



Software design specification document

2023

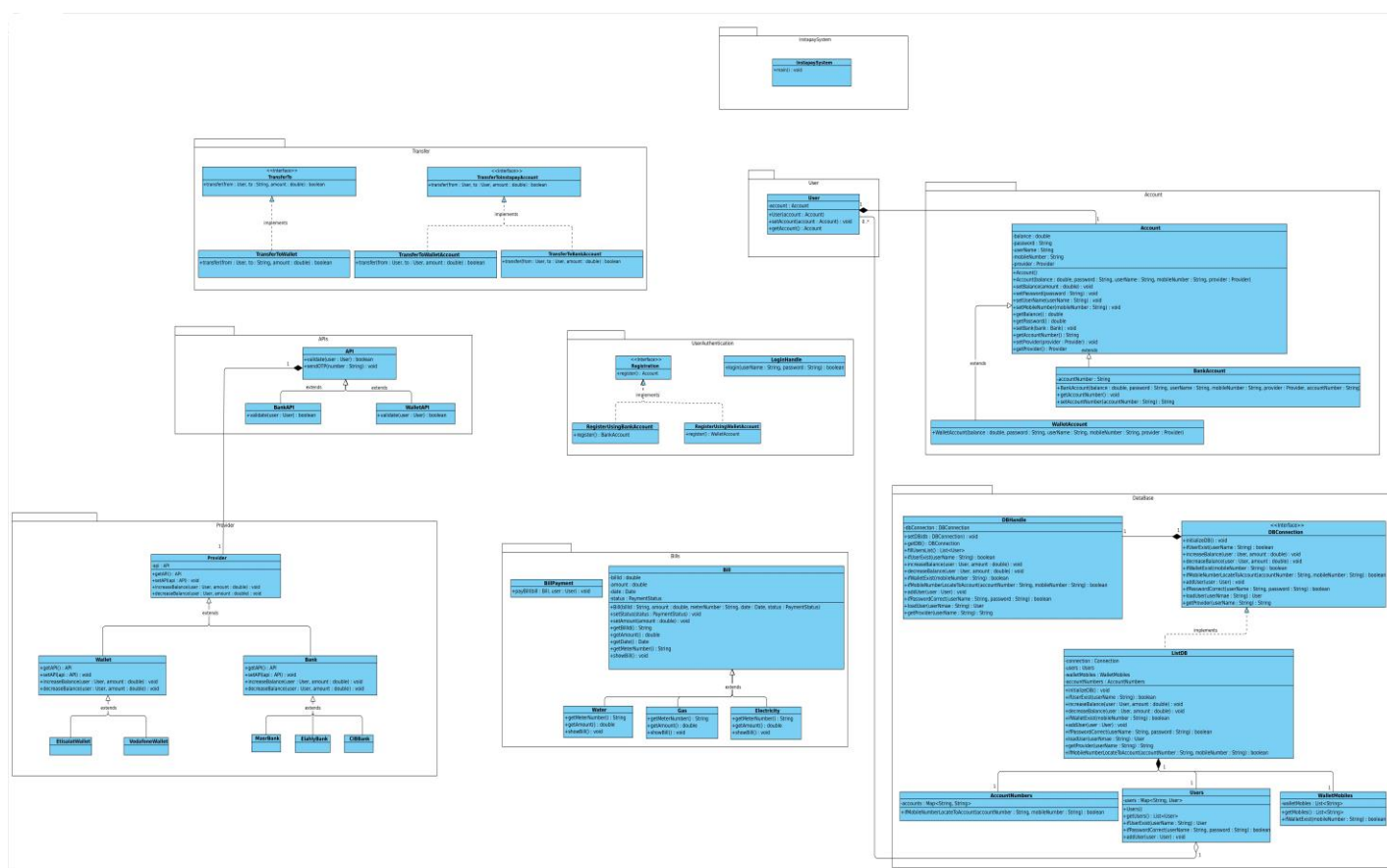
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Class diagram design





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Class diagram Explanation

	Design Patterns	Justification	Participating Classes
1	Strategy patterns	To change account type in runtime, depend on the choice of the user and make the design extendable	Account, BankAccount, WalletAccount
2	Factory Method	To separate the complex creation of the Account from instapay System	Registration, RegisterUsingWalletAccount, RegisterUsingBankAccount
3	Strategy patterns	To change transfer method in runtime, depend on the choice of the user and make the design extendable	TransferToInstapayAccount, TransferToBankAccount and TransferToWalletAccount
4	Strategy patterns	To change API type in runtime, depend on the choice of the user and make the design extendable	API, WalletAPI and BankAPI
5	Strategy patterns	To change Provider type in runtime, depend on the choice of the user and make the design extendable	Provider, Bank and Wallet
6	Strategy patterns	To change Wallet type in runtime, depend on the choice of the user and make the design extendable	Wallet, EtisalatWallet and VodafoneWallet
7	Strategy patterns	To change Bank type in runtime, depend on the choice of the user and make the design extendable	Bank, MasrBank, CIBBank and ElahlyBank
8	Strategy patterns	To change Bill type in runtime, depend on the choice of the user and make the design extendable	Bill, GasBill, WaterBill and ElectricityBill
9	Strategy patterns	To change Database type, and make the design extendable	DBConnection, DBHandle and ListDB

