BankingApp Capstone Project:

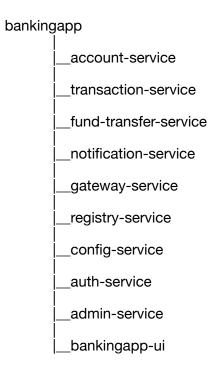
Design and Develop Banking Application to manage account and transaction details with micro services based

architecture with below services and technology stack with automated containerisation deployments into on promise and cloud infrastructure.

Technology Stack:

Spring Boot + Spring Cloud + REST API + Validation + Spring Data JPA / H2 + MySQL/MongoDB

Unit Testing and Integration/API Testing with 80% coverage + Docker + K8s + Azure Cloud + Agile Scrum



REST API

Account Service [account-service]

GET /accounts GET /accounts/{id} POST /accounts PUT /accounts/{id}

/accounts/{id} DELETE

GET /accounts/search

POST /accounts/{id}/deposits [SYNC - REST API] POST /accounts/{id}/withdrawal [SYNC - REST API]

Transaction Service [transaction-service]

GET /transactions GET /transactions/{id} POST /transactions

Fund Transfer Service [fund-transfer-service]

POST /fundTransfers [ASYNC - MESSAGING]

Notification Service [notification-service] [ASYNC - MESSAGING] **Event Driven**

```
Account
       int id
       String name
       AccountType type
       double balance
       double roi
       boolean active
       LocalDateTime createTimestamp
       LocalDateTime updateTimestamp
{
       "name": "xyz",
       "type": "Savings|Current|Loan", "balance" 50000.0,
       "roi": 7.5
       "active": true|false
       "createTimestamp": "2023-02-16T16:00:00",
       "updateTimestamp": "2023-02-16T16:00:00"
}
Transaction
       int id
       TransactionType type
       String description
       double amount
       Account account
       LocalDateTime transactionTimestamp
{
       "type": "Credit|Debit",
       "description": "School Fee"
       "amount": 50000,
       "accountId": 100,
       "transactionTimestamp": "2023-02-16T16:00:00"
}
Fund Transfers
{
       "sourceAccountId": 100,
       "targetAccoundId": 200
       "amount": 50000,
       "description": "School Fee"
}
```

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AccountServiceMain TransactionServiceMain FundTransferServiceMain NotificationServiceMain RegistryServiceMain GatewayServiceMain AdminMain
 service
AccountService
TransactionService
FundTransferService
NotificationService
 model
Account
 Transaction
 FundTransfer
repository
AccountRepository
TransactionRepository
FundTransferRepository
exception
NoAccountFoundException
AccountValidationException
AccountException
NoTransactionFoundException
TransactionValidationException
TransactionException

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