

## VideoStoreManagement - items: ArrayList <Item> - customers: ArrayList <Customer> - currentUser: Customer - adminUsername: String - adminPassword: String + System() + login(String, String): bool + adminLogin(String, String): bool + findItemByID(String): Item + findCustomerByID(String): Customer + isValidItemID(String): bool + isValidCustomerID(String): bool + addCustomer(String, Text, String, String, String, String): void + updateCustomer(String, Text, String, String, String, String, String, String, String, String): void + addItem(String, Text, String, String, String, String): void + updateItem(String, Text, String, String, String, String, String, String, String, String): void + deleteItem(String, Text): void + increaseNoCopies(String, Text, String): void + loadData(): bool + saveData(): bool + rentItem(String, Label): bool + rentItemRewardPoint(String, Label): void + returnItem(String): bool + displayIDSortItem(Gridpane): void + displayTitleSortItem(Gridpane): void + displayIDSortCustomers(Gridpane): void + displayNameSortCustomer(Gridpane): void + displayGroup(Gridpane): void + displayItemsNoCopies(Gridpane): void + searchItemID(Gridpane, String): void + searchItemTitle(Gridpane, String): void

## <<Interface>> VideoStoreApp

- vsm: VideoStoreManagement

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+ start(Stage): void
- loginStage(Stage): void
- buttonDesignForHeader(Button): void
- buttonDesignForStage(Button): void
- customerPageButtonBox(Stage): HBox
- customerHome(Stage): void
- createStyledButton(String, String): Button
- setButtonStyle(Button): void
- rentItemStage(Stage): void
- showItemInformation(Item): void
- returnItemStage(Stage, Customer): void
- rewardPointStage(Stage, Customer): void
- showRentItemStage(Stage): void
- viewUpdateInfoStage(Stage): void
- adminHome(Stage): void
- adminPageButtonBox(Stage): void
- addItemStage(Stage): void
- updateItemStage(Stage): void
- increaseItemStage(Stage): void
- deleteItemStage(Stage): void
- displayItemStage(Stage): void
- searchItemStage(Stage): void
- addCustomerStage(Stage): void
- updateCustomerStage(Stage): void
- displayCustomerStage(Stage): void
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- searchCustomerStage(Stage): void