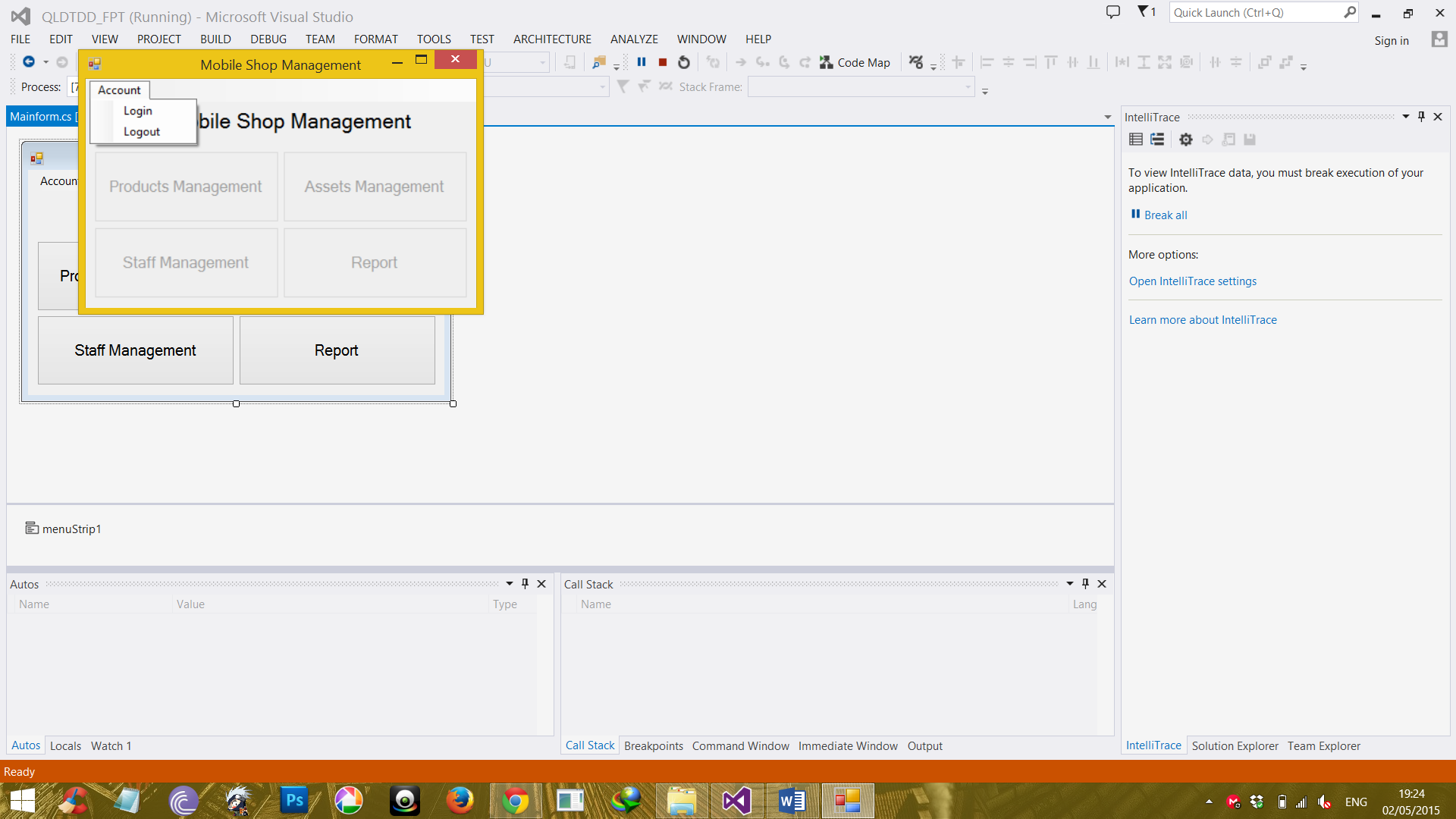
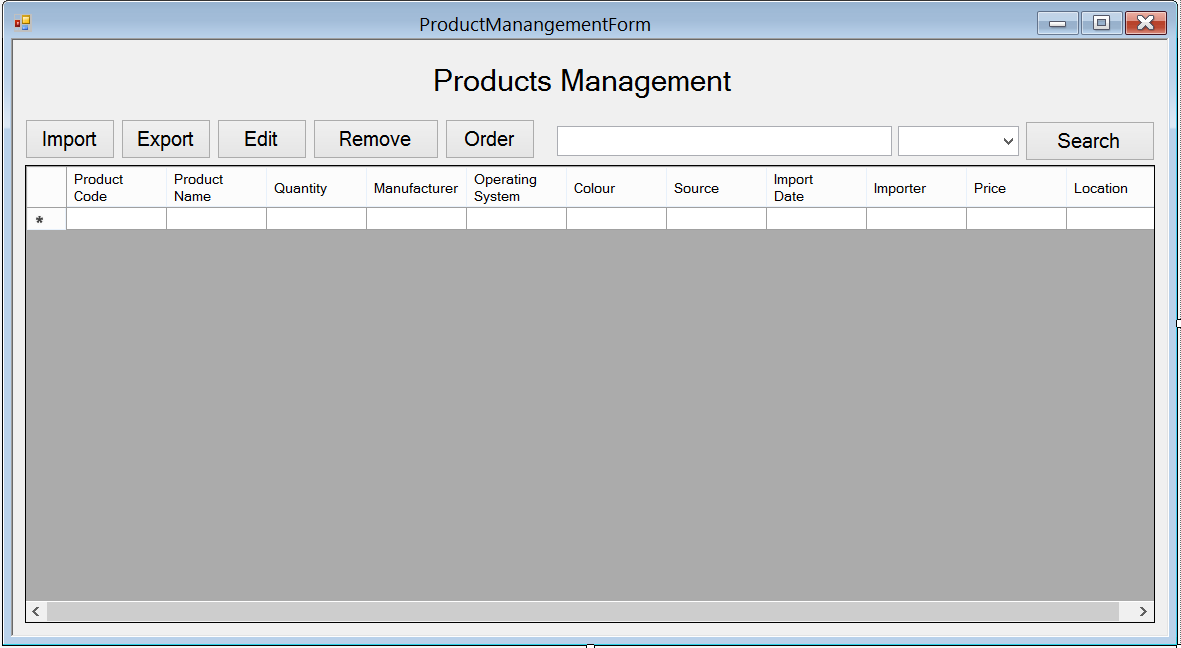
# Functional Description

## User interface:



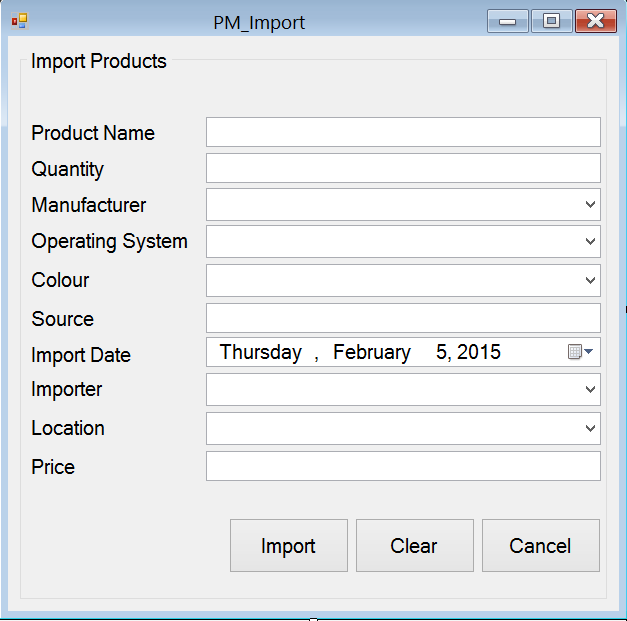
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Mobile Shop Management – User interface | | | | |
| **Description** | Display a screen where user can control the product. | | | |
| **Screen Access** | Users run program by click on file **ProductManagement.exe** | | | |
| **Screen Content** | | | | | |
| **Item** | **Type** | **Data** | **Description** | |
| Mobile Shop Management | Label |  | Name of the software | |
| Account | Menu strip item |  | Name of menu strip | |
| Log in | Menu strip item |  | Open a dialog where user can log into program | |
| Log out | Menu strip item |  | Log out the program. | |
| Products Management | Button |  | If user click on this button, the “Products Management” dialog will appear. | |
| Assets Management | Button |  | If user click on this button, the “Assets Management” dialog will appear. | |
| Staff Management | Button |  | If user click on this button, the “Staff Management” dialog will appear. | |
| Report | Button |  | If user click on this button, the “Report” dialog will appear. | |
| **Screen Actions** | | | | | |
| **Action Name** | **Description** | | **Success** | **Failure** |
| Log in | Everyone have an account and click on it to enter the system. | | Username of current user will display at the bottom of screen and all buttons will be enabled. | Displays message “Username or password is incorrect.” |
| Log out | Use to exit the system. | | Username of current user at the bottom of screen will be disappeared and all button will be disabled. | Nothing. |
| Products Management | Search data which existed in database | | “Products Management” dialog opened | Nothing. |
| Assets Management | Add more data. | | “Assets Management” dialog opened | Nothing. |
| Staff Management | Remove some of data. | | “Staff Management” dialog opened | Nothing. |
| Report | Update some exist fields of data. | | “Report” dialog opened | Nothing. |

