Bank Server Application

To be developed individually

Bank server application with simple functionalities like getting the balance of the account, doing routine transactions as withdraw, deposit, fund transfer.

# Overview

Application should allow users to check the balance in the account; withdraw/deposit money; transfer funds from one account to another; display last 10 transactions on the account.

All accounts to be created while the application boots. Application must have at least 10 accounts. Account is owned by a customer.

* Milestone #1: Class design
* Milestone #2: Write test cases
* Milestone #3: Display balance of a given account.
* Milestone #4: Withdraw/deposit money in the account.
* Milestone #5: Transfer money from one account to another.
* Milestone #6: Display last 10 transactions of an account.

## Points to consider

* #1: Appropriate error messages if user tries to do an operation on invalid account.
* #2: Account balance cannot be negative.
* #3: One customer can have only one account, there is only one type of account.

# Expected LEarning

Participants will learn following concepts from this assignment

* Basic programing building blocks like classes, interfaces, flow control statements, arrays, exception handling, programming to interface, one-to-one and one-to-many relationship.
* Writing test cases using Junit
* Creating Github repository and committing code to the repository, branching.
* Sonar for code quality

## Project Phases

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| Phases | Description |
| Phase #1 | Develop application using arrays |
| Phase #2 | Change array to appropriate collection |
| Phase #3 | Implement JDBC |
| Phase #4 | Implement JPA |
| Phase #5 | Implement Spring |
| Phase #6 | Implement Spring Data JPA with Spring Boot |

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## Timeline for Execution

Key project dates can be outlined below. Phase duration is best guess estimate and may vary based on performance and caliber of the participants.

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| --- | --- | --- | --- |
| Description | Start Date | End Date | Duration |
| Phase 1 |  |  | 3 days |
| Phase 2 |  |  | 1 day |
| Phase 3 |  |  | 1 day |
| Phase 4 |  |  | 1 day |
| Phase 5 |  |  | 1 day |
| Phase 6 |  |  | 1 day |