```
QWindow
                                                                      Main Window
                                        + page : int
                                         # keyPressEvent(QKeyEvent*) : void
                                         on_pushButton_clicked() : void
                                         - changetoAdmin() : void
                                         - changeToManager() : void
                                         on_viewItems_clicked(): void
                                         on_loadSales_clicked() : void
                                         - on_comboBox_currentIndexChanged(const QString&) : void
- on_comboBoc_2_currentIndexChanged(const QString&) : void
                                         - showTables() : void
                                         generateMemberID(): QString
                                         getMonth(QString) : QString
                                                                                                                                                                                                                                               Commodity
                                         on_createMember_clicked() : void
                                         on_LoadMemberInfo_clicked() : void
                                                                                                                                                                                                                      + item() const : QString
                                         - changetoValidationTool() : void
                                                                                                                                                                                                                      + setItem(const Qstring&) : void
                                         on_ValidateSoftware_clicked() : void
                                         - on_SearchCustomerByID_clicked() : void
- on_SearchCustomerByID_clicked() : void
- on_FinalizePurchase_clicked() : void
- on_adminTable_clicked(const QModelIndex&) : void
- on_BackButton_clicked() : void
                                                                                                                                                                                                                      + price() const : float
                                                                                                                                                                                                                      + setPrice(float) : void
                                                                                                                                                                                                                      + quantity() const : int
                                                                                                                                                                                                                      + setQuantity(int) : void
                                                                                                                                                                                                                      + revenue() const : float
                                         on_BacktoMAINADMIN_clicked(): void
                                                                                                                                                                                                                      + setRevenue(float) : void
                                         on_LogoutfromAdmin_clicked(): void
                                         on_BackFromVsoft_clicked(): void
                                                                                                                                                                                                                      # itemChanged() : void
                                         on_ViewMembersadmin_clicked() : void
                                                                                                                                                                                                                      # priceChanged() : void
                                         on_adminviewmember_clicked() : void
                                                                                                                                                                                                                      # quantityChanged(): void
                                         on_dateEdit_userDateChanged(const QDate&) : void
                                                                                                                                                                                                                      # revenueChanged(): void
                                         on_ClearButton_clicked(): void
                                         on BackFromInventory_clicked() : void
                                                                                                                                                                                                                      - m_item : QString
                                         - on_ViewInventory_clicked() : void
- on_ViewInventory_2_clicked() : void
                                                                                                                                                                                                                       - m_price : float
                                                                                                                                                                                                                       - m_quantity : int
                                         savetoNewFile(QString,QString,QString,QString,QString()): void
                                                                                                                                                                                                                       m revenue : float
                                                   Controller
+ createTable(): void
+ createMember(int, QString, QString, QDate, float, float) : void
+ createRecord(int, QDate, QString, int) : void
+ createCommodity(QString, float,int,float) : void
+ createInventoryTable(Qstring,float) : void
                                                                                                                                                                                                                      + username() const : QString
                                                                                                                                                                                                                      + setUsername(const QString&) : void
                                                                                                                                                                                                                      + password() const : QString
+ deleteMember(int) : void
                                                                                                                                                                                                                      + setPassword(const QString&) : void
+ updatemember(int, QString, QString, QDate, float, float) : void
+ updateCommodity(QString,float,int,float) : void
                                                                                                                                                                                                                      + rank() const : int
                                                                                                                                                                                                                      + setRank(int) : void
+ updateInventory(QString,float): void
+ getSalesReportBydate(QDate, QMap<QString,int>&, QList<int>&, QList<inst>&, int&): void
                                                                                                                                                                                                                      # usernameChanged(): void
 + getexpireMembers(QDate, QList<int>&): void
                                                                                                                                                                                                                     # passwordChanged() : void
# rankChanged() : void
+ getTotalQuantityOfItems(QMap<QString,int>&): void
+ getTotalRevenueOfItems(QMap<QString,float>&): void
+ \ getMembersPurchased(QMap < int,QList < int > >\&): void\\
                                                                                                                                                                                                                       m_username : QString
+ getrebateByMembers(QMap< int,float >& ) : void
                                                                                                                                                                                                                       m_password : QString
+ getTotalSpentBymembers(QMap<int,float>&): void
                                                                                                                                                                                                                       m rank : int
+ getCommodity() : QList<Commodity*>
+ getAdmins() : QList<Admin*>
