

## INTRODUCTION

This java desktop application provides to the user keeping track of product and it's stocks. Main goal of the program to sale products those are in the user inventory. Also owner of the program can create profiles for his/her customers. Indeed, this program provides to analyse each customer.

## MAIN SCREEN

- [Add to Shopping List](#)
- [Add Quantity](#)
- [Change Quantity](#)
- [Change VAT](#)
- [Drop Product from Shopping Basket](#)
- [Product Packages Defination](#)
- [Clear Button](#)
- [Enter Cash](#)
- [Search a Product](#)
- [Select a Customer](#)
- [Payment and Print Order List](#)

## PRODUCT SCREEN

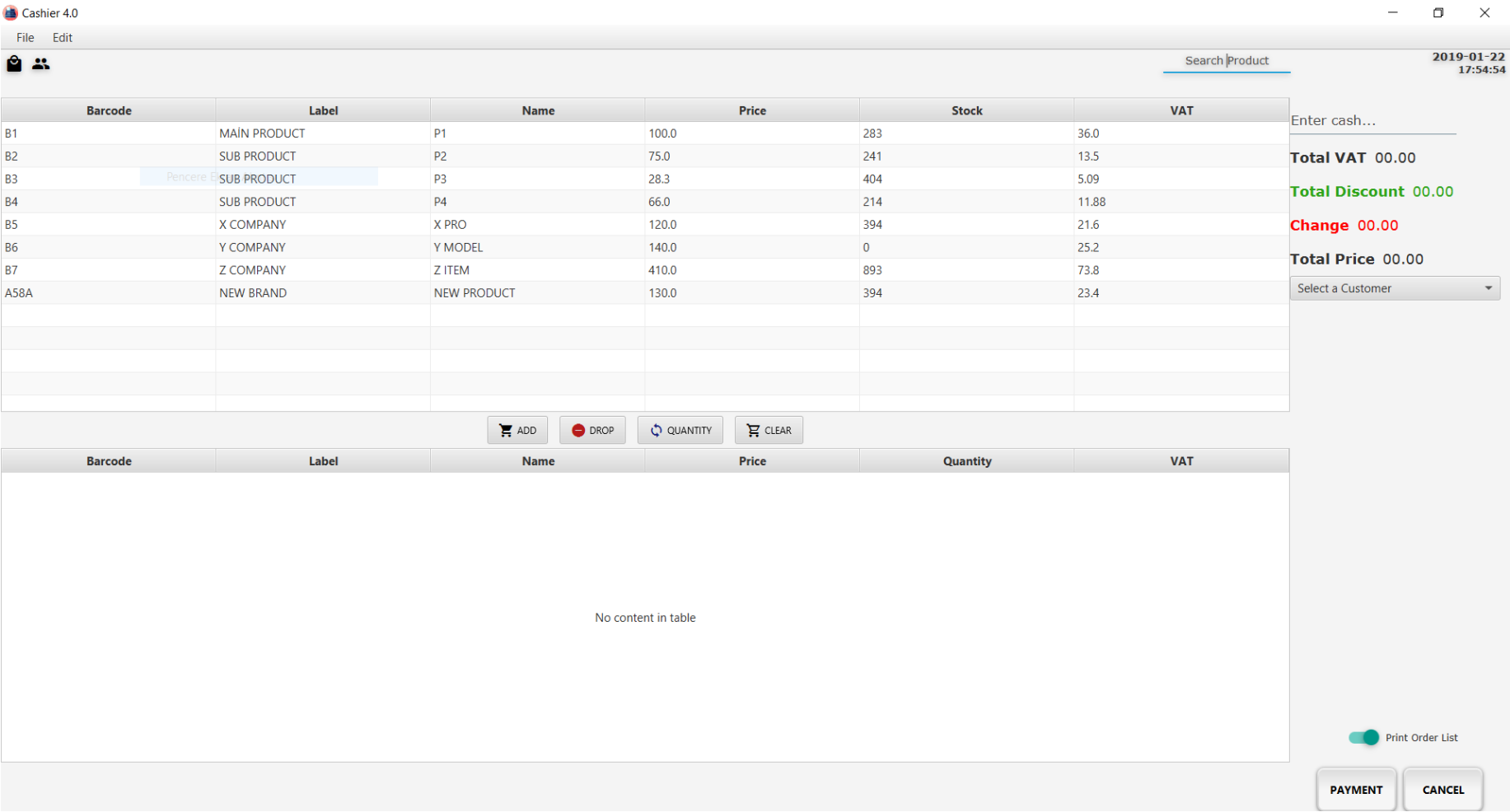
- [Create New Product](#)
- [Edit Product](#)
- [Cancel Editing](#)
- [Define Product Package](#)
- [Delete Product](#)
- [Search Product](#)