## Products Management:



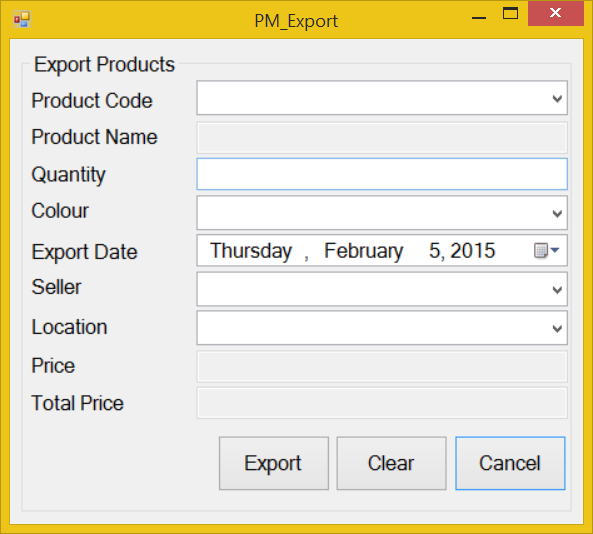
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Products Management | | | | |
| **Description** | |  | | | |
| **Screen Access** | | Users run program then click on **Products Management** button | | | |
| **Screen Content** | | | | | |
| **Item** | | **Type** | **Data** | **Description** | |
| Data grid view | | Data grid view | Lookup all fields from PRODUCT table. | * Display all fields about the product when the form loaded: Product code, product name, quantity, manufacturer, OS, colour, source, import date, importer, price, location. * This table is read-only, user cannot edit it. | |
| Import | | Button |  | User click on it to search | |
| Export | | Button |  |  | |
| Edit | | Button |  |  | |
| Remove | | Button |  |  | |
| Order | | Button |  |  | |
| Search | | Button |  |  | |
| Textbox | | Text field – String (50) |  |  | |
| Combo box | | Drop down list |  |  | |
| **Screen Actions** | | | | | |
| **Action Name** | | **Description** | | **Success** | **Failure** |
| Import | |  | |  |  |
| Export | |  | |  |  |
| Edit | |  | |  |  |
| Remove | |  | |  |  |
| Order | |  | |  |  |
| Search | | Find a product in the table below. | | Return the result of searching process | Message “Not found”. |

### Products Management – Import



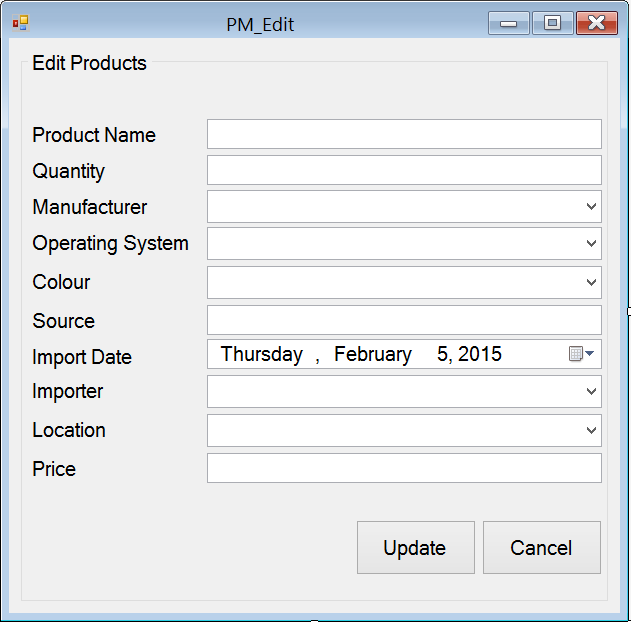
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Product Management - Import | | | | |
| **Description** |  | | | |
| **Screen Access** | Users run program by click on file **Product Management -> Import** | | | |
| **Screen Content** | | | | | |
| **Item** | **Type** | **Data** | **Description** | |
| Import Products | String (50) |  |  | |
| Product Code | Text field – String (50) |  |  | |
| Product Name | Text field – String (50) |  |  | |
| Quantity | Text field – String (50) |  |  | |
| Manufacturer | Text field – String (50) |  |  | |
| Operating System | Dropdown list – String (50) |  |  | |
| Colour | Dropdown list – String (50) |  |  | |
| Source | Text field – String (50) |  |  | |
| Import Date | Date time picker |  |  | |
| Importer | Dropdown list – String (50) |  |  | |
| Location | Dropdown list – String (50) |  |  | |
| Price | Text field – String (50) |  |  | |
| Import | Button |  |  | |
| Clear | Button |  |  | |
| Cancel | Button |  |  | |
| **Screen Actions** | | | | | |
| **Action Name** | **Description** | | **Success** | **Failure** |
| Import |  | |  |  |
| Clear |  | |  |  |
| Cancel |  | |  |  |

### Products Management – Export



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Product Management - Export | | | | |
| **Description** |  | | | |
| **Screen Access** | Users run program by click on file **Product Management -> Export** | | | |
| **Screen Content** | | | | | |
| **Item** | **Type** | **Data** | **Description** | |
| Export Products | String (50) |  |  | |
| Product Code | Text field – String (50) |  |  | |
| Product Name | Text field – String (50) |  |  | |
| Quantity | Text field – String (50) |  |  | |
| Colour | Dropdown list – String (50) |  |  | |
| Export Date | Date time picker |  |  | |
| Seller | Dropdown list – String (50) |  |  | |
| Location | Dropdown list – String (50) |  |  | |
| Price | Text field – String (50) |  |  | |
| Total Price | Text field – String (50) |  |  | |
| Export | Button |  |  | |
| Clear | Button |  |  | |
| Cancel | Button |  |  | |
| **Screen Actions** | | | | | |
| **Action Name** | **Description** | | **Success** | **Failure** |
| Export |  | |  |  |
| Clear |  | |  |  |
| Cancel |  | |  |  |

