

Electronics and Hardware Management System

General information:

This is an Inventory Management System which is used to manage all the products that are available in a shop or in a warehouse. This program will keep track of all the products their quantity, user ratings, and their price. This system will mostly be used to store information of products like hardware and electronics.

System overview:

The system will help the user in adding the products detail in a tabular format. Using a table, a user can either add a product, search for a product based on price and category. The user will also be allowed delete a product, sort a product based on price, product number, and total stocks in an ascending order. The user can also import data into the table which is previously saved as a text file. Similarly, the user can also export a file i.e. saving values of a table in a text file.

Getting started:

The first and foremost thing necessary for smooth running of the program is importing the table. The imported table will have previously stored data. The table can be imported into the program using a shortcut key “**CTRL + I**” or from a menu item under file menu. There are various other methods as well like clicking on an Import Button on dashboard menu the import button is also present on add product menu. All the buttons have the same functionality.



Figure 1: Import Button

After successfully importing a table a message with suitable message will be displayed.

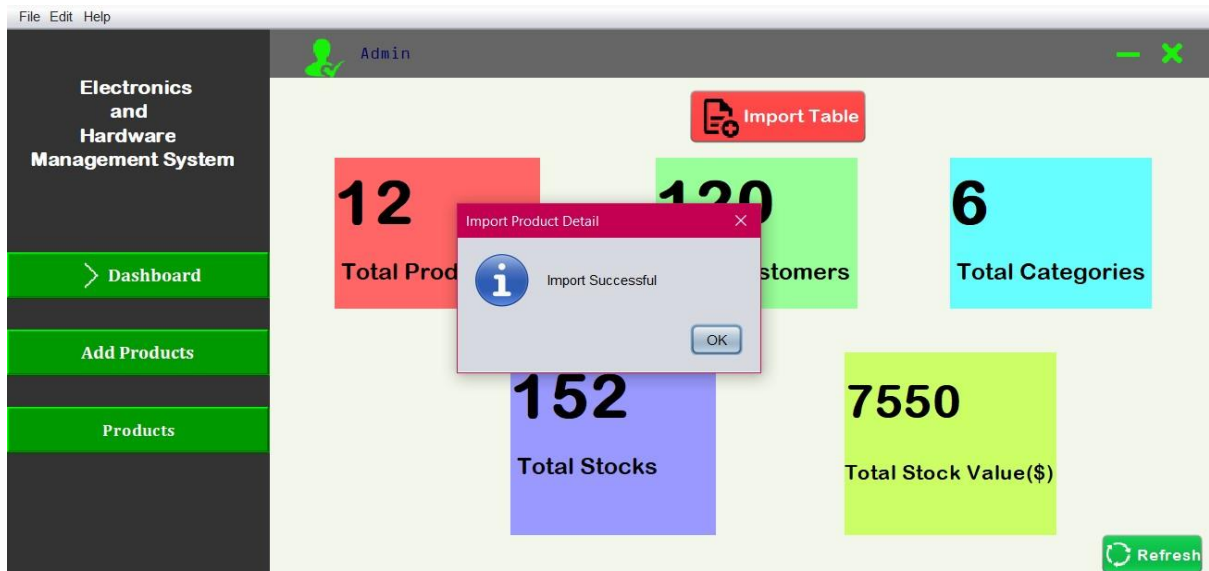


Figure 2: Successful Import

Adding a new product:

A new product will be added only when the table is imported first. If the table has not been imported, then a message box with suitable message will be displayed.

Product can be added using a shortcut “**CTRL + T**” or from add to table menu item present on edit menu from menu bar. There are various other methods as well like clicking add button on add product menu after.