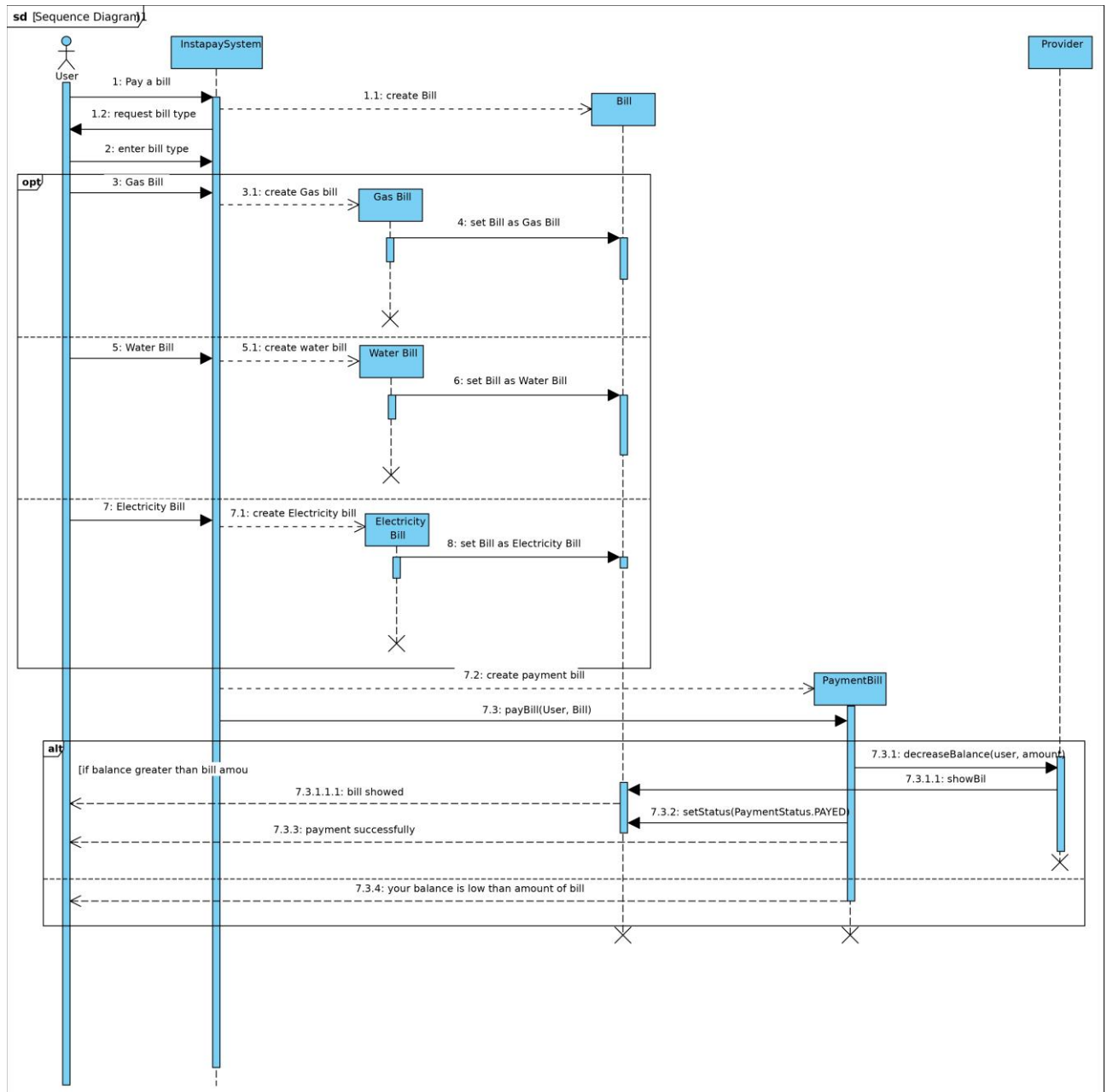


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Sequence diagram design

❖ Sequence diagram for Pay Bills → Mohamed Amir

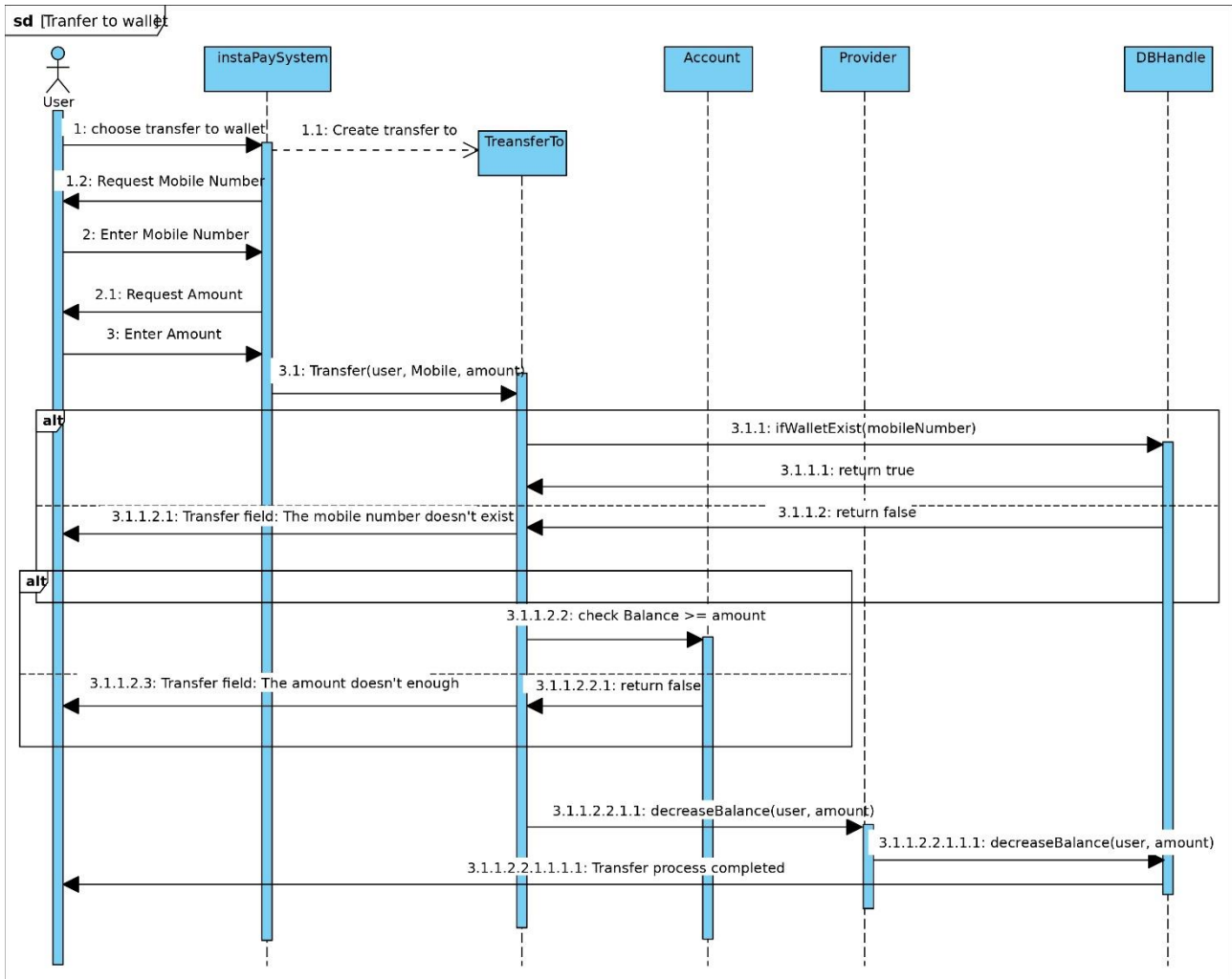