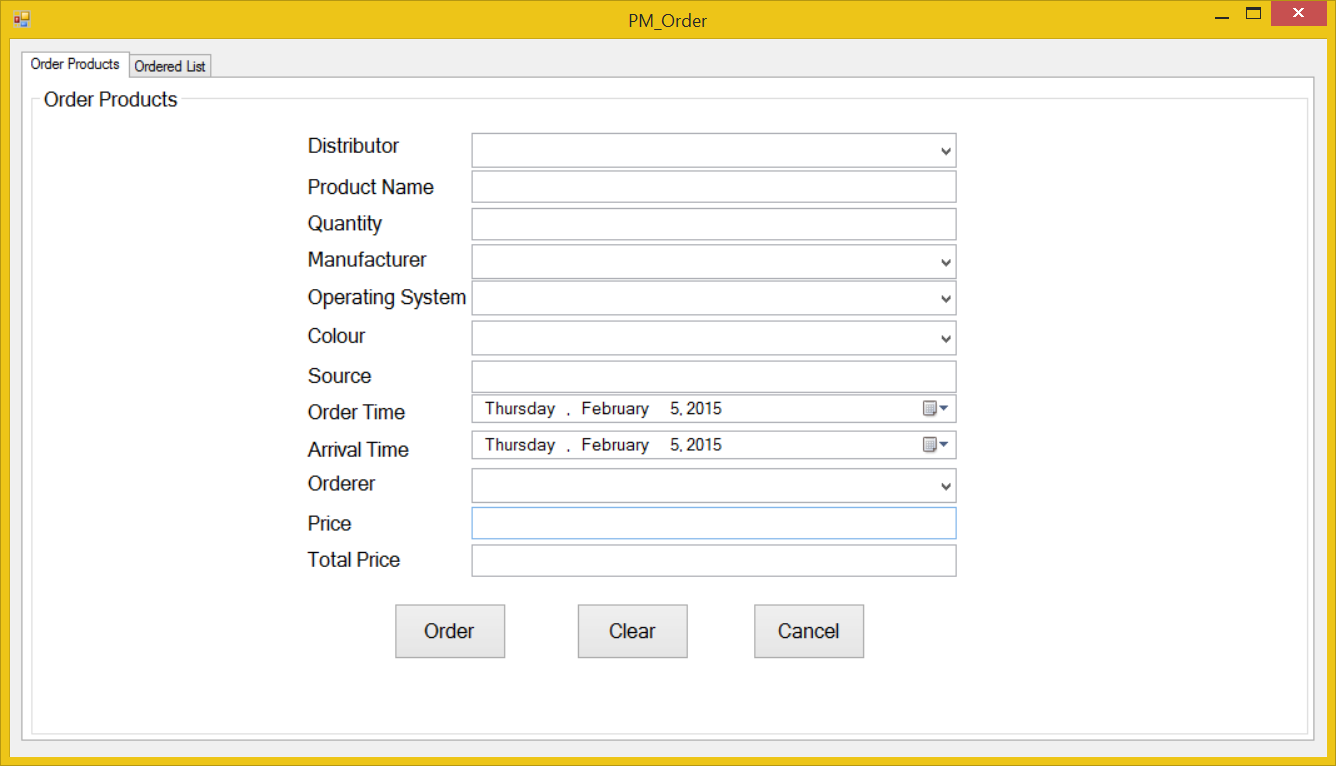
### Products Management – Edit



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Product Management - Edit | | | | |
| **Description** |  | | | |
| **Screen Access** | Users run program by click on file **Product Management -> Edit** | | | |
| **Screen Content** | | | | | |
| **Item** | **Type** | **Data** | **Description** | |
| Edit Products | String (50) |  |  | |
| Product Code | Text field – String (50) |  |  | |
| Product Name | Text field – String (50) |  |  | |
| Quantity | Text field – String (50) |  |  | |
| Manufacturer | Text field – String (50) |  |  | |
| Operating System | Dropdown list – String (50) |  |  | |
| Colour | Dropdown list – String (50) |  |  | |
| Source | Text field – String (50) |  |  | |
| Import Date | Date time picker |  |  | |
| Importer | Dropdown list – String (50) |  |  | |
| Location | Dropdown list – String (50) |  |  | |
| Price | Text field – String (50) |  |  | |
| Update | Button |  |  | |
| Cancel | Button |  |  | |
| **Screen Actions** | | | | | |
| **Action Name** | **Description** | | **Success** | **Failure** |
| Update |  | |  |  |
| Cancel |  | |  |  |

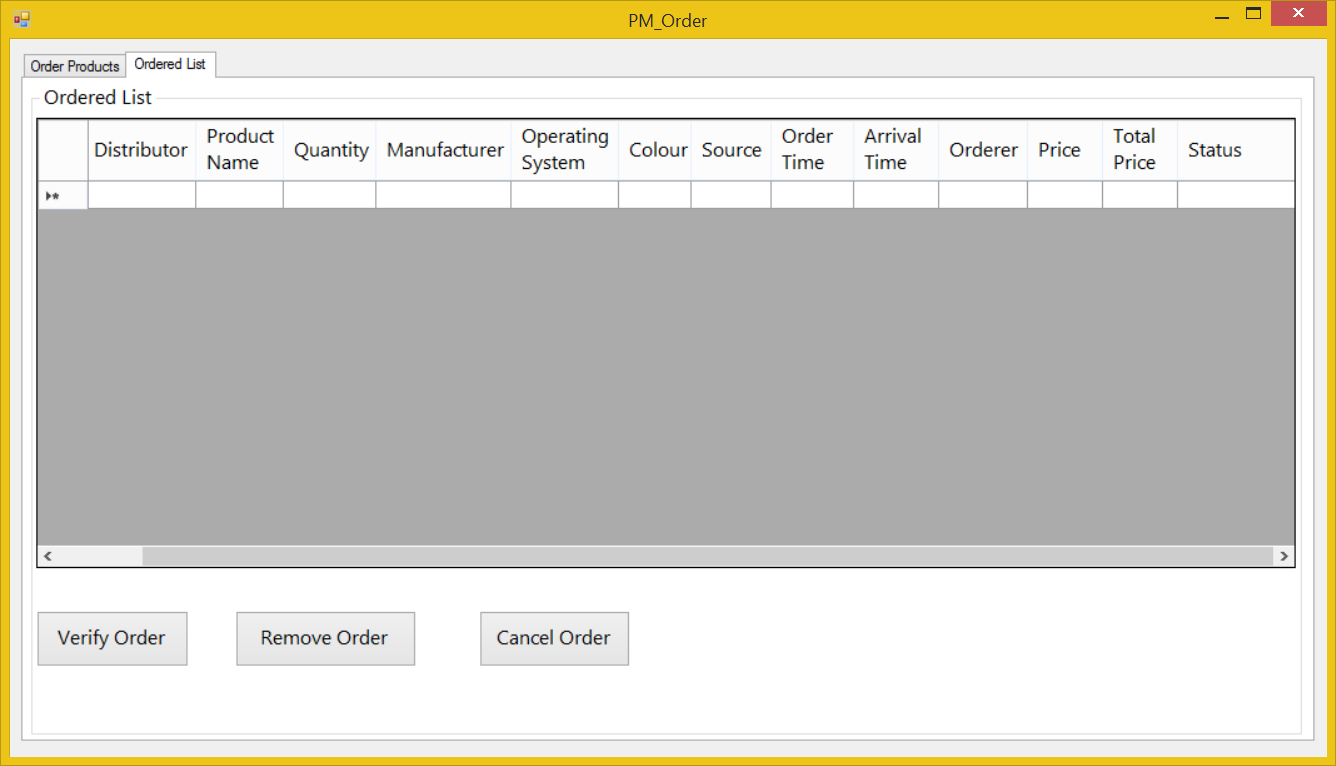
### Products Management – Order

#### Order – Order Products



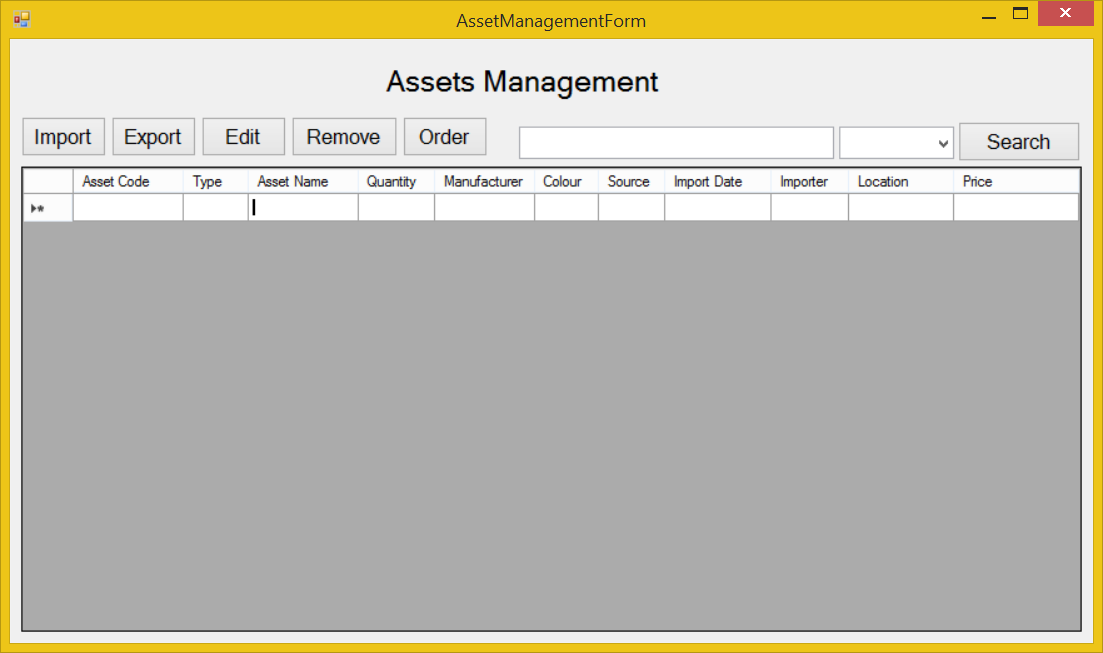
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Product Management – Order | | | | |
| **Description** |  | | | |
| **Screen Access** | Users run program by click on file **Product Management -> Order** | | | |
| **Screen Content** | | | | | |
| **Item** | **Type** | **Data** | **Description** | |
| Order Products | Tab |  |  | |
| Order Products | String (50) |  |  | |
| Distributor | Dropdown list – String (50) |  |  | |
| Product Name | Text field – String (50) |  |  | |
| Quantity | Text field – String (50) |  |  | |
| Manufacturer | Dropdown list – String (50) |  |  | |
| Operating System | Dropdown list – String (50) |  |  | |
| Colour | Dropdown list – String (50) |  |  | |
| Source | Text field – String (50) |  |  | |
| Order Time | Date time picker |  |  | |
| Arrival Time | Date time picker |  |  | |
| Orderer | Dropdown list – String (50) |  |  | |
| Price | Text field – String (50) |  |  | |
| Total Price | Text field – String (50) |  |  | |
| Order | Button |  |  | |
| Clear | Button |  |  | |
| Cancel | Button |  |  | |
| **Screen Actions** | | | | | |
| **Action Name** | **Description** | | **Success** | **Failure** |
| Order |  | |  |  |
| Clear |  | |  |  |
| Cancel |  | |  |  |

