

Final Project Report

CSIS 4050 Project Team 7 – Electronic Shop App

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Project Description and Process Model

In our project, we are proposing an app to help with the ordering process in an Electric and Electronic equipment company. Our application is used by two users:

1. The Administrator
2. The Manager

The Administrator will take the order of electric and electronic products with certain specifications. First, the admin must input customers details at the top of the form. Then the admin chooses the product ordered by the customer based on different criteria such as: category, types, voltage, current and voltage version. The app will have tables and check boxes to make the selection more specific and easier. The admin must also input the quantity of the product ordered into a text box. There will be a button to add the chosen item to a grid view which will display the product name, description, unit price, quantity to be ordered and subtotal for that ordered product. A row of certain products will be added to the grid view every time the admin inputs an item into the list. Just below the data grid view of ordered items, there will be 3 labels to display: order total amount, tax and total amount including tax. At the very bottom of the page there will be three buttons for the admin to save the order, to edit the ordered products or to close the form.

Once the admin clicks on the save button:

1. The ordered items are removed from inventory database based on their quantities and then the inventory is updated.
2. An invoice is generated for customer orders. The Invoice will be a read only file that displays customer details, the data grid-view generated, total amount, tax and total amount including tax.

The manager can view a list of all products with their total quantities within the inventory. If an item is low in quantity within the inventory, then the manager can choose the product specifications and add it to the inventory. One label will show the name of the chosen item and another label will show the description of the item. Once the manager hits the add button, if the item doesn't exist in the inventory, then an item is added to the list and if the item does exist in inventory, then the quantity is changed for that product. And once the manager hits the update button then the inventory is updated with newly added items.

Our app will also have a page for admin to restore and backup data frequently. This will protect our data within the company.

Database Model (Final design)

a) Normalization Process:

Initial Entities: (1) Manufacturer, (2) Electronic Shop Inventory, (3) Customer

Customers go to the Electronic Shop and doesn't know anything about the product, Electronic Shop Inventory as a medium/platform which allows the customer to buy inventories and make the order.

INVENTORY

InventoryId
InventoryName
InventoryQuantities
InventoryUnitInStock
InventoryUnitPrice
InventoryCategory
InventoryType
InventoryCurrent
InventoryVoltage
InventoryVersion

CUSTOMER

CustomerId
CustomerName
CustomerPhone
CustomerAddress
CustomerEmail
OrderId
OrderDate
OrderDetailsInventory
OrderDetailsQuantity
OrderDetailsTotalAmount

Functional Dependencies:

1. InventoryId -> InventoryName, InventoryQuantities, InventoryUnitPrice, InventoryManufacturers, InventoryCountryOfOrigin, InventoryType
2. CustomerId -> CustomerName, CustomerPhone, CustomerAddress, CustomerEmail
3. OrderId -> OrderDate, OrderDetailsInventory, OrderDetailsQuantity, OrderDetailsTotalAmount

Many-to-Many Relationship:

1. Inventory <-> Orders
One order can have many inventories, and one inventory can also exist in many orders.
Therefore, another entity OrderDetails as an association table is required.

Category Entity:

1. Category entity is required for filtering, like the Department entity in StudentRegistrationDB.

After the normalization process, we have 5 main entities, they are **INVENTORY**, **CATEGORY**, **CUSTOMER**, **ORDER** and **ORDERDETAILS**

This project includes these entities:

1. Inventory (**InventoryId**, Name, UnitInStock, UnitPrice, *CategoryId*, Type, Current, Voltage, Version)
2. Category (**CategoryId**, CategoryCode, Description), code: LI, RE, EM
3. OrderDetails (***InventoryId***, ***OrderId***, OrderQuantity, TotalAmount), [composite primary key]
4. Orders (**OrderId**, *CustomerId*, OrderDate)
5. Customers (**CustomerId**, Name, Phone, Address, Email)

INVENTORY

<u>InventoryId</u>
Name
UnitInStock
UnitPrice
<i>CategoryId</i>
Type
Current
Voltage
Version