## CUSTOMER SCREEN

- [Create New Customer](#)
- [Edit Customer](#)
- [Delete Customer](#)
- [Search Product](#)
- [Analysis of Customer](#)

MAIN SCREEN

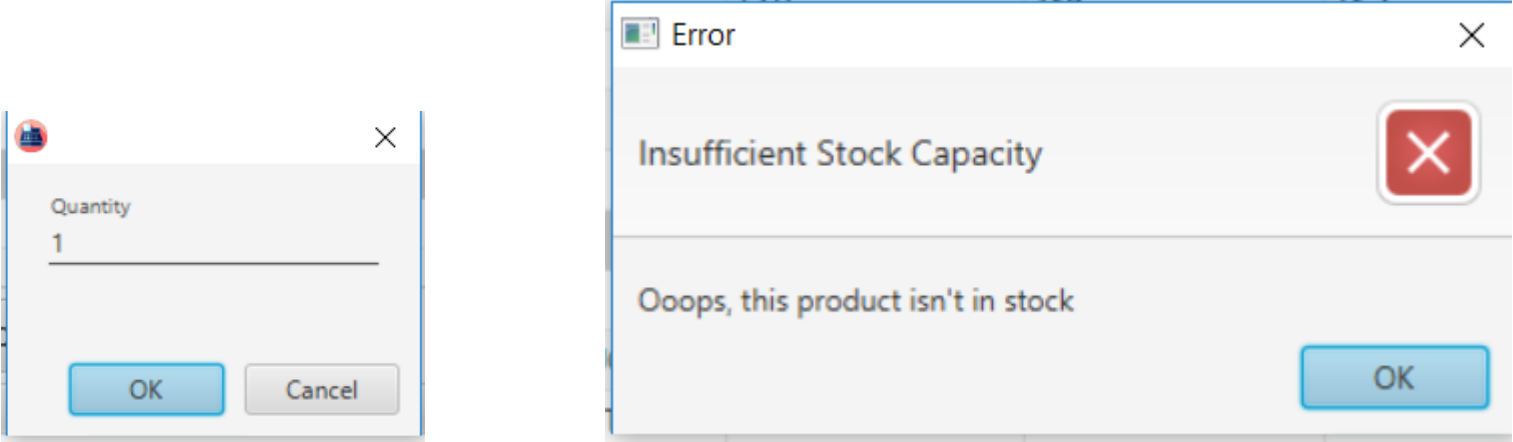
On the top table user can see all products in the inventory.  
The below table is customer’s **shopping basket**.  
On the right side there are vary of information about the sale (Total VAT, Total Discount, Change and Total Price).



Products can be added into to he inventory by following these two steps two different ways.  
After selecting a product the user should **click on** **ADD** button or **right click** on a product and click **Add to Shopping List** choice.



After following those steps the user will encounter with **Quantity** screen. This screen allows the user to enter quantity of desired product  
If desired quantity is **out of stock capacity** then this product will not be added into the shopping basket.



Cashier 4.0

FileEdit

2019-01-23  
14:55:13

Search Product

Enter cash...  
160

Total VAT 23.4  
Total Discount 00.00  
Change 6.600006  
Total Price 153.4

Select a Customer

Barcode	Label	Name	Price	Stock	VAT
B1	MAIN PRODUCT	P1	100.0	283	36.0
B2	SUB PRODUCT	P2	75.0	241	13.5
B3	SUB PRODUCT	P3	28.3	404	5.09
B4	SUB PRODUCT	P4	66.0	214	11.88
B5	X COMPANY	X PRO	120.0	394	21.6
B6	Y COMPANY	Y MODEL	140.0	0	25.2
B7	Z COMPANY	Z ITEM	410.0	893	73.8
A58A	NEW BRAND	NEW PRODUCT	130.0	394	23.4

ADD

DROP

QUANTITY

CLEAR

Barcode	Label	Name	Price	Quantity	VAT
A58A	NEW BRAND	NEW PRODUCT	130.0	1	23.4

After added products into the shopping basket, the program will calculate total price and vat according to content of shopping basket.

