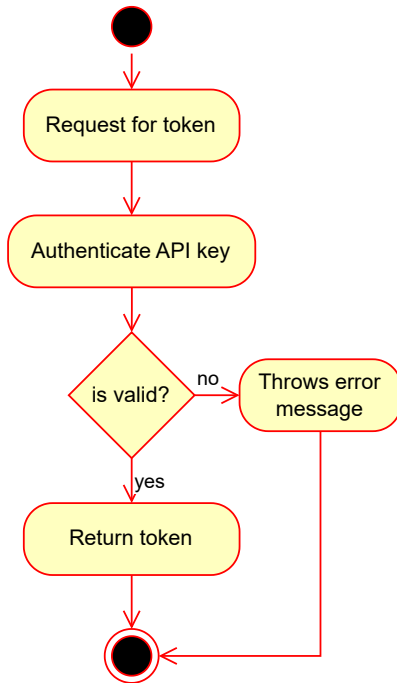
GET	/api/transactions	Get all transactions
GET	/api/transactions/{id}	Get transaction by ID
PUT	/api/transactions/{id}	Update transaction by ID
POST	/authenticate	Get authentication token

Requirements

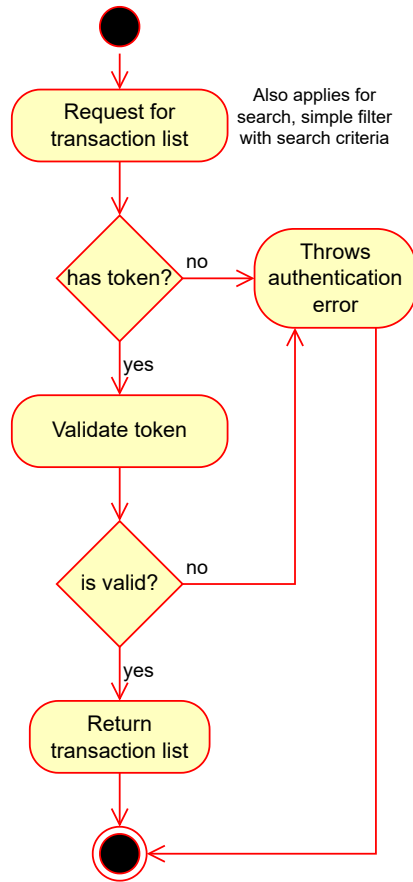
- ✓ 1. Batch job for data consumption Python to extract into MongoDB
- ✓ 2. Retrieve REST API
- ✓ 3. Update REST API
- ✓ 4. API with authentication using JWT token, Bearer Auth
- ✓ 5. API with pagination using mongoose-paginate-v2
- ✓ 6. Retrieve API can search by customerId multiple value, split by { , }
- ✓ 7. Retrieve API can search by accountNumber multiple value, split by { , }
- ✓ 8. Retrieve API can search by description
- 9. Update API can handle concurrency

Activity Diagram

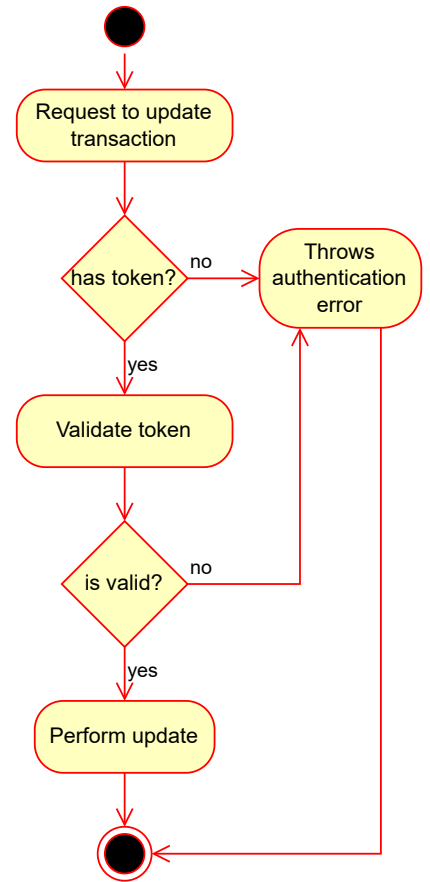
Initialization



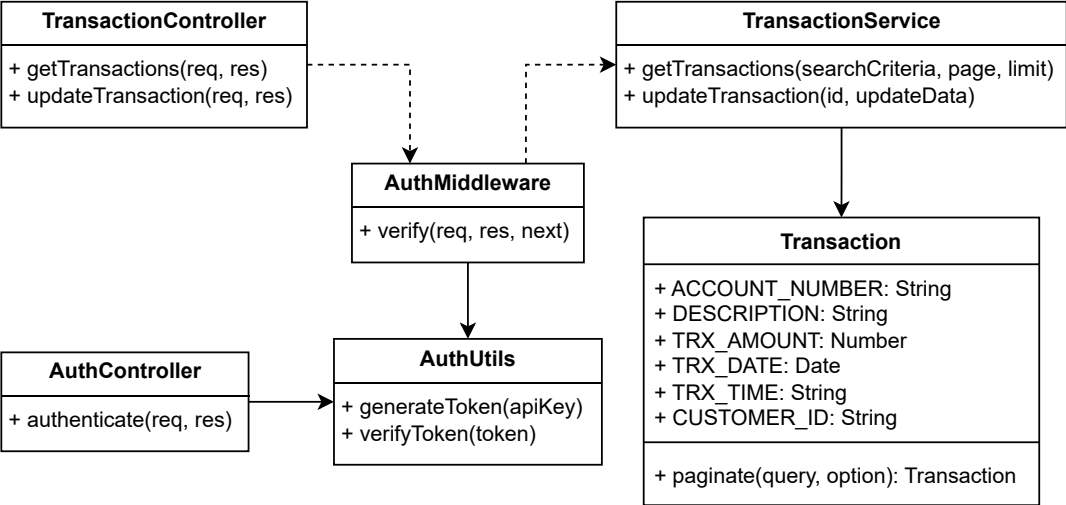
Request for Retrieval



Request for Update



Class Diagram



Entity Relationship Diagram

transaction_records	
PK	_id
FK1	CUSTOMER_ID
	ACCOUNT_NUMBER
	DESCRIPTION
	TRX_AMOUNT
	TRX_DATE
	TRX_TIME