

SRS Project “Instapay”

1. Registration:
 - a. Username (which must be unique and cannot be changed)
 - b. password (must fit the rules of a strong password)
 - c. Phone number (must have a wallet and if not have a bank account)
 - d. Bank Account Number (if it exists and the phone number must be connected to it)
 - e. Full Name (cannot be empty)
2. Login:
 - a. Choose which account to type from (bank account or wallet)
 - b. Username
 - c. Password
3. The Instapay system must support the following money transfer requirements:
 - a. Transfer to Wallet: Users must be able to transfer money to another Instapay user's wallet using the recipient's mobile number.
 - b. Transfer to Another Instapay Account: Users must be able to transfer money to another Instapay user's account using the recipient's -Instapay username or email address (check if the sender is a wallet and the receiver is a wallet).
 - c. Transfer to Bank Account: Users registered using their bank account must be able to transfer money to their bank account.
 - d. Transfer to Mobile Wallet through a Wallet Provider: Users must be able to transfer money to their mobile wallet through a wallet provider such as Vodafone Cash, CIB Wallet, or Fawry.
4. Bills Payment
 - a. Gas, Water, and Electricity: pay using the payment code (autogenerated)
 - b. Print the bill with the user's billing information.

SRS Project “Instapay”

Actors:

- 1- User.
- 2- Bank API
- 3- Wallet API
- 4- Password OTP API.
- 5- Bills Foundations (e.g., Gas, Water, and Electricity)

Classes:

- 1- Instapay
 - A- User
 - B- Authentication
- 2- User
 - A- Name
 - B- UserName (Unique)
 - C- Password
 - D- PhoneNumber
 - E- Account
- 3- BankAccount
 - A- AccountNumber
 - B- CardType
- 4- WalletAccount
 - A- PhoneNumber
 - B- WalletType
- 5- Bills //Abstract class for ElectricityBill, WaterBill, and GasBill classes
 - A- BillType
 - B- Amount
 - C- PaymentNumber
- 6- Payment //Helper class
- 7- Authentication //including OTP
- 8- Account //Abstract class for BankAccount and Wallet classes
 - A- Balance
 - B- ProviderName
- 9- ElectricityBill
- 10- WaterBill
- 11- GasBill

SRS Project “Instapay”

Enums:

- 1- UserType (wallet, bank account)
- 2- WalletType
- 3- BankProvider
- 4- WalletProvider
- 5- CardType
- 6- BillType
- 3- AuthenticationStatus //example: Success and Failure

Interfaces:

- 1- AuthenticationService

Dummy Data Classes:

- 1- Bank Accounts API
- 2- Wallets API
- 3- Bills API