#### Order – Ordered List



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Products Management | | | | |
| **Description** | |  | | | |
| **Screen Access** | | Users run program then click on **Products Management** button | | | |
| **Screen Content** | | | | | |
| **Item** | | **Type** | **Data** | **Description** | |
| Ordered List | | Tab |  |  | |
| Ordered List | | String (50) |  |  | |
| Data grid view | | Data grid view |  | * Display all fields about the ordered list when the form loaded: Distributor, product name, quantity, manufacturer, OS, colour, source, order time, arrival time, ordered, price, total price, status. * This table is read-only, user cannot edit it. | |
| Verify Order | | Button |  |  | |
| Remove Order | | Button |  |  | |
| Cancel Order | | Button |  |  | |
| **Screen Actions** | | | | | |
| **Action Name** | | **Description** | | **Success** | **Failure** |
| Verify Order | |  | |  |  |
| Remove Order | |  | |  |  |
| Cancel Order | |  | |  |  |

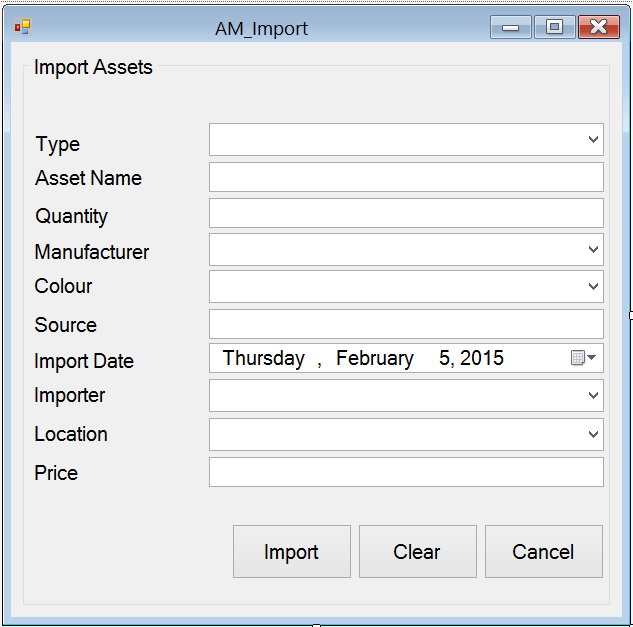
## Assets Management:



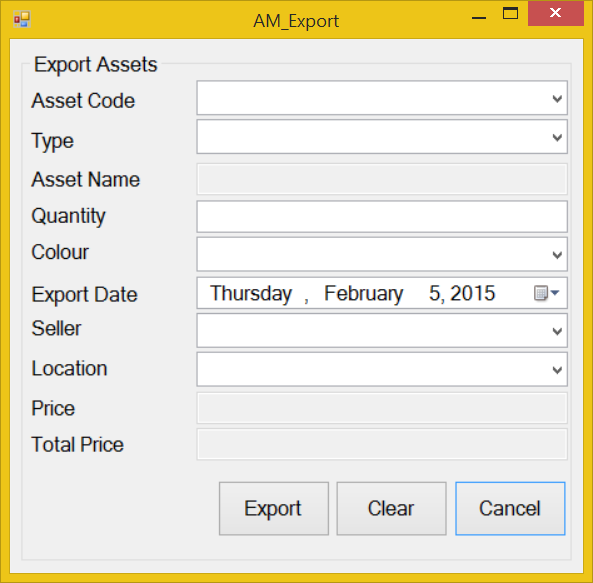
|  |  |
| --- | --- |
| Use Case Name | Add products |
| Use Case ID | ABC001 |
| High Level Requirement Ref | The general information about imported products must be prepared. The manager and the others members who have authority can view the product list. Besides that, they can make the order to import more products. |
| Actor | Shop’s Master, Warehouse Manager, Treasurer, Accountant |
| Description | This use case is used to add more products. |
| Pre-condition | The product is not available in the database. |
| Post-processing | The database has new products. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Assets Management | | | | |
| **Description** | |  | | | |
| **Screen Access** | | Users run program then click on **Assets Management** button | | | |
| **Screen Content** | | | | | |
| **Item** | | **Type** | **Data** | **Description** | |
| Data grid view | | Data grid view | Lookup all fields from ASSET table. | * Display all fields about the asset when the form loaded: asset code, type, asset name, quantity, manufacturer, colour, source, import date, importer, location, price. * This table is read-only, user cannot edit it. | |
| Import | | Button |  | User click on it to search | |
| Export | | Button |  |  | |
| Edit | | Button |  |  | |
| Remove | | Button |  |  | |
| Order | | Button |  |  | |
| Search | | Button |  |  | |
| Textbox | | Text field – String (50) |  |  | |
| Combo box | | Drop down list |  |  | |
| **Screen Actions** | | | | | |
| **Action Name** | | **Description** | | **Success** | **Failure** |
| Import | |  | |  |  |
| Export | |  | |  |  |
| Edit | |  | |  |  |
| Remove | |  | |  |  |
| Order | |  | |  |  |
| Search | | Find a product in the table below. | | Return the result of searching process | Message “Not found”. |

