





Transaction
+ amount:double
+ senderName:String
+ date :Date
+ Transaction()
+ Transaction(transactionType:TransactionType,amount:double):Transaction
+ getAmount()
+ setAmount(double)
+ getSender()
+ setSender(String)
+ getDate()

Account
+ balance:double
+ Account():Account
+ addTrantaction
+ setBalance(double :balance)
+ getBalance()

<<Enumeration>> TransactionType
DEPOSIT
TRANSFER
WITHDRAW

AccountMenuAction
+ AccountMenuAction(MenuContext, User)

BaseMenuAction
- User:currentUser
+ BaseMenuAction(MenuContext, User)
+ getCurrentUser()
+ setCurrentUser(User)

MainMenuAction
+ BaseMenuAction(MenuContext, User)

UserMenuAction
+ UserMenuAction(MenuContext, User)

WelcomeMenuAction
+WelcomeMenuAction(menuContext,user)

ATMApp
main(args:String[1..*])
-memberName

User
+ id : int
+ fullname :String
+ userName:String
+ password :String
+ user()
+ hashCode(): int
+ toString():String
+ equals(Obj:Object):boolean
+ getId()
+ setId()
+ setfullName()
+ getfullName()
+ setUserName()
+ getUserName()
+ setPassword()
-memberName

DateUtil
+ DATE_FORMAT_PATTERN:String
- DateUtil()
+ toDate(dateAsString:String):LocalDate
+ getNow():String
+ toLocalDate(date:Date):String
+ toDate(date:LocalDate):Date
+ toString(date:LocalDate):String

ServiceUtil
- serviceUtil()
+ saveUsers(List<Users>)
+ loadUsers(List<Users>)

<<Enumeration>> MenuContext
WELCOME
SIGNUP
MAIN
USER
UPDATE_USER
CHANGE_PASSWORD
DELETE_USER
ACCOUNT
VIEW_BALANCE
WITHDRAW_MONEY
TRANSFER_MONEY
DEPOSIT_MONEY
LOGOUT

AccountController
AccountController(IAccountService, Account View)
+ getModel():IAccountService
+ getView():AccountView
+ requestUserInput(MenuContext, User)
- transferMoney()
- withdrawMoney()
- depositMoney()
- viewBalance()

UserController
+ UserController(UserService, UserView)
+ getModel()
+ getView()
+ requestUserInput(MenuContext, User)
- deleteUser()
- changePassword()
- updateProfile()

BaseController
- menuVisible:boolean
- userSession:User
- view :BaseView
- model :IBaseService
+ BaseController(model,view):baseController
+ requestUserInput(context,CurrentUser)

MainController
+ getModel()
+ MainController(IBaseService, BaseView)
+ getView()
+ requestUserInput(MenuContext, User)

WelcomeController
- newUser : User
+ WelcomeController(IWelcomeService, WelcomeView)
+ getModel()
+ getView()
- requestUserInput(MenuContext, User)
- login()
- createUser()

PrintHandler
+ appTitle()
+ optionLogOut()
+ optionQuit()
+ optionBackToMainMenu()
+ clearScreen()
+ readInput(userInput:String):int
+ optionList(options:List)
+ optionListInRow(options:List)

BaseView
- scanner:Scanner
+ BaseView(title:String):BaseView
+ getMenuOptions():String [1...*]
+ printNavigationMenu()
+ setTitle(title:String)
+ getUserterminal():Scanner
+ printSaveMessage()
+ printInvalidOption()
+ printUserRequest()
+ printMessage(message:String)
+ askConfirmationYesOrNo():boolean
+ waitForDecision()
+ getUserInput():int
+ getUserText():String
+ getSelectedOptionFromMenu(menuItems:int):int
+ askUserName():String
+ askuserPassword():String
+ setMenuOptions(menuOptions:List)
+ setMenuOptionsInRow(menuOptions:List)

WelcomeView
+ WelcmeView(title:String):WelcomeView
+ getMenuOptions():String[1..*]
+ printNavigationMenu()

AccountView
+AccountView(title:String):AccountView
+getMenuOptions():String[1..*]
+printNavigationMenu()
+showBalance(balance:double) t()
+askWithdrawAmount():double
+askSenderDetails():String
+askTransferAmount():double
-getUserEnteredAmount():double
+askUserDepositAmount():double

UserView
+userView(title:String):userView
+getMenuOptions():String[1..*]
+printrnavigationMenu()
+askUserDeletion():boolean

MainMenu
+MainView(String)
+ getMenuOptions()
+ printNavigationMenu()

<<Interface>> IAccountService

<<Interface>> IMainService

AccountServiceImpl
+ handleOption(int, User)

UserServiceImpl
+ deleteUser(User)
+ updateUser(User)
+ updatePassword(User)
+ handleOption(int, User)

<<Interface>> IBaseService
+ handleOption(int, User)
+ isValidUser(User)
+ findByUserName(String)

<<Interface>> IUserService
+ deleteUser(User)
+ updateUser(User)
+ updatePassword(User)

BaseServiceImpl
+ handleOption(int, User)
+ isValidUser(User)
+ findByUserName(String)

<<Interface>> IWelcomeService
+ login(User)
+ createUser(User)

MainServiceImpl
+ isValidUser(User)
+ handleOption(int, User)

WelcomeServiceImpl
+ createUser(User)
+ login(User)
+ handleOption(int, User)

