Java code challenge: Bank system

Design and create a console application for a bank system that will contain multiple user accounts and will be able to perform transactions. The amounts are always in dollars and use 2 decimals. You would need to create the following classes: `Bank, Account` and `Transaction.`

Account:
- account id
- name of the user
- account balance (it should not go below zero)

Transaction represents an amount transfer from one to another account. Transaction can also be withdrawal (user takes money from their bank account) and deposit (user puts money in their bank account)

Transaction:
- amount
- originating account id
- resulting account id
- transaction reason

The bank charges a fee for each transaction, either a flat fee (e.g. $10) or percent fee (e.g. 5%) that need to be defined. The bank system should support both transaction types.

Bank:
- bank name
- list of accounts
- total transaction fee amount
- total transfer amount
- transaction flat fee amount

- transaction percent fee value

The user should be able to:

- Create a bank with all required values
- Create an account
- Perform both flat fee and percent fee transaction from one account to another
- Withdraw and deposit money to an account
- See list of transactions for any account
- Check account balance for any account
- See list of bank accounts
- Check bank total transaction fee amount -   Check bank total transfer amount

Notes:

- Make use of OOP principles: abstract classes, inheritance, overriding/overloading methods
- Make use of exceptions and handling
- Return proper error messages (e.g. account not found, not enough funds)
- Readme file with instructions on how the application works and can be started
- Bonus points for using a database to store and read the data (in-memory DB is more than enough)
- Bonus points for designing a Spring Boot RESTful web service
- Bonus points for providing Unit/Integration Test

Important:

Please push the code to GitHub and make sure that the repo is public. After the code challenge is complete, please send an email to office@linkplus-it.com that the code challenge is completed with the repo link.

Any commits with timestamps after the confirmation email is sent will not be taken into consideration.