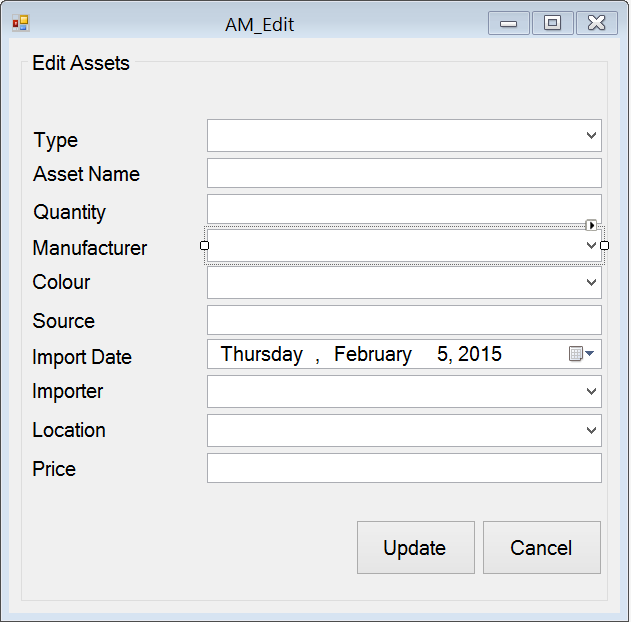
### Assets Management – Import



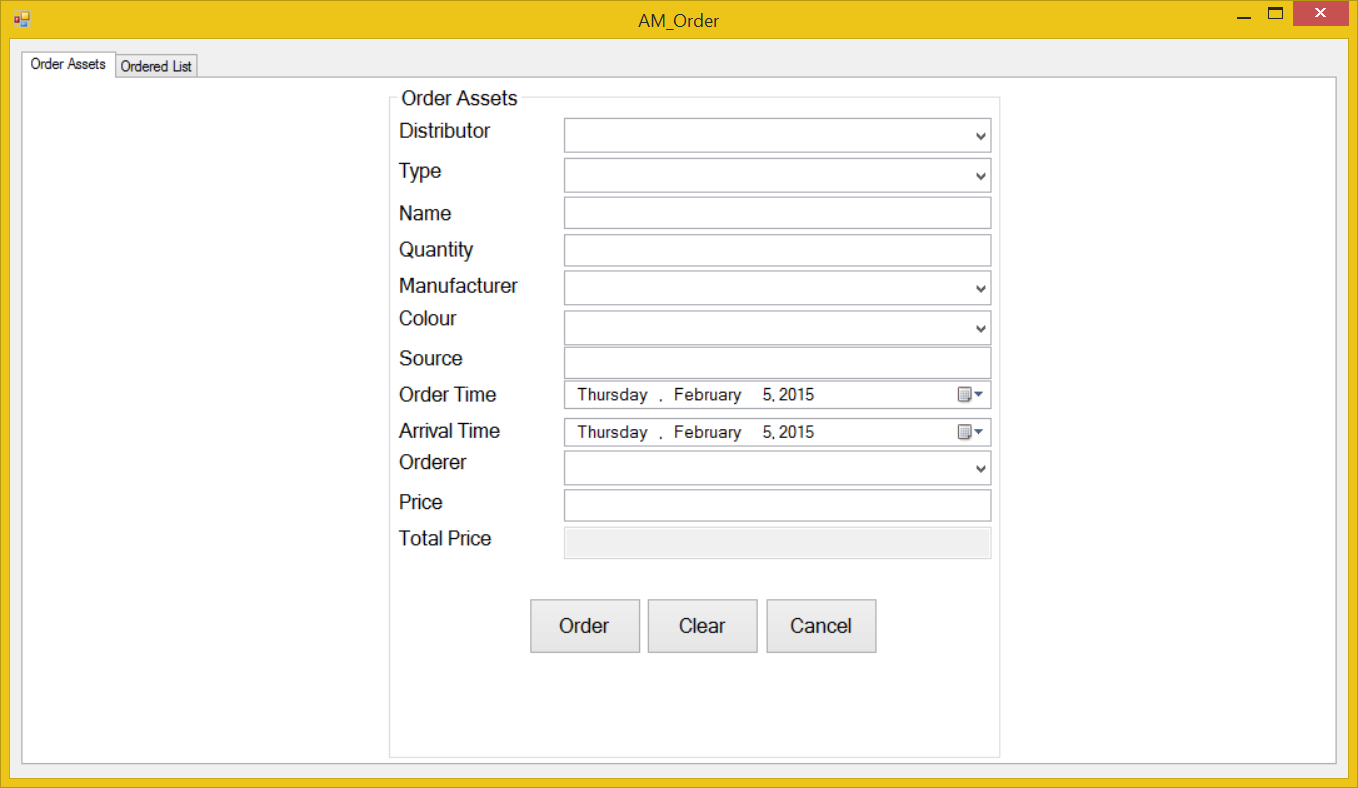
### Assets Management – Export



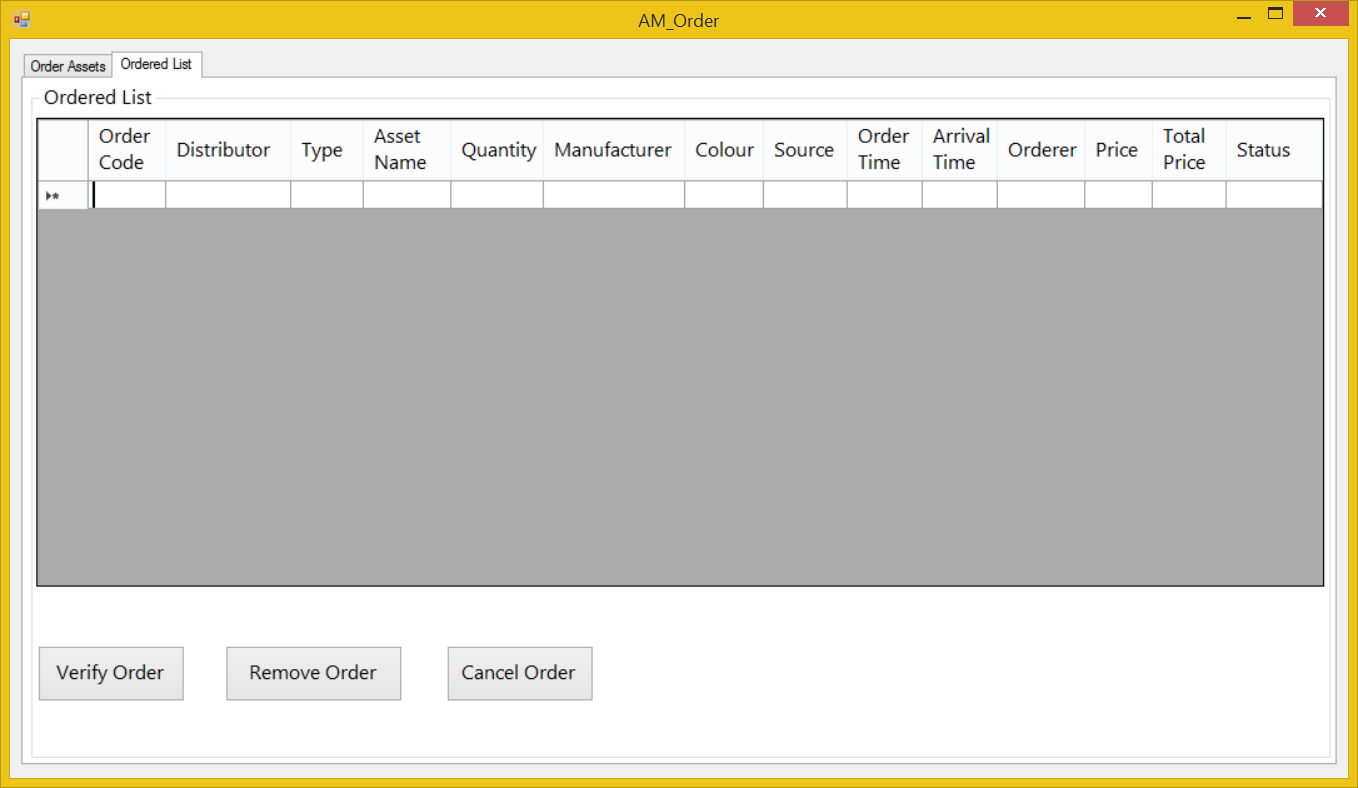
### Assets Management – Edit



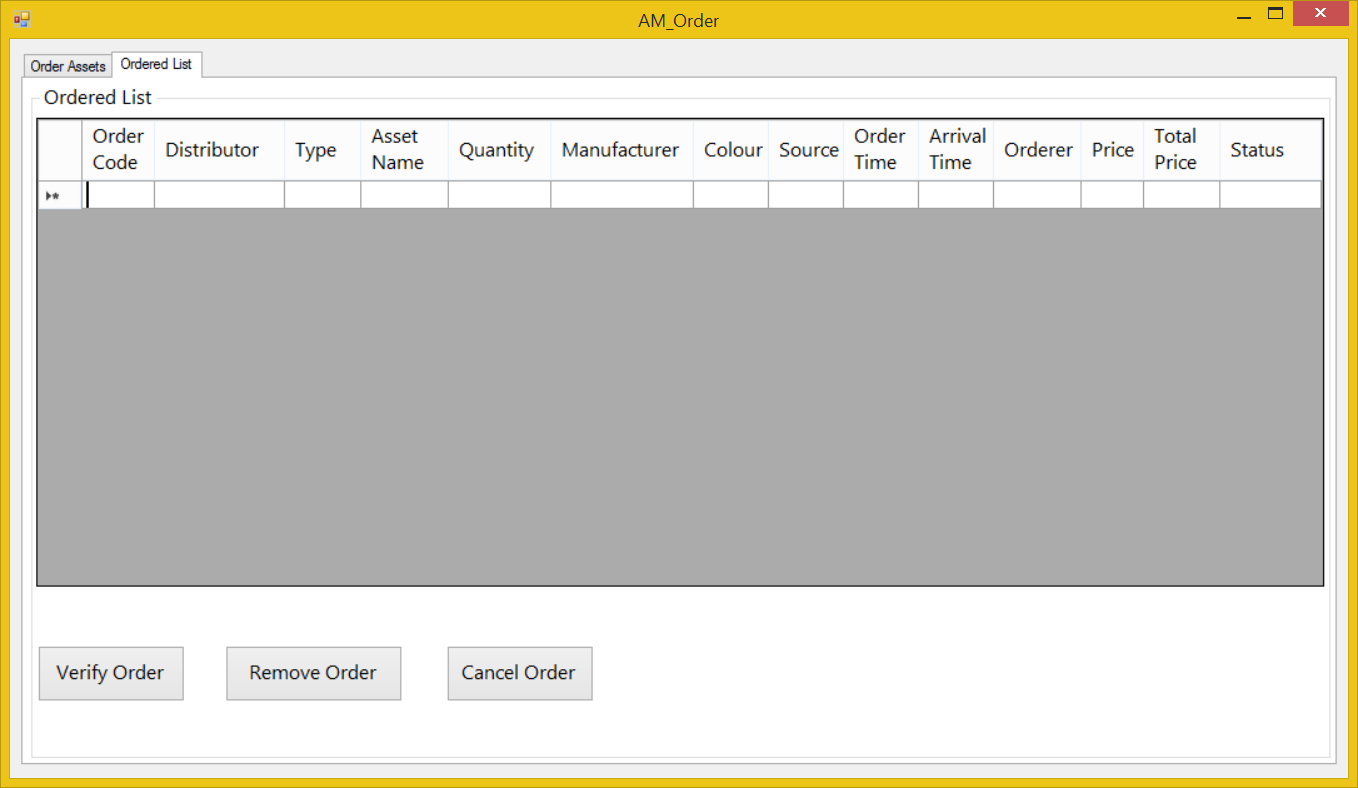
### Assets Management – Order



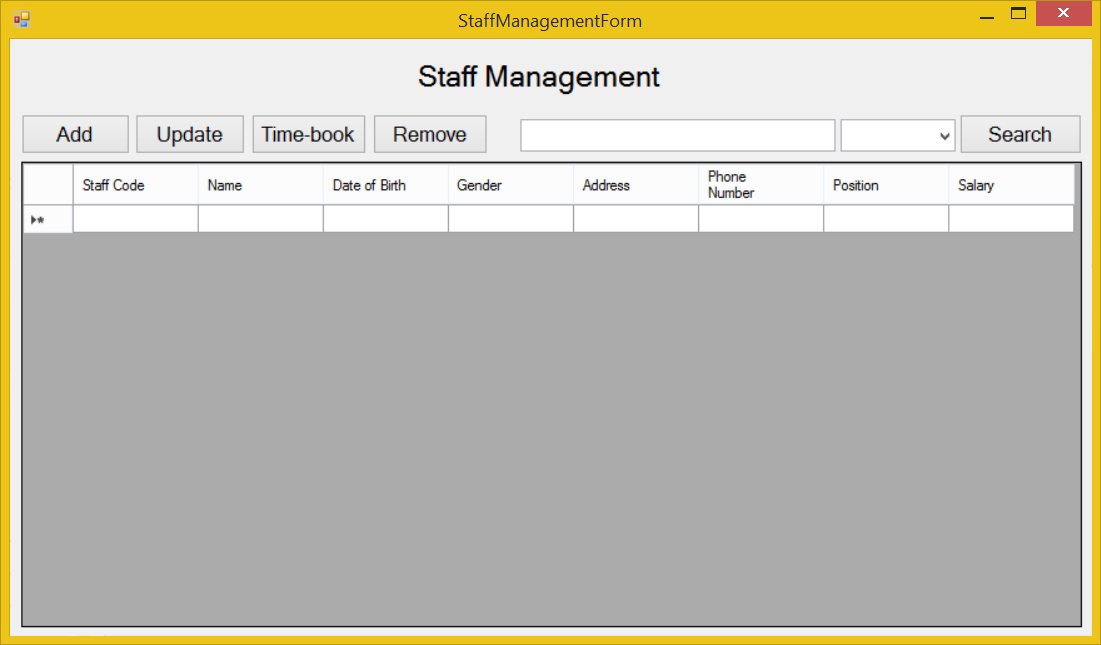
#### Order – Order Products



#### Order – Ordered List

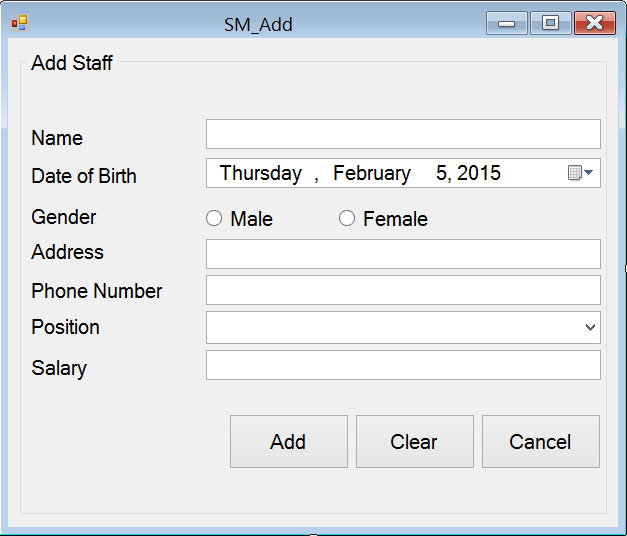


## Staff Management



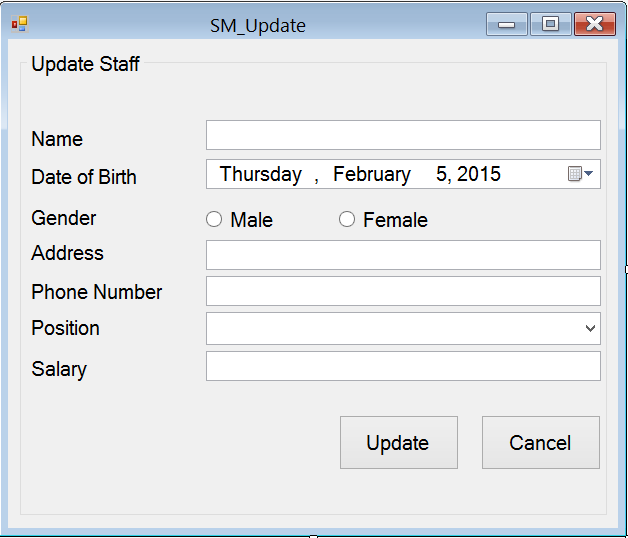
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Staff Management | | | | |
| **Description** | | Display a screen where user can manage their staff. | | | |
| **Screen Access** | | Users run program then click on **Staff Management** button. | | | |
| **Screen Content** | | | | | |
| **Item** | | **Type** | **Data** | **Description** | |
| Data grid view | | Data grid view | Lookup all fields from STAFF table. | * Display all fields about the staff when the form loaded: staff code, name, date of birth, gender, address, phone number, position, salary. * This table is read-only, user cannot edit it. | |
| Add | | Button |  | Open “Add Staff” dialog when user click it. | |
| Update | | Button |  | Open “Update Staff” dialog when user choose an item from data grid view and click this button. | |
| Time-book | | Button |  | Open “Time-book” dialog when user click it. | |
| Remove | | Button |  | Remove a staff when user choose an item from data grid view and click this button. | |
| Search | | Button |  | User click on it to search | |
| Textbox | | Text field – String (50) |  | User type their keyword to search | |
| Combo box | | Drop down list |  | Filter searching result by: Name | |
| **Screen Actions** | | | | | |
| **Action Name** | | **Description** | | **Success** | **Failure** |
| Add | | Open “Add Staff” dialog | | “Add Staff” dialog opened | Display a message “Cannot open ‘Add Staff’ dialog”. |
| Update | | Open “Update Staff” dialog | | “Update Staff” dialog opened | Display a message “Cannot open ‘Update Staff’ dialog”. |
| Time-book | | Open “Time-book” dialog | | “Time-book” dialog opened | Display a message “Cannot open ‘Time-book’ dialog”. |
| Remove | | Remove a staff | | Data grid view’s item removed. | Display a message “Cannot remove the chosen item”. |
| Search | | Find a product in the table below. | | Return the result of searching process | Display a message “Not found”. |

### Staff Management – Add



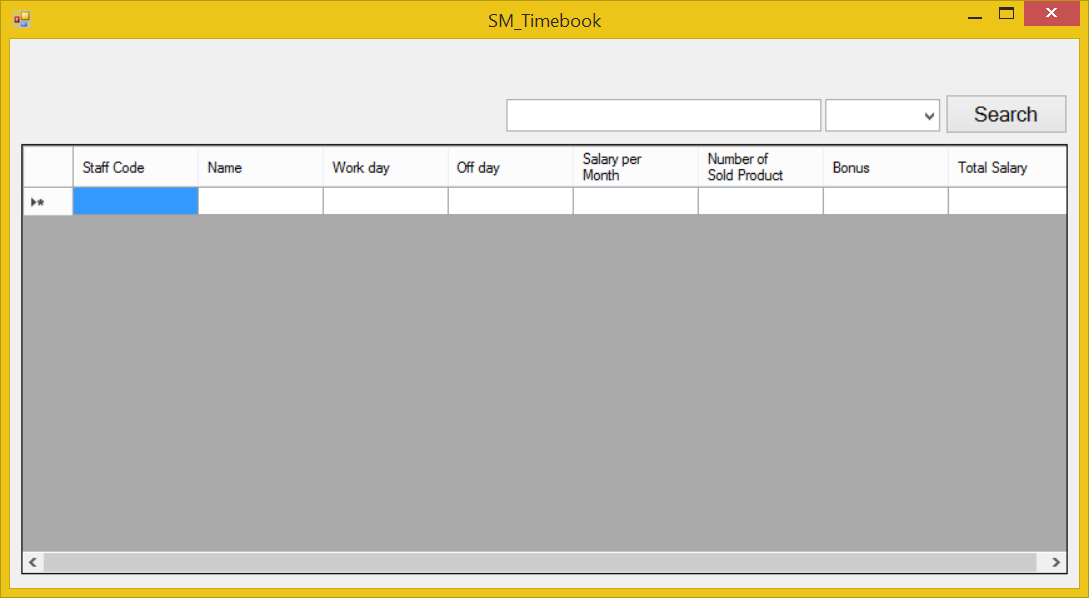