ORDER

<u>OrderId</u>
<i>CustomerId</i>
OrderDate

CUSTOMER

<u>CustomerId</u>
Name
Phone
Address
Email

ORDERDETAILS

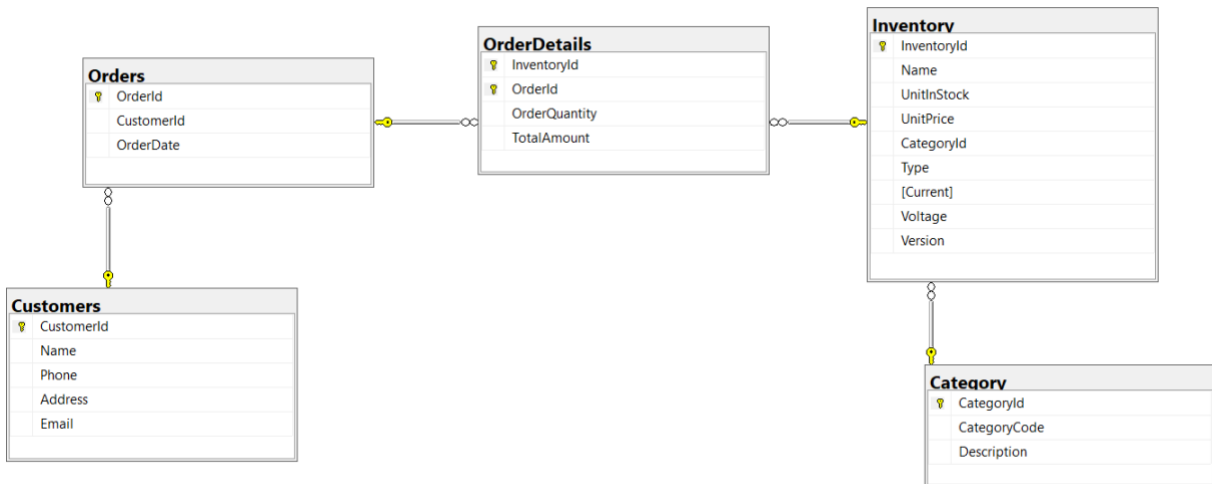
<u><i>InventoryId</i></u>
<u><i>OrderId</i></u>
OrderQuantity
TotalAmount

CATEGORY

<u>CategoryId</u>
CategoryCode
Description

* Remark: Version refer to AC / DC power supply

b) E-R Model from the MsSQL Server Database



Functionality and Testing

1. Administrator Tab

Electronic Shop Form

Administrator | Manager | Sales Order | Database Backup

Customer

CustomerId	Name	Phone	Address	Email
1	Kara O'Mannion	753-739-0862	17 Pearson Drive	komannion0@jathis.com
2	Lanni MacKessock	647-442-1228	374 Sullivan Alley	lmackessock1@so-net.ne.jp
3	Anne-marie Gumett	667-599-7561	79 Quincy Parkway	agumett2@photobucket.com
4	Jojo Pinckney	999-895-5903	9 Pepper Wood Way	jpinckney3@cafepress.com
5	Yasmin Wile	258-773-8966	66632 Arrowood Way	ywile4@yelp.com
6	Nicola Mackerel	874-233-7813	68772 Parkside Lane	nmackerel5@topsy.com
7	Ofelia Ebbens	727-344-9821	293 Hagan Parkway	oebbens6@wufoo.com
8	Lyndsey Hauger	976-974-4601	075 Heffeman Court	lhauget7@amazon.co.uk

Add Or Update Customer

Category: Light Relay Energy Meter

Type: ON/OFF Switch Movement Detector Plug-in Faston with Flange 1 1 Phase 3 Phase Plug-in 5mm pin

Voltage: 12-48V 110-240V 120V 24V 230V 3x230/400V 12V

Current: 200mA 39mA 6A 8A 25A 65A 10A

Version: AC DC

Selected Items: Quantity Add Item Delete Item

Item#	Item Name	Unit Price	Quantity	Sub. Total

Total Price = Order

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer

Customerid	Name	Phone	Address	Email
1	Kara O'Mannion	753-739-0862	17 Pearson Drive	komanion0@juffia.com
2	Lanni MacKessock	647-442-1228	374 Sullivan Alley	lmackessock1@so-net.ne.jp
3	Anne-marie Gumett	667-599-7561	79 Quincy Parkway	agumett2@photobucket.com
4	Jojo Pinckney	999-895-5903	9 Pepper Wood Way	jpinckney3@cafepress.com
5	Yasmin Wile	258-773-8966	66632 Arrowood Way	ywile4@yelp.com
6	Nicola Mackereel	874-233-7813	68772 Parkside Lane	nmackereel5@topsy.com
7	Ofelia Ebbens	727-344-9821	293 Hagan Parkway	oebbens6@wufoo.com
8	Lyndsey Hauger	976-974-4601	075 Heffeman Court	lhauer7@amazon.co.uk

Add Or Update Customer

Category Type Voltage Current Version

Light Relay Energy Meter ON/OFF Switch Movement Detector Plug-in Faston with Flange I 1 Phase 3 Phase Plug-in 5mm pin 12-48V 110-240V 120V 24V 230V 3x230/400V 12V 200mA 39mA 6A 8A 25A 65A 10A AC DC

Selected Items Quantity 3 Add Item Delete Item

Item#	Item Name	Unit Price	Quantity	Sub. Total
1	24V DC - 6A Plug-in	\$5.00	3	\$15.00

Total Price = \$15.00 Order

- a) Select the customer and select item's category, type, voltage, current, version to add the inventory to the datagridview below.