- Total Price** calculating product price + product vat.
- If the user **enter cash** that the customer give it to pay then the program will calculate how much user should give it back (**change**) to the customer.

Cashier 4.0

FileEdit

2019-01-23  
14:58:51

Search Product

Enter cash...  
160

Total VAT 23.4  
Total Discount 00.00  
Change 6.600006  
Total Price 153.4

Select a Customer

Barcode	Label	Name	Price	Stock	VAT
B1	MAIN PRODUCT	P1	100.0	283	36.0
B2	SUB PRODUCT	P2	75.0	241	13.5
B3	SUB PRODUCT	P3	28.3	404	5.09
B4	SUB PRODUCT	P4	66.0	214	11.88
B5	X COMPANY	X PRO	120.0	394	21.6
B6	Y COMPANY	Y MODEL	140.0	0	25.2
B7	Z COMPANY	Z ITEM	410.0	893	73.8
A58A	NEW BRAND	NEW PRODUCT	130.0	394	23.4

ADD

DROP

QUANTITY

CLEAR

Barcode	Label	Name	Price	Quantity	VAT
A58A	NEW BRAND	NEW PRODUCT	130.0	1	23.4

Change Quantity

Change VAT

Drop

If the user will enter wrong quantity or if the user desire to **Change VAT** or **Change Quantity** of interested product by right clicking on that product or after

selected that product user can use those buttons 

DROP

QUANTITY

 to **delete product** from the shopping basket.

**Search field** provides to the user find desired product quickly.

FileEdit

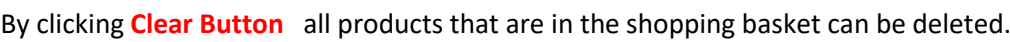
Search Product

Barcode	Label	Name	Price	Stock	VAT
B1	MAIN PRODUCT	P1	100.0	283	36.0
B2	SUB PRODUCT	P2	75.0	241	13.5
B3	SUB PRODUCT	P3	28.3	404	5.09
B4	SUB PRODUCT	P4	66.0	214	11.88
B5	X COMPANY	X PRO	120.0	394	21.6
B6	Y COMPANY	Y MODEL	140.0	0	25.2
B7	Z COMPANY	Z ITEM	410.0	893	73.8
A58A	NEW BRAND	NEW PRODUCT	130.0	394	23.4

FileEdit

com

Barcode	Label	Name	Price	Stock	VAT
B5	X COMPANY	X PRO	120.0	394	21.6
B6	Y COMPANY	Y MODEL	140.0	0	25.2
B7	Z COMPANY	Z ITEM	410.0	893	73.8

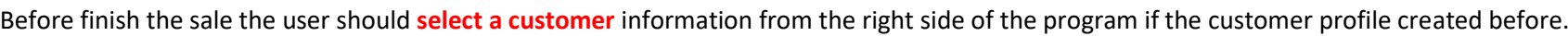


### Example:

**Total Price** of the product will be calculated  $20+20+7 = 47\$$   
In this vat assumed as 0\$.

If the user wants to add that main products into the shopping basket then it's sub products will be added automatically into the shopping basket.

User will not be able to **delete** those sub products from the shopping basket **if** the main product is still in the shopping basket.  
-Sub products can be added by itself and can be deleted from the shopping basket if it did not come with the main product