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Staff Management – Add Staff | | | | |
| **Description** | Allow Administrator and Managers Account to add new staff members. | | | |
| **Screen Access** | Users run program by click on file **Staff Management -> Add** | | | |
| **Screen Content** | | | | | |
| **Item** | **Type** | **Data** | **Description** | |
| Add Staff | String (50) |  | Name of the form | |
| Name | Text field – String (50) | Inserted into STAFF.NAME | This field is mandatory.  Name of staff member. | |
| Date of birth | Date time picker | Inserted into STAFF.DOB | User pick the date from a date time picker | |
| Gender - Male | Radio button | Inserted into STAFF.GENDER | This field is mandatory.  Gender of staff member (male) | |
| Gender - female | Radio button | Inserted into STAFF.GENDER | This field is mandatory.  Gender of staff member (female) | |
| Address | Text field – String (50) | Inserted into STAFF.ADDRESS | Address of staff member. This field is optional. | |
| Phone number | Text field – String (50) | Inserted into STAFF.PHONENUMBER | This field is mandatory and number only. Managers need staff member’s phone number to contact. | |
| Position | Dropdown list – String (50) | Inserted into STAFF.POSITION | This field is mandatory. Choose from the available position in the dropdown list. | |
| Salary | Text field – String (50) | Inserted into STAFF.SALARY | This field is mandatory and number only. | |
| Add | Button |  | Add data into database | |
| Clear | Button |  | Clear all inputted data | |
| Cancel | Button |  | Cancel “Add Staff”. | |
| **Screen Actions** | | | | | |
| **Action Name** | **Description** | | **Success** | **Failure** |
| Add | Inputted data will be saved into the DB. | | Display a message “A staff member has been added”.  Back to the “Staff Management” screen with new record on the table below (default list with all data).  When go back to the list from “Staff Management” screen, the new record will be focused on. | Display message: “Database connection error.”  Display message:  “Name must be entered.”  Display message:  “Gender must be chosen.”  Display message:  “Phone number must be entered.”  Display message:  “Position must be chosen.”  Display message:  “Salary number must be entered.” |
| Clear | Clear inputted data. | | All field cleared. | Nothing. |
| Cancel | Close “Add Staff” dialog. | | “Add Staff” dialog closed. | Nothing. |