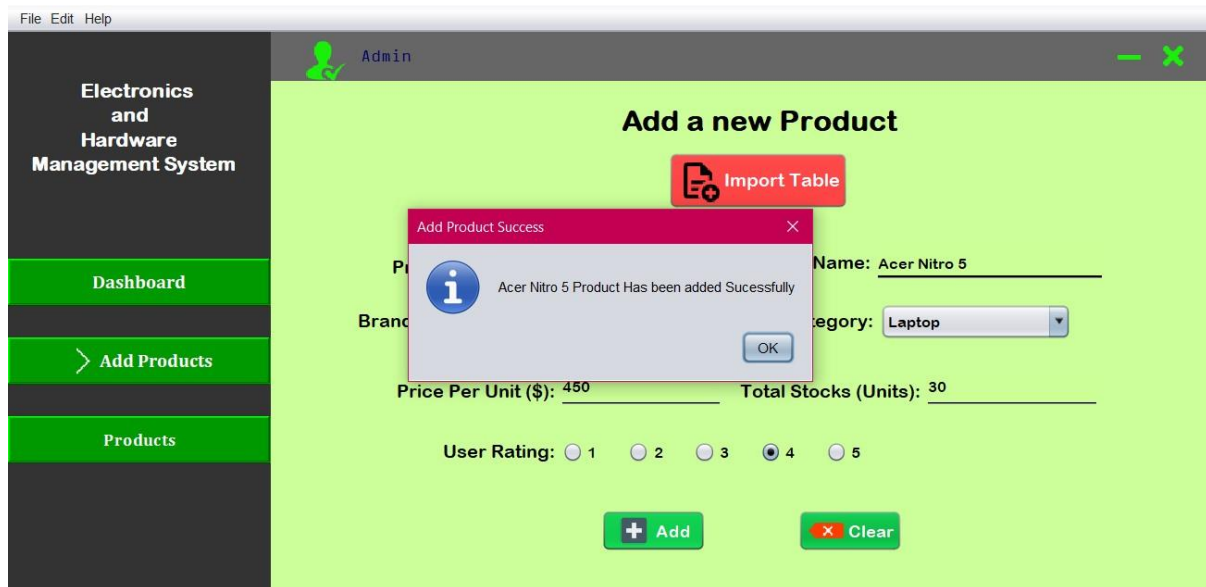


Figure 3: Adding a product

Few things to make sure before adding a product:

1. Table must first be imported.
2. None of the entry field must be left empty.
3. The product number, price, and total stock must be a numeric value.
4. The product with product number which is already in the table will not be added.

A detailed message box will be displayed if above mentioned rules are not followed.

The message box will be displayed depending upon the rule that has been broken.

Updating values on the dashboard menu

The values on the dashboard menu will be updated as you import the table. After the table has been imported then the values will be automatically updated. The values are set after doing some operation on table rows.

Values can also be updated after clicking on a refresh button which is located on bottom-left corner of a dashboard menu.

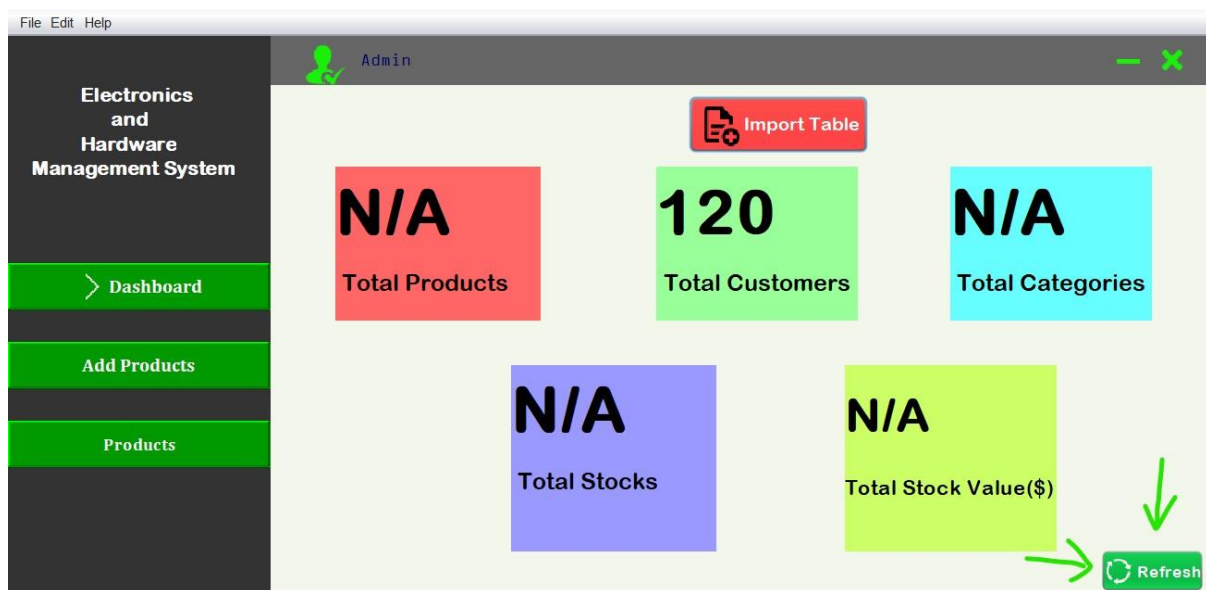


Figure 4: Refresh Button

The values will also be updated when you import the table as well as when you delete a product.