12345 EMRE SERBEST

12345 EMRE SERBEST

242425 İZZET ASLAN

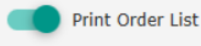
34925620242 KAYA OĞUZ

Print Order List

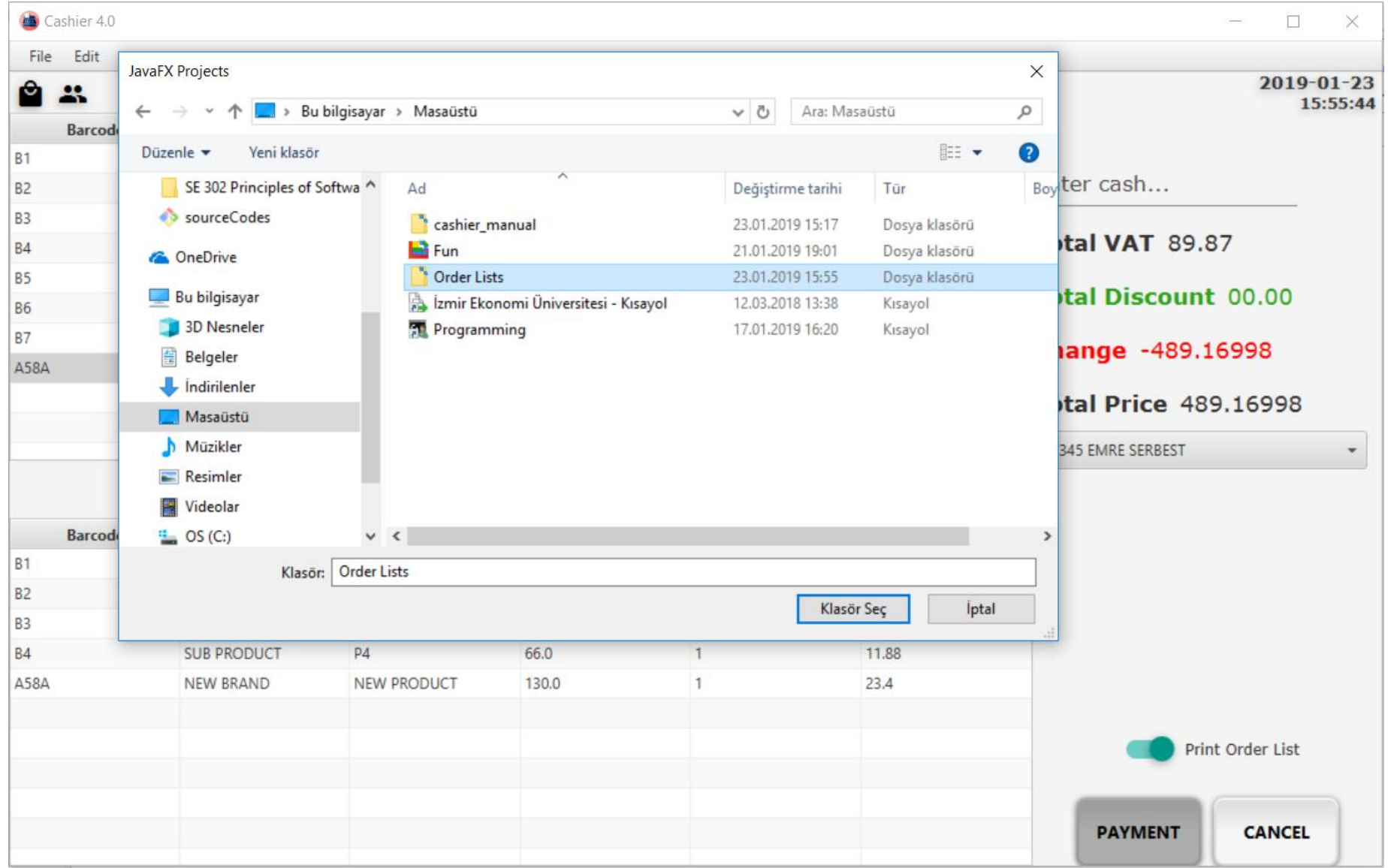
PAYMENT

CANCEL

To finish the shopping click on **PAYMENT** button. If the user wants to **print order** details onto **.txt** files the user should make sure that button must stay like this.



Then directory should be selected to create **.txt** file.