### Staff Management – Update



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Staff Management – Update Staff | | | | |
| **Description** | Allow Administrator and Managers Account to update existing staff members. | | | |
| **Screen Access** | Users run program by click on file **Staff Management -> Update** | | | |
| **Screen Content** | | | | | |
| **Item** | **Type** | **Data** | **Description** | |
| Update Staff | String (50) |  | Name of the form | |
| Name | Text field – String (50) | Look up from STAFF.NAME | This field is mandatory.  Name of staff member. | |
| Date of birth | Date time picker | Look up from STAFF.DOB | User pick the date from a date time picker | |
| Gender - Male | Radio button | Look up from STAFF.GENDER | This field is mandatory.  Gender of staff member (male) | |
| Gender - female | Radio button | Look up from STAFF.GENDER | This field is mandatory.  Gender of staff member (female) | |
| Address | Text field – String (50) | Look up from STAFF.ADDRESS | Address of staff member. This field is optional. | |
| Phone number | Text field – String (50) | Look up from STAFF.PHONENUMBER | This field is mandatory and number only. Managers need staff member’s phone number to contact. | |
| Position | Dropdown list – String (50) | Look up from STAFF.POSITION | This field is mandatory. Choose from the available position in the dropdown list. | |
| Salary | Text field – String (50) | Look up from STAFF.SALARY | This field is mandatory and number only. | |
| Add | Button |  | Add data into database | |
| Cancel | Button |  | Cancel “Add Staff”. | |
| **Screen Actions** | | | | | |
| **Action Name** | **Description** | | **Success** | **Failure** |
| Update | Inputted data will be saved into the DB. | | Display a message “A staff member has been updated”.  Back to the “Staff Management” screen with new record on the table below (default list with all data).  When go back to the list from “Staff Management” screen, the new record will be focused on. | Display message: “Database connection error.”  Display message:  “Name must be entered.”  Display message:  “Phone number must be entered.”  Display message:  “Position must be chosen.”  Display message:  “Salary number must be entered.” |
| Cancel | Close “Update Staff” dialog. | | “Update Staff” dialog closed. | Nothing. |

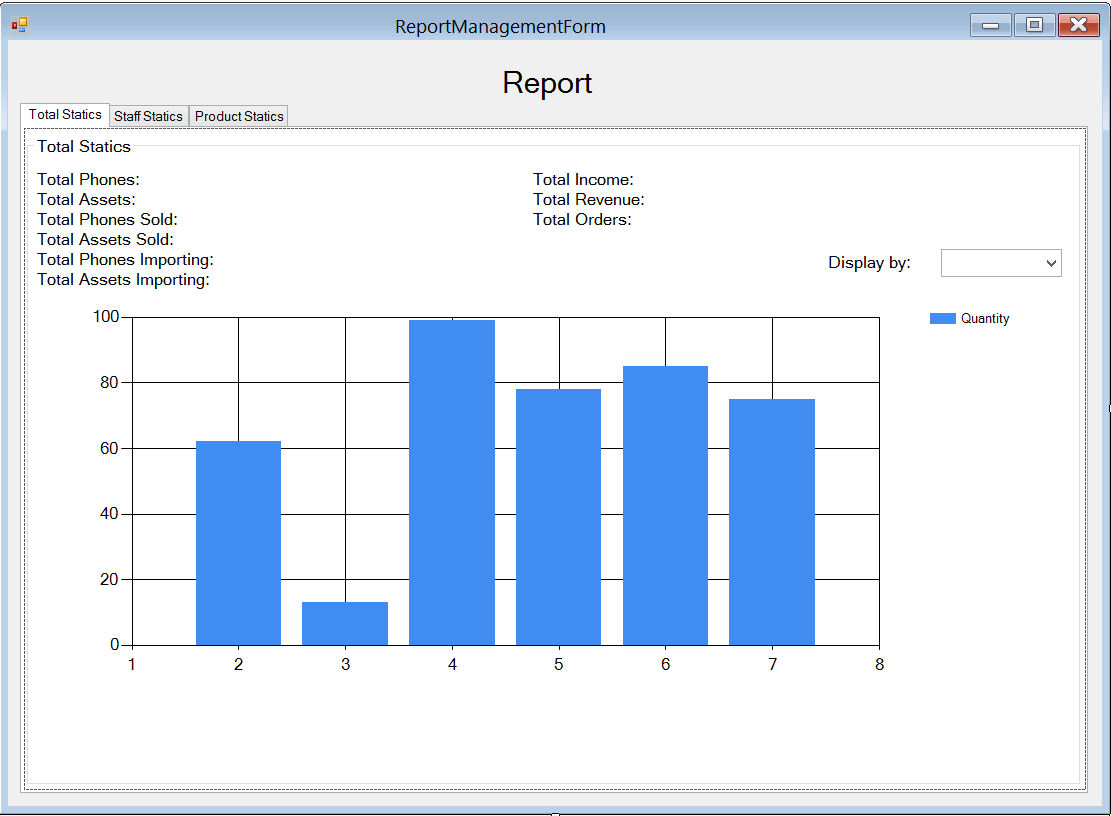
### Staff Management – Time-book



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Staff Management – Time-book. | | | | |
| **Description** | | Display a screen where user can manage staff member’s jobs. | | | |
| **Screen Access** | | Users run program then click on **Staff Management -> Time-book** | | | |
| **Screen Content** | | | | | |
| **Item** | | **Type** | **Data** | **Description** | |
| Data grid view | | Data grid view | Lookup all fields from TIMEBOOK table. | * Display all fields about the staff’s time-book when the form loaded: staff code, name, work day, off day, salary per month, number of product sold, bonus, total salary. * This table is read-only, user cannot edit it. | |
| Search | | Button |  | User click on it to search | |
| Textbox | | Text field – String (50) |  | User type their keyword to search | |
| Combo box | | Drop down list |  | Filter searching result by: Name | |
| **Screen Actions** | | | | | |
| **Action Name** | | **Description** | | **Success** | **Failure** |
| Search | | Find a product in the table below. | | Return the result of searching process | Display a message “Not found”. |

