

CO528 Workshop 2

Users

- Create user (account holder)
- Login (basic auth / JWT later)
- Get all users
- Delete user

Bank Accounts

- Create bank account
- View account details
- View balance

Transactions

- Deposit money
- Withdraw money
- Transfer money between accounts
- View transaction history

User APIs

POST /api/users/register

POST /api/users/login

GET /api/users

DELETE /api/users/{id}

Login (basic now / JWT later)

- **Basic Auth approach:** no dedicated endpoint required (browser/app sends Authorization header)
- **JWT later:**
POST /api/auth/login → returns token

Account APIs

POST /api/accounts

GET /api/accounts/{id}

GET /api/accounts/user/{userId}

Transaction APIs

POST /api/transactions/deposit

POST /api/transactions/withdraw

POST /api/transactions/transfer

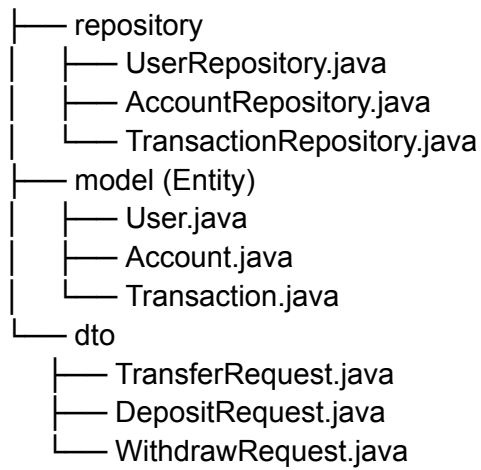
GET /api/transactions/account/{accountId}

DB Entities (high level)

- **User:** id, name, email, passwordHash, createdAt
- **BankAccount:** id, accountNumber, userId, balance, status(ACTIVE/CLOSED), createdAt
- **Transaction:** id, type(DEPOSIT/WITHDRAW/TRANSFER), amount, fromAccountId, toAccountId, timestamp, description

Spring Boot Backend Structure

```
backend
├── controller
│   ├── UserController.java
│   ├── AccountController.java
│   └── TransactionController.java
├── service
│   ├── UserService.java
│   ├── AccountService.java
│   └── TransactionService.java
```



Frontend

bank-app-frontend/