Deleting a product

The product can be removed from the table after clicking on a delete button which is located on products menu at the bottom-left besides export button. The row which has been selected by the user will be deleted.

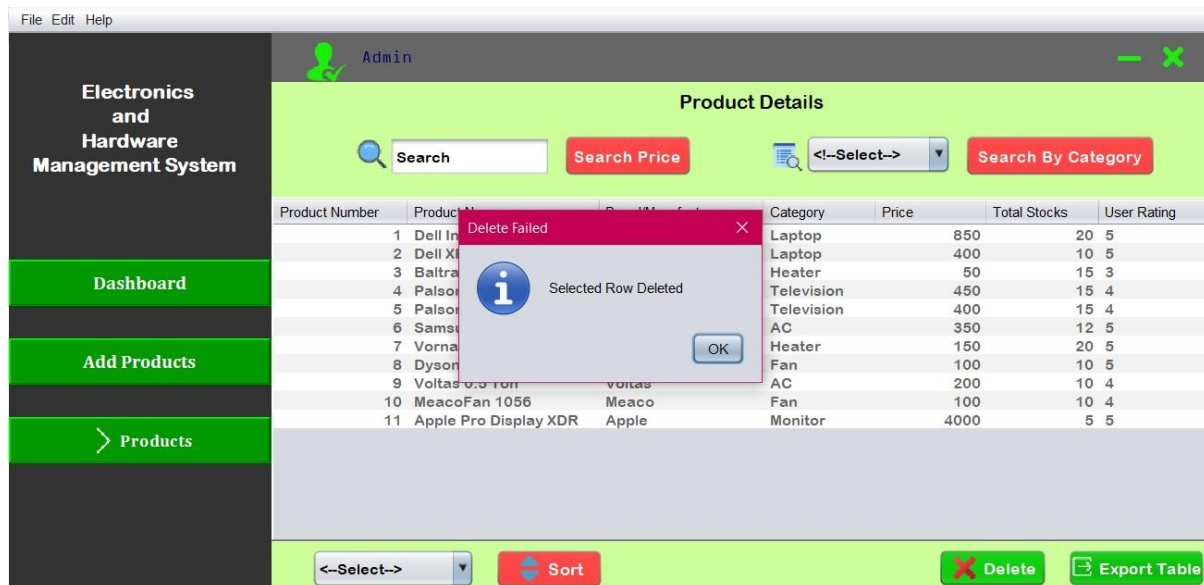


Figure 5: Delete a product

If the user has not selected any row but still click on delete button, then a message box with suitable message will be displayed.

The most important thing is to import the table first. If the table has not been imported but user clicks on delete button, then an error message dialog box with suitable message will be displayed.

Searching for a product based on price

The product can be found out based on price using a search button from the table of values of product. Firstly, input the amount you want to search for in the product table. If the product has been found, then product will be displayed in a message box with suitable message.

Few things to make sure before searching based on price

1. Table must first be imported.
2. The entered amount must be in numeric format. Characters are not allowed.
3. The entered amount must not be 0 or less than zero.
4. The text field must not be left empty.

If the above-mentioned rules are not followed, then error message dialog box with suitable message will be displayed.

Searching for products based on category

Various products can be found out based on category using a search button from the table. To specify the category to search for, this can be achieved using a combo box in a products menu. Select a category to search for the result will then be displayed on the message box. If no product is found, then error message box with suitable error message will be displayed.

Sorting products in ascending order

Products can be sorted in an ascending order using a sort button on products menu which is located at the bottom of the product menu. Products can be sorted based on price, product number, and total stocks. The method to sort product can be selected through a combo box.

Exporting products

All the values that are located on the table can be displayed on a text file using an export button which is located at the bottom of the product menu. In order to export the values table must be imported first. Then only export will work. The exported file will be saved on .txt format.