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❖ Sequence diagram for Transfer to wallet → Badr Mohamed

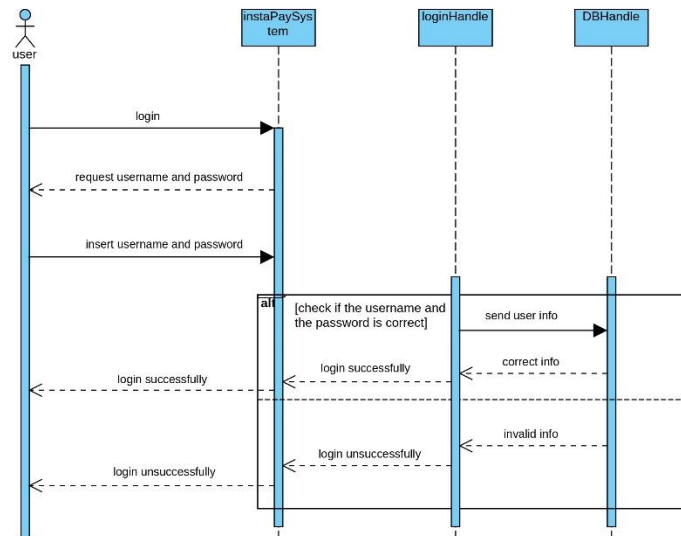




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❖ Sequence diagram for Login → Abdelrahman Adel

