Object Oriented Software Development - CA3:

Customer Invoice Management System

**Buy / Sell**

**Online**

**System**

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**Description**

My Project is based on a Buy / Sell system of Secondhand objects.

All the products are checked carefully by one of our staff before being placed for sale.

Graphical user interface, application

Description automatically generated

* System have the option of buying and selling items from/to the costumers.
* Each item has an Id, a buying price and a selling price and the option to get a voucher when selling items.
* When Costumer sell and object he has the option to get cash or a voucher for a bigger value that can be used to buy things from our store.
* Only registered users can purchase an item from the online store.
* Registered users have an account with a unique id, login, and password
* A shopping cart belongs to account and is used to temporarily store items before purchase
* Payment is made by credit card, debit card or by phone payment
* Parcels are sent by either standard or express mail and can be delivered to either the payment address or an alternative address.
* Items can be sold Only in the shop where a worker can check the item.

**Requirements**

**Register- User can create an account by entering first name, last name, Username, Password, Email Address and mobile number. After a success operation the user will be noticed that the account was successfully created and that he can proceed to the login Screen.**

**Login – Once the user has signed in he can now view and browse the store catalogue to buy the items he wants.**

**Search Catalogue – In order to use the Search Catalogue the user must be registered**

**Add object to cart/Delete object from cart – In order to add an object or to delete an object from the cart user must be logged in and to Enter into the text field the Id of the product he wants to operate with and to select the action he wants to do ‘Add’ or ‘Delete’.**

**See Support Information – In order to see ‘Support Information’ User must be logged in and to press the ‘Support Information’ Button**

**See About Business Information – In order to see ‘About Business Information’ User must be logged in and to press the ‘About’ Button**

**See Profile information**

**See Orders History**

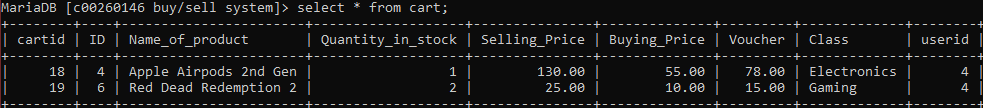
**Change User Details – In order to change User details in security purposes user will be asked to enter their login details one more time.**

**Enter Voucher – In order to have a valid voucher the user must sell something to the business and to select the pay as voucher instead of cash or by wining in one of the business giveaways.**

**Process Checkout – To register a checkout operation the user must enter**

**Their address , City/Town, County and Eircode of the place where they want the product to be delivered.**

**Screenshot database tables (Structure & Data)**



Text

Description automatically generated with medium confidence

Text

Description automatically generated

A picture containing diagram

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A picture containing graphical user interface

Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

**ER Diagram**

Diagram

Description automatically generated

**Interesting source code snippets**

**Login**

Text

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**Register**

Text

Description automatically generated

**MainPage**

Text

Description automatically generated

Text

Description automatically generated

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**gettotal class**

Text

Description automatically generated

**Used to access userId, total, vocher, voucherprice all over program.**

**Tests**

Test Case Table 1

|  |  |
| --- | --- |
| **Name** | TC - 1 |
| **Requirements** | LogIn |
| **Precondition** | 1. User must have an account 2. User must have an stable internet connection. |
| **Steps** | 1. Enter username 2. Enter Password 3. Click LogIn |
| **Expected Results** | User enters the MainPage Screen |

Test Case Table 2

|  |  |
| --- | --- |
| **Name** | TC - 2 |
| **Requirements** | Register Account |
| **Precondition** | 1. User must have no pre-existing accounts |
| **Steps** | 1. Enter First name 2. Enter Second name 3. Enter Email 4. Enter Login 5. Enter Password 6. Enter Mobile Number 7. Click “Register” |
| **Expected Results** | User has created an account |

Test Case Table 3

|  |  |
| --- | --- |
| **Name** | TC - 3 |
| **Requirements** | LogOut |
| **Precondition** | 1. User must have an account 2. User must be Logged in |
| **Steps** | 1. Click ‘LogOut’ 2. Get redirected to the LogIn screen |
| **Expected Results** | User successfully Sign Out |

Test Case Table 4

|  |  |
| --- | --- |
| **Name** | TC - 4 |
| **Requirements** | Select a Category |
| **Precondition** | 1. User must have an account 2. User must be Logged in |
| **Steps** | 1. Select one of the categories from the menu. 2. Table is filled with the products from the category selected. |
| **Expected Results** | User can now see the products from the category selected |

Test Case Table 5

|  |  |
| --- | --- |
| **Name** | TC - 5 |
| **Requirements** | Cart |
| **Precondition** | 1. User must have an account 2. User must be Logged in |
| **Steps** | 1. Select ‘Cart’ 2. Table is filled with the items that are stored in the Cart DB |
| **Expected Results** | User can now see the products inserted in Cart |

Test Case Table 6

|  |  |
| --- | --- |
| **Name** | TC - 6 |
| **Requirements** | Checkout |
| **Precondition** | 1. User must have an account 2. User must be Logged in |
| **Steps** | 1. Select ‘Checkout’ 2. Enter Address 3. Enter City/Town 4. Enter County 5. Enter Eircode 6. Press ‘Confirm Order’ 7. Select ‘Do you want to continue shopping’ ‘Yes’ or ‘No’ |
| **Expected Results** | If ‘Yes’ User returns to MainPage Screen  If ‘No’ User closes the application |