#### Order Lists

Ad	Değiştirme tarihi	Tür	Boyut
EMRE-SERBEST-1234523-01-2019	23.01.2019 15:55	Metin Belgesi	1 KB

EMRE-SERBEST-1234523-01-2019 - Not Defteri

Dosya Düzen Biçim Görünüm Yardım

CUSTOMER:EMRE SERBEST

DATE:23/01/2019

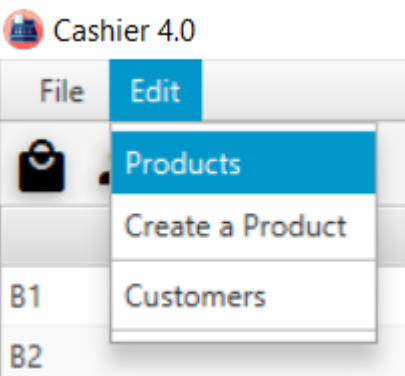
HOURL:15:54:29


BARCODE	LABEL	NAME	QUANTITY	UNIT PRICE	UNIT VAT	SUB TOTAL PRICE
A58A	NEW BRAND	NEW PRODUCT	1	130.0	23.4	130.0
B1	MAIN PRODUCT	P1	1	100.0	36.0	100.0
B2	SUB PRODUCT	P2	1	75.0	13.5	75.0
B3	SUB PRODUCT	P3	1	28.3	5.09	28.3
B4	SUB PRODUCT	P4	1	66.0	11.88	66.0

TOTAL VAT:89.87  
TOTAL PRICE:399.3

PRODUCT SCREEN

- [Create New Product](#)
- [Edit Product](#)
- [Cancel Editing](#)
- [Define Product Package](#)
- [Delete Product](#)
- [Search Product](#)



The user can reach product screen from main screen by clicking  button on the tool bar. or by following **Edit/Products** path.

Here is the products screen.

PRODUCTS

Search...

Barcode	Label	Name	Stock	Selling Price	Buying Price	VAT
B1	MAIN PRODUCT	P1	281	100.0	145.0	36.0
B2	SUB PRODUCT	P2	239	75.0	25.0	13.5
B3	SUB PRODUCT	P3	402	28.3	9.99	5.09
B4	SUB PRODUCT	P4	212	66.0	100.0	11.88
B5	X COMPANY	X PRO	394	120.0	40.0	21.6
B6	Y COMPANY	Y MODEL	0	140.0	35.0	25.2
B7	Z COMPANY	Z ITEM	893	410.0	290.0	73.8
A58A	NEW BRAND	NEW PRODUCT	390	130.0	256.0	23.4

Create

Edit

Delete

Barcode

Label

Product Name

Stock

Selling Price

Buying Price

VAT

Sub Product List

Barcode	Label	Name	Price	Quantity
No content in table				

Close

After filled up required fields the user can create new product.

Create

Edit

Delete

Barcode

Label

Product Name

Stock

Selling Price

Buying Price

VAT

N001

MY COMPANY

MY PRODUCT

100


150

99.99

VAT field will be calculated as %18 of selling price if the user doesn not fill it up.

Barcode	Label	Product Name	Stock	Selling Price	Buying Price	VAT
Cannot be empty	Cannot be empty	Cannot be empty	Cannot be empty	Cannot be empty	Cannot be empty	Cannot be empty

Barcode	Label	Name	Stock	Selling Price	Buying Price	VAT
B1	MAiN PRODUCT	P1	281	100.0	145.0	36.0
B2	SUB PRODUCT	P2	239	75.0	25.0	13.5
B3	SUB PRODUCT	P3	402	28.3	9.99	5.09
B4	SUB PRODUCT	P4	212	66.0	100.0	11.88
B5	X COMPANY	X PRO	394	120.0	40.0	21.6
B6	Y COMPANY	Y MODEL	0	140.0	35.0	25.2
B7	Z COMPANY	Z ITEM	893	410.0	290.0	73.8
A58A	NEW BRAND	NEW PRODUCT	390	130.0	256.0	23.4
N001	MY COMPANY	MY PRODUCT	100	150.0	99.99	27.0

To **Edit a product** the user must select interested product on the products table then should click on edit button  .

Then user can change any defined information in the past. After changed necessary information the user must click Update button.

Update

N001	MY COMPANY	MY PRODUCT	100	150.0	99.99	27.0
------	------------	------------	-----	-------	-------	------

Create

Edit

Delete

+


?


-

Cancel

Update

Barcode	Label	Product Name	Stock	Selling Price	Buying Price	VAT
N001	MY COMPANY	MY EDITED PRODUCT	200	200.0	99	

Or the user may **Cancel** editing process by clicking Cancel Button  .

