SQUAD 12:

Members:

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Technologies:

Spring Boot : 3.2

Java: 17

Rest API

JPA

MYSQL

Design:

REST API standard – Richardson Maturity model

DB design – Normalization 3NF

Data Contract:

A diagram of a server

Description automatically generated

API Documentation:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Endpoint (all APIs will be secured by Bearer Token in the header which will be consumed as SecurityContext) | Description | Payload | Response | Possible status codes |
| POST /api/auth/login | To authenticate | {   "userName": "user123",   "password": "securePassword" } | {  User contract  } | Success: 200 OK with a success message. Failure: 401 Unauthorized with an error message. |
| POST - /api/accounts – X-Authorization: Bearer <jwt\_token> | To view all account details for a user | {  “user\_name”:”user123”  } | [   {     "accountNumber": "123456789",     "accountType": "Savings",     "availableBalance": 5000.00,     "lastTransactionDate": "2024-12-05T12:00:00"   }, {       "accountNumber": "123456789",     "accountType": "Mortgage",     "availableBalance": 5000.00,     "lastTransactionDate": "2024-12-05T12:00:00"   } ] | 400 – Bad request  200 – success  500 – something went wrong |
| GET - /api/accounts/{id} | To display specific account detail |  | {     "accountNumber": "123456789",     "accountType": "Savings",     "availableBalance": 5000.00,     "lastTransactionDate": "2024-12-05T12:00:00"   } |  |
| POST - POST /api/v1/accounts/transfer | Fund Transfer | {   "fromAccount": "123456789",   "toAccount": "987654321",   "amount": 1000.00,   "instructions": "Monthly payment" } | Message: success message | Success: 200 OK with a success message. Failure: 400 Bad Request with an error message. |
| POST - /api/accounts/search?pagesize=10&pageNumber=0 | Dashboard | [  {“fieldName”:”account\_type”,  “tableName”:”account”,  “operator”:”equals”},  {“fieldName”:”amount”,  “tableName”:”account”,  “operator”:”gte”  “field\_value”: “200”}  ] | [   {     "accountNumber": "123456789",     "accountType": "Savings",     "availableBalance": 5000.00,     "lastTransactionDate": "2024-12-05T12:00:00"   }, {       "accountNumber": "123456789",     "accountType": "Mortgage",     "availableBalance": 5000.00,     "lastTransactionDate": "2024-12-05T12:00:00"   } ] | 400 – Bad request  200 – success  500 – something went wrong |
| POST - /api/transactions?pagesize=10&pageNumber=0 |  | {  “account\_id”:”user123”  “start\_dt”:””,  “end\_dt”:””  } | [   {     "accountNumber": "123456789",     "accountType": "Savings",     "availableBalance": 5000.00,     "lastTransactionDate": "2024-12-05T12:00:00"   }, {       "accountNumber": "123456789",     "accountType": "Mortgage",     "availableBalance": 5000.00,     "lastTransactionDate": "2024-12-05T12:00:00"   } ] |  |