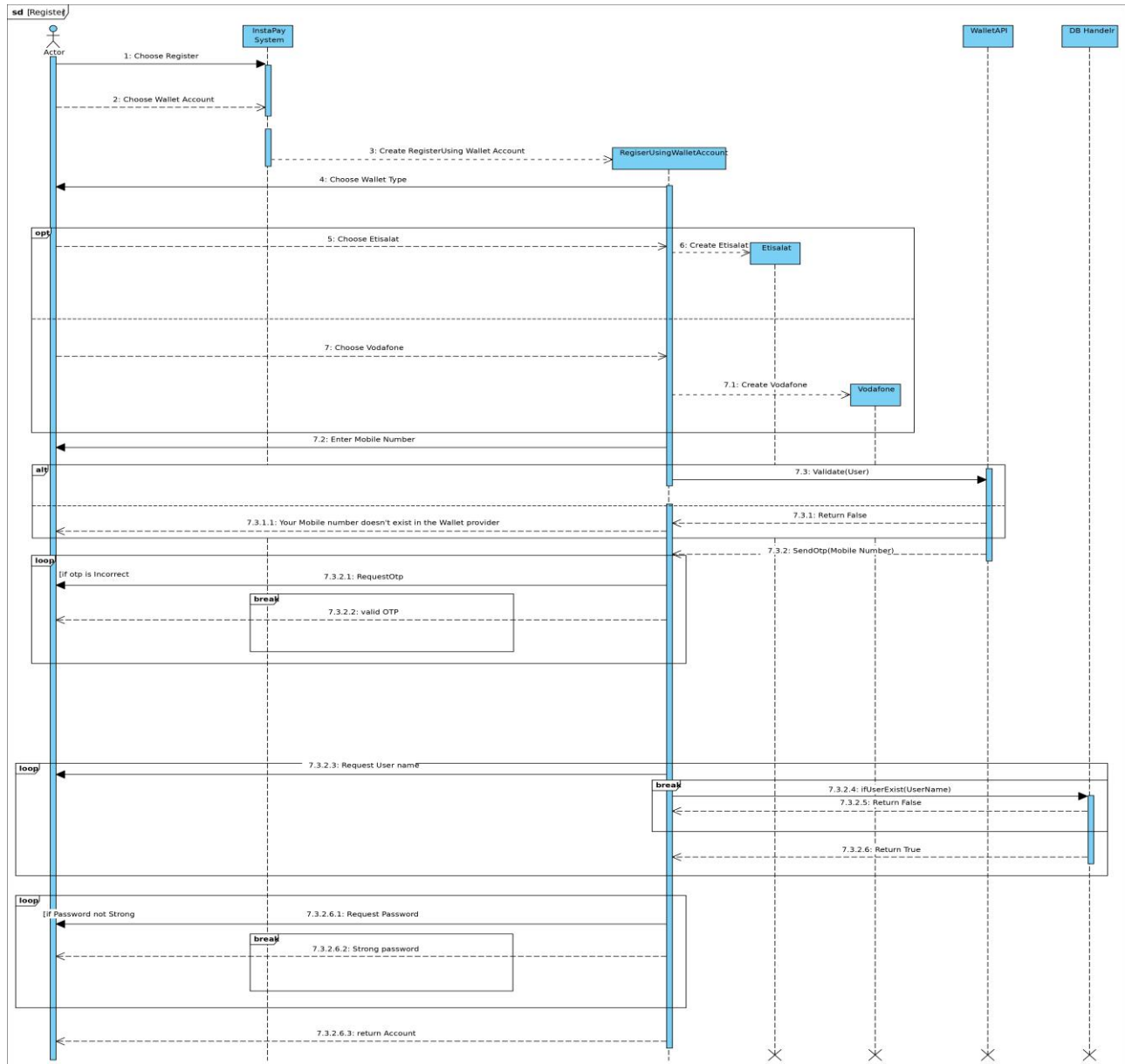




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❖ Sequence diagram for Register Using Wallet Account → Ahmed Yasser Mohamed



GitHub repository link

❖ https://github.com/Badrmohamedragab/InstaPay_Project