To **define product package** the user should select a product that wants be defined as a main product after that click on edit button  .

Barcode	Label	Name	Stock	Selling Price	Buying Price	VAT
B1	MAiN PRODUCT	P1	281	100.0	145.0	36.0
B2	SUB PRODUCT	P2	239	75.0	25.0	13.5
B3	SUB PRODUCT	P3	402	28.3	9.99	5.09
B4	SUB PRODUCT	P4	212	66.0	100.0	11.88
B5	X COMPANY	X PRO	394	120.0	40.0	21.6
B6	Y COMPANY	Y MODEL	0	140.0	35.0	25.2
B7	Z COMPANY	Z ITEM	893	410.0	290.0	73.8
A58A	NEW BRAND	NEW PRODUCT	390	130.0	256.0	23.4
N001	MY COMPANY	MY PRODUCT	100	150.0	99.99	27.0

Create

Edit

Delete

+

?

-




Cancel

Update

Barcode	Label	Product Name	Stock	Selling Price	Buying Price	VAT
N001	MY COMPANY	MY PRODUCT	100	150.0	99.99	27.0

MY COMPANY MY PRODUCT Sub Products List


Barcode	Label	Name	Price	Quantity
No content in table				

After clicking on edit button    buttons will be activated. Now editing mode is on and while editing mode is on the user can define any product (apart from editing product –main product-) as a sub product of editing product.

To define a product as a sub product the user must select a product on top table.

In this example our main product's (editing product) name is **MY PRODUCT** and we are going to define **X PRO** as sub product.



To add X PRO as sub product first select X PRO and then click on  button then enter desired quantity here.

Quantity

3

OK

Cancel

PRODUCTS

Search...

Barcode	Label	Name	Stock	Selling Price	Buying Price	VAT
B1	MAIN PRODUCT	P1	281	100.0	145.0	36.0
B2	SUB PRODUCT	P2	239	75.0	25.0	13.5
B3	SUB PRODUCT	P3	402	28.3	9.99	5.09
B4	SUB PRODUCT	P4	212	66.0	100.0	11.88
B5	X COMPANY	X PRO	394	120.0	40.0	21.6
B6	Y COMPANY	Y MODEL	0	35.0	25.2	
B7	Z COMPANY	Z ITEM	893	290.0	73.8	
A58A	NEW BRAND	NEW PRODUCT	390	256.0	23.4	
N001	MY COMPANY	MY PRODUCT	100	99.99	27.0	

Create

Edit

Delete

+

?

-

Cancel

Update

Barcode

Label

Product Name

Stock

Selling Price

Buying Price

VAT

N001

MY COMPANY

MY PRODUCT

100

150.0


99.99

27.0


MY COMPANY MY PRODUCT Sub Products List

Barcode	Label	Name	Price	Quantity
B5	X COMPANY	X PRO	120.0	3

Close

Now **X PRO** is sub product of **MY PRODUCT** if we click on update button. 

The user is able to define sub products as many as desired.

 button is provides to **change quantity of sub products**. To change quantity of sub product the user must select the desired sub product below table.

N001

MY COMPANY

MY PRODUCT

100

150.0

99.99

27.0

Create

Edit

Delete

+

?

-

Cancel

Update

Barcode

Label

Product Name

Stock

Selling Price

Buying Price

VAT

N001

MY COMPANY

MY PRODUCT

100


150.0

99.99

27.0

MY COMPANY MY PRODUCT Sub Products List

Barcode	Label	Name	Price	Quantity
B5	X COMPANY	X PRO	120.0	3

To delete defined sub product click on  button after selecting that product.

After click on update button that product package will be defined.  
Now you can see my product is a main product and has sub product(X PRO).



Barcode	Label	Product Name	Stock	Selling Price	Buying Price	VAT
A58A	NEW BRAND	NEW PRODUCT	390	130.0	256.0	23.4
N001	MY COMPANY	MY PRODUCT	100	150.0	99.99	27.0

CreateEditDelete

Barcode

Label

Product Name

Stock

Selling Price

Buying Price

VAT

MY COMPANY MY PRODUCT Sub Products List

Barcode	Label	Name	Price	Quantity
B5	X COMPANY	X PRO	120.0	3

**To delete a product** the user must select interested product on the top Products table then by clicking on 

Delete

 delete button the user can delete the product. If selected product is a sub product of any product then the user will get an error.