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer

Customerid	Name	Phone	Address	Email
15	Stacy Groundwater	819-594-5811	317 Barbey Place	sgroundwater@cdnet.com
16	Rab Browne	986-127-0556	27455 Arkansas Terrace	rbrownel@usda.gov
17	Faber Laurenz	342-276-8753	89688 Banding Pass	flaurenzg@eymantec.com
18	Tasia Jepps	647-492-3982	89130 Schmedeman Street	teppah@howstuffworks.com
19	Carleen Majoram	132-563-0975	74 Shelley Pass	cmajoram@yale.edu
20	Niki Strading	892-852-8956	4 Lighthouse Bay Circle	nstrading@taobao.com
21	Channellkwan	97940664	street	cccc@gmail.com

Add Or Update Customer

Category Type Voltage Current Version

Light Relay Energy Meter ON/OFF Switch Movement Detector Plug-in Faston with Flange I 1 Phase 3 Phase Plug-in 5mm pin 12-48V 110-240V 120V 24V 230V 3x230/400V 12V 200mA 39mA 6A 8A 25A 65A 10A AC DC

Selected Items Quantity 2

Item#	Item Name	Unit Price	Quantity	Sub. Total
1	24V DC - 6A Plug-in	\$5.00	2	\$10.00

Total Price = \$10.00 Order

Select a customer who get an order

OK

- b) Error message pop up if no customer is selected.

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer

Customerid	Name	Phone	Address	Email
1	Kara O'Mannion	753-739-0862	17 Pearson Drive	komannion0@jathis.com
2	Lanni MacKessock	647-442-1228	374 Sullivan Alley	lmackessock1@so-net.ne.jp
3	Anne-marie Gumett	667-599-7561	79 Quincy Parkway	agumett2@photobucket.com
4	Jojo Pinckney	999-895-5903	9 Pepper Wood Way	jpinckney3@cafeexpress.com
5	Yasmin Wile	258-773-8966	66632 Arrowood Way	ywile4@yelp.com
6	Nicola Mackerel	874-233-7813	68772 Parkside Lane	nmackere5@topsy.com
7	Ofelia Ebbens	727-344-9821	293 Hagan Parkway	oebbens6@wufoo.com
8	Lyndsey Hauger	976-974-4601	075 Heffeman Court	lhauer7@amazon.co.uk

Add Or Update Customer

Category: Light, Relay, Energy Meter

Type: ON/OFF Switch, Movement Detector, Plug-in, Faston with Range 1, 1 Phase, 3 Phase, Plug-in 5mm pin

Voltage: 12-48V, 110-240V, 120V, 24V, 230V, 3x230/400V, 12V

Current: 200mA, 39mA, 6A, 8A, 25A, 65A, 10A

Version: AC, DC

Item is unavailable!

Selected Items

Quantity: 1

Item#	Item Name	Unit Price	Quantity	Sub. Total
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Total Price =

Order

c) Error message pop up if the item is not available.

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer

Customerid	Name	Phone	Address	Email
1	Kara O'Mannion	753-739-0862	17 Pearson Drive	komannion0@jathis.com
2	Lanni MacKessock	647-442-1228	374 Sullivan Alley	lmackessock1@so-net.ne.jp
3	Anne-marie Gumett	667-599-7561	79 Quincy Parkway	agumett2@photobucket.com
4	Jojo Pinckney	999-895-5903	9 Pepper Wood Way	jpinckney3@cafeexpress.com
5	Yasmin Wile	258-773-8966	66632 Arrowood Way	ywile4@yelp.com
6	Nicola Mackerel	874-233-7813	68772 Parkside Lane	nmackere5@topsy.com
7	Ofelia Ebbens	727-344-9821	293 Hagan Parkway	oebbens6@wufoo.com
8	Lyndsey Hauger	976-974-4601	075 Heffeman Court	lhauer7@amazon.co.uk