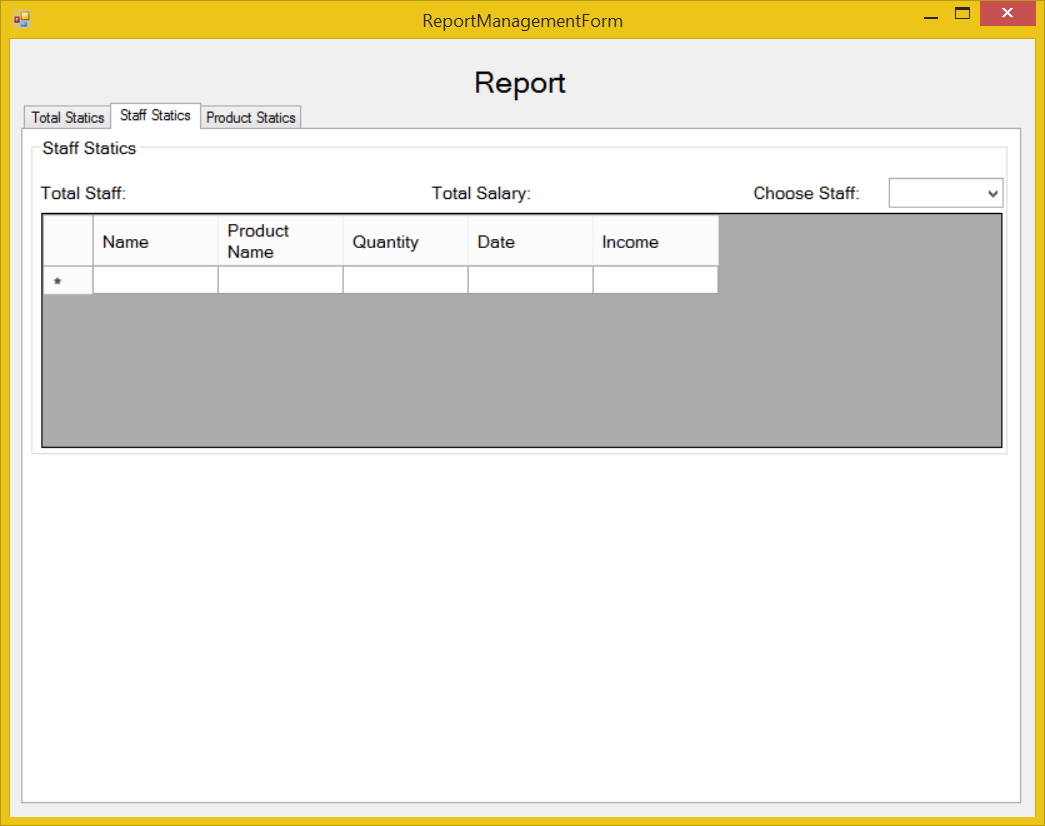
## Report

### Report – Total Statics



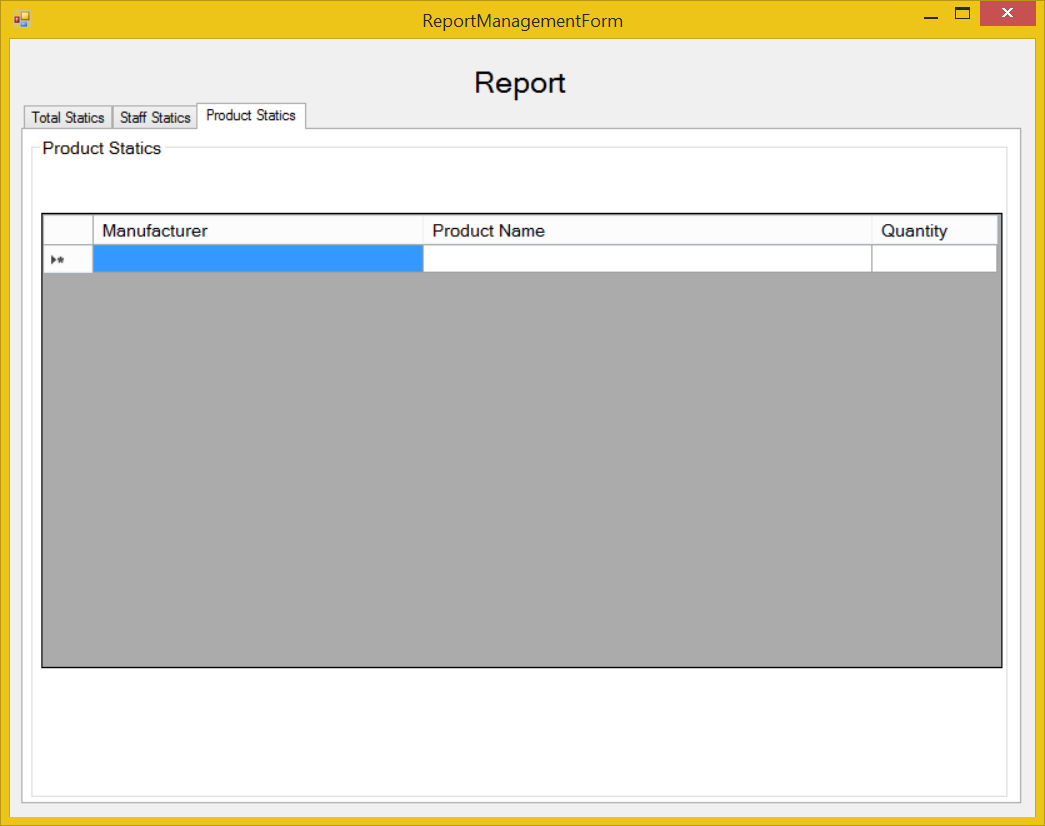
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Report Management(total statics) | | | | |
| **Description** | | Allow Administrator and Managers view their total statics in a month. | | | |
| **Screen Access** | | Users run program then click on **Report** button | | | |
| **Screen Content** | | | | | |
| **Item** | | **Type** | **Data** | **Description** | |
| Tab Total Statics | | Tab |  | Display tab total statics | |
| Total Phone | | Label – String (50) | Count all available phones in table PHONE | Display total available phones in DB. | |
| Total Assets | | Label – String (50) | Count all available phones in table ASSET | Display total available assets in DB. | |
| Total Phone Sold | | Label – String (50) |  | Display total phones sold. | |
| Total Assets Sold | | Label – String (50) |  | Display total assets sold. | |
| Total Phone Importing | | Label – String (50) |  | Display phones which are importing. | |
| Total Assets Importing | | Label – String (50) |  | Display assets which are importing. | |
| Total Income | | Label – String (50) |  | Display total income. | |
| Total Revenue | | Label – String (50) |  | Display Total Revenue | |
| Total Orders | | Label – String (50) |  | Display Total Orders | |
| Display by | | Drop down list – String (50) |  | Display information in chart below by total phones, assets; total phones, assets sold; total importing phones, assets; total income, revenue, orders. | |
| Chart | | Chart |  | Display data when user choose an item from dropdown list.  X-axis is days of a month.  Y-axis is quantity.  The chart in the image above is just an example. | |
| **Screen Actions** | | | | | |
| **Action Name** | | **Description** | | **Success** | **Failure** |
| Choose | | Choose an item from combo box “Display by:” | | Display information to the chart below. | Display message: “Database connection error.” |

### Report – Staff Statics



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Report – Staff Statics | | | | |
| **Description** | Allow Administrator and Managers view their statics about staff members. | | | |
| **Screen Access** | Users run program by click on file **Report -> Staff Statics** | | | |
| **Screen Content** | | | | | |
| **Item** | **Type** | **Data** | **Description** | |
| Staff Statics | Tab |  | Tab name | |
| Staff Statics | Label – String (50) |  | Name of the staff statics group | |
| Total Staff | Label – String (50) | Look up from STAFF, count all of available staff members in DB except Administrator. | Display total available staff members in DB. | |
| Total Salary | Label – String (50) |  | Display total available salary of all staff members in DB. | |
| Choose Staff | Combo box | Look up from STAFF.STAFFCODE | Choose a staff code from the dropdown list to view information at a specific staff member in data grid view below. | |
| Data grid view | Data grid view |  | * Display all fields about the staff when the staff code is chose: Name, product name, quantity, date, income. * This table is read-only, user cannot edit it. | |
| **Screen Actions** | | | | | |
| **Action Name** | **Description** | | **Success** | **Failure** |
| Choose. | Choose an item from combo box “Choose Staff:” | | Display information to the data grid view below. | Display message: “Database connection error.” |

### Report – Product Statics



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Screen** | Report – Products Statics | | | | |
| **Description** | Allow Administrator and Managers view their statics about products. | | | |
| **Screen Access** | Users run program by click on file **Report -> Product Statics** | | | |
| **Screen Content** | | | | | |
| **Item** | **Type** | **Data** | **Description** | |
| Products Statics | Tab |  | Tab name | |
| Products Statics | Label – String (50) |  | Name of the Products statics group | |
| Data grid view | Data grid view | Look up from PHONE.MANUFACTURER and ASSET.MANUFACTURER join with PHONE.NAME and ASSET.NAME then count all them. | * Display all fields about the Products when the form loaded: Manufacturer, product name, quantity. * This table is read-only, user cannot edit it. | |
| **Screen Actions** | | | | | |
| **Action Name** | **Description** | | **Success** | **Failure** |