Error

DELETION EXCEPTION

This product could not deleted because  
The product you have tried to delete is Sub Product of N001 MY COMPANY MY PRODUCT

OK

**Sub products cannot be deleted.** If the user wants to delete sub product then the user must update it's main product's sub products list and delete the interested product from sub products list.

**To search** a product type name of product(X PRO) or label of product(X COMPANY) or label and name together (Y COMPANY XPRO) on the search field.

PRODUCTS

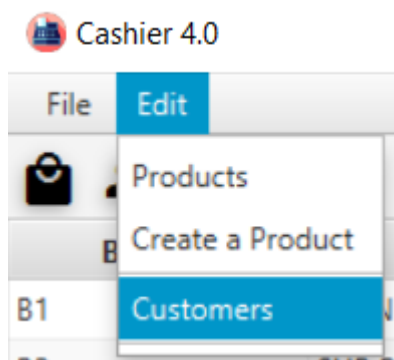
Search...


Barcode	Label	Name	Stock	Selling Price	Buying Price	VAT
B1	MAIN PRODUCT	P1	281	100.0	145.0	36.0
B2	SUB PRODUCT	P2	239	75.0	25.0	13.5
B3	SUB PRODUCT	P3	402	28.3	9.99	5.09
B4	SUB PRODUCT	P4	212	66.0	100.0	11.88
B5	X COMPANY	X PRO	394	120.0	40.0	21.6
B6	Y COMPANY	Y MODEL	0	140.0	35.0	25.2
B7	Z COMPANY	Z ITEM	893	410.0	290.0	73.8
A58A	NEW BRAND	NEW PRODUCT	390	130.0	256.0	23.4
N001	MY COMPANY	MY PRODUCT	100	150.0	99.99	27.0

CreateEditDelete

## CUSTOMER SCREEN

- Create New Customer
- Edit Customer
- Delete Customer
- Search Product
- Analysis of Customer



The user can reach **customer screen** from main screen by clicking  button on the tool bar.  
or by following **Edit/Customers** path.

Here is Customer Screen.

CUSTOMERS

Search...

Name	Surname	Email	Phone	TaxID or ID Number	Address
EMRE	SERBEST	eserbest1903@gmail.com	5535361903	12345	İzmir
İZZET	ASLAN	izzet.aslan@gmail.com	4455324	242425	ALANYA
KAYA	OĞUZ	kayaoguz@ieu.edu.tr		34925620242	Balçova

Name

Surname

Email

Phone

TaxID

Enter your address

CreateAnalysisEditDelete

Close

After filled up required fields the user can **create new customer**.

Name	Surname	Email	Phone	TaxID	
Freddie	Mercury			1111	Enter your address

Create

Analysis

Edit

Delete

To fill up E-mail, Phone and Address fields are not must!

Warning

Invalid e-mail input

You are free to enter e-mail address

OK

Name

Cannot be empty

Surname

Cannot be empty

Email

mail

Phone

TaxID

Cannot be empty

Enter your address

If the user enter a text into e-mail field then e-mail structure must be vaid! Example: mailaddress@outlook.com

CUSTOMERS					
Search...					
Name	Surname	Email	Phone	TaxID or ID Number	Address
EMRE	SERBEST	eserbest1903@gmail.com	5535361903	12345	İzmir
İZZET	ASLAN	izzet.aslan@gmail.com	4455324	242425	ALANYA
KAYA	OĞUZ	kayaoguz@ieu.edu.tr		34925620242	Balçova
FREDDİE	MERCURY			1111	

To **Edit a customer** the user must select interested customer on the customers table then should click on edit button .

Edit

Then user can change any defined information in the past. After changed necessary information the user must click Update button.

Update

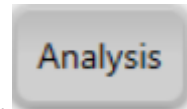
To **delete a customer** the user must select a customer on the table then click on delete button .