Add Or Update Customer

Category: Light, Relay, Energy Meter

Type: ON/OFF Switch, Movement Detector, Plug-in, Faston with Range 1, 1 Phase, 3 Phase, Plug-in 5mm pin

Voltage: 12-48V, 110-240V, 120V, 24V, 230V, 3x230/400V, 12V

Current: 200mA, 39mA, 6A, 8A, 25A, 65A, 10A

Version: AC, DC

Order completed

Selected Items

Quantity: 3

Item#	Item Name	Unit Price	Quantity	Sub. Total
1	24V DC - 6A Plug-in	\$5.00	3	\$15.00

Total Price = \$15.00

Order

d) Press the order button to add the order, send it to the Sales Order Tab Page.

Manager Sales Order Database Backup

	Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
▶	Kara O'Mannion	24V DC - 6A Plug-in	3	15	Dec 07, 2021	753-739-0862	17 Pearson Drive
	Lanni MacKessock	12-48V AC - 200mA - Movement Detector	15	450	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	230V AC - 10A plug-in 5mm pin	15	60	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	3x230/400V AC - 65A Three-Phase	5	225	Jan 25, 2013	647-442-1228	374 Sullivan Alley
	Anne-marie Gumett	12-48V AC - 200mA - Movement Detector	25	750	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gumett	120V AC - 6A Plug-in	90	450	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gumett	230V AC - 25A Single-Phase	55	1375	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gumett	120V AC - 16A Faston with Range Mount	100	1000	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gumett	12V DC - 10A plug-in 3.5mm pin	80	320	Aug 14, 2012	667-599-7561	79 Quincy Park...

Delete Order

Delete All Orders

Clear Filter

6. Nicola Mackereel
7. Ofelia Ebbens
8. Lyndsey Hauger
9. Bendick Petersen
10. Evangelina Sondon
11. Ada Natissa
12. Wofly Westwell
13. Agosto Longtreeth
14. Sigmund Pibworth
15. Stacy Groundwater
16. Ruby Browne
17. Faber Laurentz
18. Tasia Jepps
19. Cateen Majoram
20. Nikl Stradling

5. 24V DC - 6A Plug-in
7. 120V AC - 6A Faston with Range Mount
8. 24V DC - 6A Faston with Range Mount
9. 120V AC - 8A Plug-in
10. 24V DC - 8A Plug-in
11. 120V AC - 8A Faston with Range Mount
12. 24V DC - 8A Faston with Range Mount
13. 230V AC - 25A Single-Phase
14. 3x230/400V AC - 65A Three-Phase
15. 230V AC - 10A plug-in 5mm pin
16. 12V DC - 10A plug-in 3.5mm pin
17. 48V DC - 16A PCB 3.5 mm pin flat
18. 110V AC - 8A plug-in 5mm pin
19. 24V DC - 16A PCB Mount
20. 120V AC - 16A Faston with Range Mount

Filter

e) New Order added.

Administrator Manager Sales Order Database Backup

Customer

CustomerId	Name	Phone	Address	Email
1	Kara O'Mannion	753-739-0862	17 Pearson Drive	komannion0@yahoo.com
2	Lanni MacKessock	647-442-1228	374 Sullivan Alley	lmackessock1@sonet.net.jp
3	Anne-marie Gumett	667-599-7561	79 Quincy Parkway	agumett2@photobucket.com
4	Jojo Pinckney	999-895-5903	9 Pepper Wood Way	jpinckney3@cafeexpress.com
5	Yasmin Wile	258-773-8966	66632 Arrowood Way	ywile4@yelp.com
6	Nicola Mackereel	874-233-7813	68772 Parkside Lane	nmackereel5@topcy.com
7	Ofelia Ebbens	727-344-9821	293 Hagan Parkway	oebbens6@wufoo.com
8	Lyndsey Hauger	976-974-4601	075	

Add Or Update Customer

Category: Light Relay Energy Meter
Type: ON/OFF Switch Movement Detector 6A Plug-in Faston with Range 1. 1 Phase 3 Phase Plug-in 5mm pin
Voltage: 12-48V 110-240V 120V 24V 230V 3x230/400V 12V
Current: 200mA 39mA 25A 25A 65A 10A

Add Or Update Customer

Selected Items

Item#	Item Name	Unit Price	Quantity
			1

Total Price =

Inventory: 1. Kara O'Mannion 2. Lanni MacKessock 3. Anne-marie Gumett 4. Jojo Pinckney 5. Yasmin Wile 6. Nicola Mackereel 7. Ofelia Ebbens 8. Lyndsey Hauger 9. Bendick Petersen 10. Evangelina Sondon 11. Ada Natissa 12. Wofly Westwell 13. Agosto Longtreeth

Name: Kara UpdateName Phone: 753-739-0862 Address: 17 Pearson Drive Email: komannion0@yahoo.com

Add Update

f) Update the customer information, the changes reflected in both Admin and Order Tab.