+ getRecords() : QList<Record*>
+ getMembers() : QList<Member*>
+ getCommodityPriceList() : QMap<QString,float>
+ getMembersQueryModel() : QSqlQueryModel*
                                                                                                                                                                                                                                                Member
+ getRecordsQueryModel() : QSqlQueryModel*
                                                                                                                                                                                                                      + id() const : int
+ getCommoditiesQueryModel(): QSqlQueryModel*
                                                                                                                                                                                                                      + setId(int) : void
+ name() const : QString
 + getRevenueSortedById() : QSqlQueryModel*
+ getRevenueSortedByRev() : QSqlQueryModel*
                                                                                                                                                                                                                      + setName(QString) : void
+ SortByRevenueItems() : QSqlQueryModel*
                                                                                                                                                                                                                      + type() const : QString
+ SortByNameItems() : QSqlQueryModel*
                                                                                                                                                                                                                       + setType(QString) : void
+ getInventoryQueryModel() : QSqlQueryModel*
                                                                                                                                                                                                                      + date() const : QDate
+ getMembersQueryModelWithCondition(QString) : QSqlTableModel*
+ getRecordsQueryModelWithCondition(QString) : QSqlTableModel*
+ getCommoditiesQueryModelWithCondition(QString) : QSqlTableModel*
+ getMembersExpiredAttheMonth(int,int) : QSqlTableModel*
                                                                                                                                                                                                                       + setDate(QDate) : void
                                                                                                                                                                 Record
                                                                                                                                                                                                                      + spent() const : float
                                                                                                                                                                                                                       + setSpent(float) : void
                                                                                                                                      + id() const : int
                                                                                                                                                                                                                      + rebate() const : float
+ getCommodityByItemName(QString) : Commodity*
                                                                                                                                      + setId(int) : void
                                                                                                                                                                                                                      + setRebate(float) : void
 + getCommoditiesQueryModelbyName(QString) : QSqlQueryModel*
                                                                                                                                      + member_id() const : int
+ getMemberById(int) : Member*
                                                                                                                                      + setMember_id(int) : void
+ readRecordFile(): bool
                                                                                                                                                                                                                      # idChanged() : void
                                                                                                                                      + date() const : QDate
+ readMemberFile() : bool
                                                                                                                                      + setDate(const QDate&) : void
                                                                                                                                                                                                                      # nameChanged() : void
 + calcMemberSpent(int) : float
                                                                                                                                     + item() const : QString
+ setItem(const QString&) : void
+ quantity() const : int
                                                                                                                                                                                                                      # typeChanged() : void
 + calcMemberRebate(int) : float
                                                                                                                                                                                                                      # dateChanged() : void
+ setComboDate(QString) : void
                                                                                                                                                                                                                      # spentChanged(): void
+ getComboDate(QString&) : void
                                                                                                                                      + setQuantity(int) : void
                                                                                                                                                                                                                      # rebateChanged() : void
                                                                                                                                                                                                                       - m_id : int
 m_database : QSqlDatabase
                                                                                                                                      # idChanged(): void
                                                                                                                                                                                                                       - m_name : QString
                                                                                                                                      # memberIdChanged() : void
 - m_members : QList<Member*>
                                                                                                                                                                                                                       - m_type : QString
 m_record : QList<Record*>
                                                                                                                                      # dateChanged(): void
                                                                                                                                                                                                                       m_Date : QDate
 m_commodities : QList<Commodity*>
                                                                                                                                      # itemChanged(): void
                                                                                                                                                                                                                       m_spent : float
 m_admins : QList<Admin*>
                                                                                                                                      # quantityChanged(): void
                                                                                                                                                                                                                       m_rebate : float
 loadMembers() : void
                                                                                                                                      - m_id : int
 - loadRecords() : void
- loadCommodities() :void
                                                                                                                                      - m_member_id : int
                                                                                                                                      - m_date : QDate
 loadAdmins(): void
                                                                                                                                       m_item : QString
                                                                                                                                       m_quantity: int
```