Delete

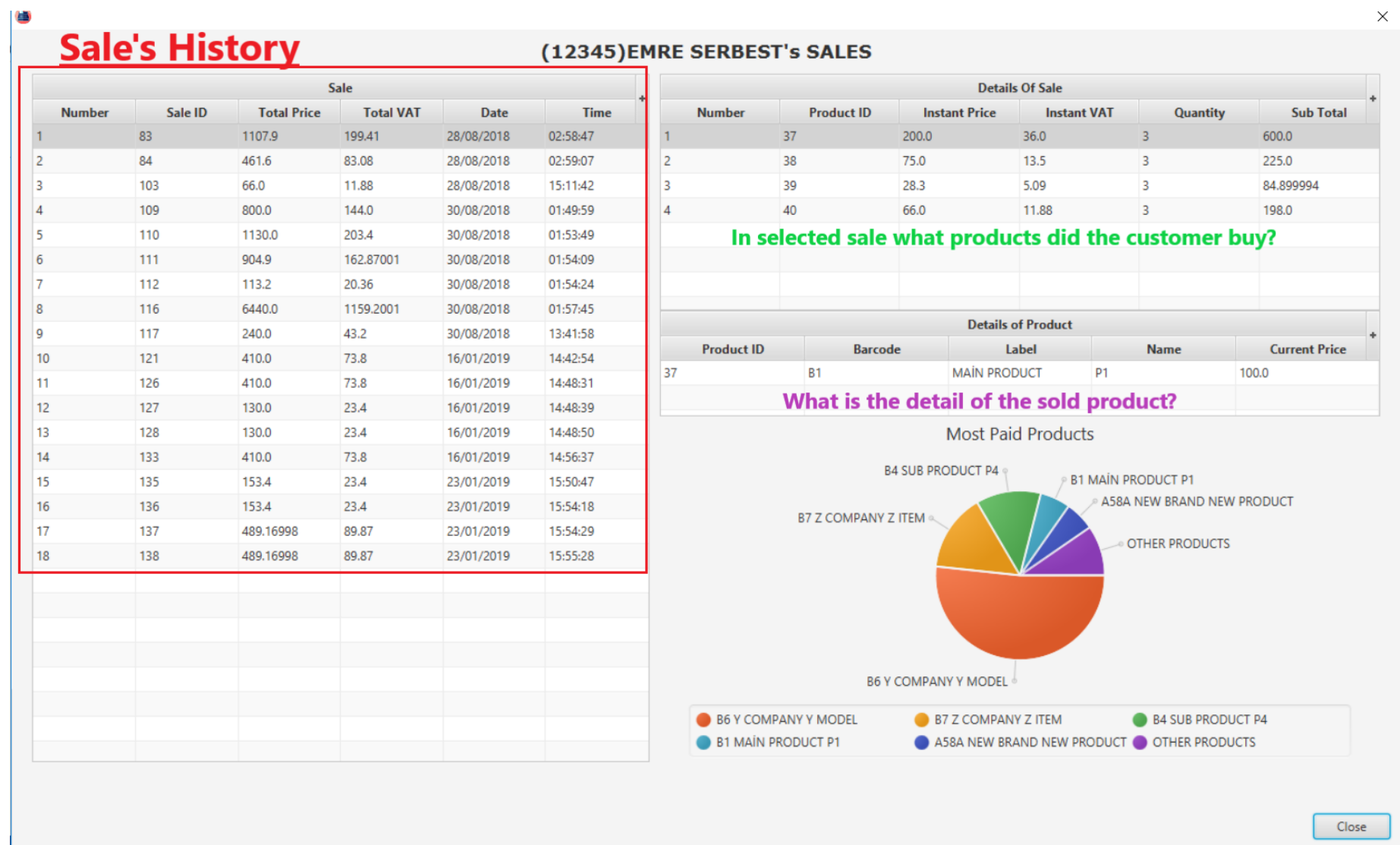
To **search a customer** the user can search accoring to name, surname, name surname or Tax ID/ID number.

CUSTOMERS					
Search...					
Name	Surname	Email	Phone	TaxID or ID Number	Address
İZZET	ASLAN	izzet.aslan@gmail.com	4455324	242425	ALANYA
EREN	SERT			24245	

## CUSTOMER ANALYSIS SCREEN



To reach a **Customer Analysis Screen** after select a customer click on **Analylsis** button.



The user can see most paid 5 products of the selected customer in analysis screen on pie chart.

That application is my first JAVA GUI application this is designed on 2018 summer holiday.

Developed by Emre Serbest

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