**MoneyTransferAPI**

Simple Spring boot application which provide RESTful API for money transfer

**Prerequisite**

* Maven
* JDK 1.8+

### Project Structure

MoneyTransferAPI

├── src

│ ├── main

│ │ ├── java\com\nwb\transfer

│ │ └── resources

│ └── test

│ ├── java\com\nwb\transfer

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├── pom.xml

└── README.md

### Packaging

mvn package

### Test

mvn test

### Running

java -jar moneytransfer-0.0.1-SNAPSHOT.jar

### Data

Initial data (src\main\resources\data.sql) will be loaded in the H2 database when application start.

INSERT INTO ACCOUNTS (ACCOUNTID, BALANCE) VALUES (1, 100), (2, 100);

### Feature

This application is for demo only. It provides APIs for following 2 features

* Retrieve Account Balance
* Create Transaction

### Basic API Information

| **Method** | **Path** | **Usage** |
| --- | --- | --- |
| GET | /v1/accounts/{id}/balances | retrieve account balance |
| POST | /v1/transaction | create transaction |

### Swagger-UI

API Specification is provided in the [swagger-ui page](http://localhost:8080/swagger-ui.html) after spring boot application start.

http://localhost:8080/swagger-ui.html

### Error Code

| **Code** | **Description** |
| --- | --- |
| ERR\_SYS\_001 | used when internal server error happens |
| ERR\_SYS\_002 | used when gateway timeout happens (e.g. calling external services) |
| ERR\_CLIENT\_001 | used when error due to client's input or business logic |
| ERR\_CLIENT\_002 | used when error related to account logic |

### Library used

| **Library** | **Usage** |
| --- | --- |
| spring boot | for spring boot application |
| spring data jpa | for ORM and DB operation purpose |
| H2 | lightweight database for demo purpose |
| springfox swagger | generate swagger API specification from code |
| springfox swagger ui | generate swagger ui page for specification |
| httpClient | configurate http request |