e-Wallet Management System

(eWMS)

# Problem Statement

## Objective

Development of an online e-Wallet Management System (eWMS)

## Abstract of the project

This project is aimed at developing an online e-Wallet Management System (eWMS). In this project, the system is used to create an account for the users and allow them to deposit and withdraw money. The users can also transfer money between them and can check the summary of transactions. This system contains only user component.

## Functional components of the project

The functionalities of the system are as follows. There are two categories of people who would access the system viz. customer, one is the sender and the other is the receiver or vice-versa. At a time one person can become a sender and the other person can become a receiver, and transfer money between them.

Customers should be able to

* 1. Create an account in the system.
  2. View the balance.
  3. Deposit the money.
  4. Withdraw the money.
  5. Transfer money between them.
  6. Check the summary of money transfers.

## PLAN

Following are the layered architecture and classes/interfaces of the project.

**Layered Architecture:**

1. **Packages**

com.capgemini.ui -> User Interface Layer

com.capgemini.bean -> POJO Class

com.capgemini.service -> Service Layer

com.capgemini.dao -> DAO Layer

1. **Other Packages**

com.capgemini.exception -> Exception package

com.capgemini.test -> Test Package

**Classes and Interfaces:**

1. AccountClient.java -> com.capgemini.ui
2. AccountDetails.java -> com.capgemini.bean
3. IAccountService.java -> com.capgemini.service
4. AccountService.java -> com.capgemini.service
5. AccountDataValidate.java -> com.capgemini.service
6. IAccountDao.java -> com.capgemini.dao
7. AccountDao.java -> com.capgemini.dao
8. NoAccountFoundException -> com.capgemini.exception
9. AccountDataValidateTest -> com.capgemini.test

**Variables and Methods:**

1. **AccountClient.java(com.capgemini.ui)**

**\*Variables**:

Int choice;

Boolean b=false;

Int id=0;

Boolean isValidName,isValidAge,isValidEmail,isValidMobile,isValidAadhar

String name,age,aadhar,email,dob,phone,password

**\*Methods:**

Public static void main(String[] args) {}

1. **AccountDetails.java(com.capgemini.bean)**

**\*Variables:**

Private String name;

Private int age;

Private long aadhar;

Private String email;

Private String phone;

Private int balance;

Private int id;

Private String password;

**\*Methods:**

The setters, getters and toString methods are generated of the above variables.

1. **IAccountService.java(com.capgemini.service)**

**\*Variables:**

No variables are declared or initialized

**\*Methods:**

Public Boolean addAccountDetails(AccountDetails details);

Public void showBalance(int id,String password);

Public void deposit(int id,int amount,String password);

Public void withdraw(int id,int amount,String password);

Public void fundTransfer(int id1,int id2,int amount,String password);

Public void printTransaction(int id1,int id2);

1. AccountService.java(com.capgemini.service)

**\*Variables:**

No variables are declared or initialized

**\*Methods:**

Public Boolean addAccountDetails(AccountDetails details) {}

Public void showBalance(int id,String password) {}

Public void deposit(int id,int amount,String password) {}

Public void withdraw(int id,int amount,String password) {}

Public void fundTransfer(int id1,int id2,int amount,String password) {}

Public void printTransaction(int id1,int id2) {}

1. **AccountDataValidate.java(com.capgemini.service)**

**\*Variables:**

No variables are declared or initialized

**\*Methods:**

Public Boolean validateName(String name) {}

Public Boolean validateAge(String age) {}

Public Boolean validateMobile(String phone) {}

Public Boolean validateAadhar(String aadhar) {}

1. **IAccountDao.java(com.capgemini.dao)**

**\*Variables:**

No variables are declared or initialized

**\*Methods:**

Public Boolean addAccountDetails(AccountDetails details);

Public void showBalance(int id,String password);

Public void deposit(int id,int amount,String password);

Public void withdraw(int id,int amount,String password);

Public void fundTransfer(int id1,int id2,int amount,String password);

Public void printTransaction(int id1,int id2);

1. **AccountDao.java(com.capgemini.dao)**

**\*Variables:**

No variables are declared or initialized

**\*Methods**:

Public Boolean validateName(String name) {}

Public Boolean validateAge(String age) {}

Public Boolean validateMobile(String phone) {}

Public Boolean validateAadhar(String aadhar) {}

1. **NoAccountFoundException.java(com.capgemini.exception)**

**\*Variables:**

Private static final long serialVersionUID = 1L;

**\*Methods:**

No methods defined in this block

1. **AccountDaoTest.java(com.capgemini.test)**

**\*Methods:**

Public void testAddAccountDetails() {}

Public void testShowBalance() {}

Public void testDeposit() {}

Public void testWithdraw() {}

Public void testFundTransfer() {}

Public void testPrintTransaction() {}

1. **AccountDataValidateTest.java(com.capgemini.test)**

**\*Methods:**

Public void testValidateName() {}

Public void testValidateAge() {}

Public void testValidateEmail() {}

Public void testValidateMobile() {}

Public void testValidateAadhar() {}

1. **AccountServiceTest.java(com.capgemini.test)**

**\*Methods:**

Public void testAddAccountDetails() {}

Public void testShowBalance() {}

Public void testDeposit() {}

Public void testWithdraw() {}

Public void testFundTransfer() {}

Public void testPrintTransaction() {}

1. **AccountDetailsTest.java(com.capgemini.test)**

**\*Methods:**

Public void testGetName() {}

Public void testGetAge() {}

Public void testGetAadhar() {}

Public void testGetEmail() {}

Public void testGetPhone() {}