

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 programming 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

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

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.

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