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer

CustomerId	Name	Phone	Address	Email
1	Kara UpdateName	753-739-0862	17 Pearson Drive	komannion0@jathis.com
2	Lanni MacKessock	647-442-1228	374 Sullivan Alley	lmackessock1@so-net.ne.jp
3	Anne-marie Gumett	667-599-7561	79 Quincy Parkway	agumett2@photobucket.com
4	Jojo Pinckney	999-895-5903	9 Pepper Wood Way	jpinckney3@cafeexpress.com
5	Yasmin Wile	258-773-8966	66632 Arrowood Way	ywile4@yelp.com
6	Nicola Mackerel	874-233-7813	68772 Parkside Lane	nmackerel5@topsy.com
7	Ofelia Ebbens	727-344-9821	293 Hagan Parkway	oebbens6@wufoo.com
8	Lyndsey Hauger	976-974-4601	075 Heffeman Court	lhauget7@amazon.co.uk

Add Or Update Customer

Category Type Voltage Current Version

Light Relay Energy Meter ON/OFF Switch Movement Detector Plug-in Faston with Range Mount 1 Phase 3 Phase Plug-in 5mm pin 12-48V 110-240V 120V 24V 230V 3x230/400V 12V 200mA 39mA 6A 8A 25A 65A 10A AC DC

Selected Items Quantity 1 Add Item Delete Item

Item#	Item Name	Unit Price	Quantity	Sub. Total
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Total Price = Order

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
Kara UpdateName	24V DC - 6A Plug-in	3	15	Dec 07, 2021	753-739-0862	17 Pearson Drive
Lanni MacKessock	12-48V AC - 200mA - Movement Detector	15	450	Oct 07, 2011	647-442-1228	374 Sullivan Alley
Lanni MacKessock	230V AC - 10A plug-in 5mm pin	15	60	Oct 07, 2011	647-442-1228	374 Sullivan Alley
Lanni MacKessock	3x230/400V AC - 65A Three-Phase	5	225	Jan 25, 2013	647-442-1228	374 Sullivan Alley
Anne-marie Gumett	12-48V AC - 200mA - Movement Detector	25	750	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gumett	120V AC - 6A Plug-in	90	450	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gumett	230V AC - 25A Single-Phase	55	1375	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gumett	120V AC - 16A Faston with Range Mount	100	1000	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gumett	12V DC - 10A plug-in 3.5mm pin	80	320	Aug 14, 2012	667-599-7561	79 Quincy Park...

Delete Order

Delete All Orders

Clear Filter

1. Kara UpdateName 2. Lanni MacKessock 3. Anne-marie Gumett 4. Jojo Pinckney 5. Yasmin Wile 6. Nicola Mackerel 7. Ofelia Ebbens 8. Lyndsey Hauger 9. Bendok Petersen 10. Evangelina Sondon 11. Ado Natras 12. Wofly Westwell 13. Agostio Longstreeth 14. Sigmund Ploworth 15. Stacy Groundwater 6. 24V DC - 6A Plug-in 7. 120V AC - 6A Faston with Range Mount 8. 24V DC - 6A Faston with Range Mount 9. 120V AC - 8A Plug-in 10. 24V DC - 8A Plug-in 11. 120V AC - 8A Faston with Range Mount 12. 24V DC - 8A Faston with Range Mount 13. 230V AC - 25A Single-Phase 14. 3x230/400V AC - 65A Three-Phase 15. 230V AC - 10A plug-in 5mm pin 16. 12V DC - 10A plug-in 3.5mm pin 17. 48V DC - 16A PCB 3.5mm pin flat 18. 110V AC - 8A plug-in 5mm pin 19. 24V DC - 16A PCB Mount 20. 120V AC - 16A Faston with Range Mount

Filter

g) Both admin tab and Sales order tab are updated with customer information

Electronic Shop Form

AddOrUpdateCustomer

Inventory
1: Kara UpdateName
2: Lanni MacKessock
3: Anne-marie Gurnett
4: Jojo Pinckney
5: Yasmin Wile
6: Nicola Mackerel
7: Ofelia Ebbens
8: Lyndsey Hauger
9: Bendick Petersen
10: Evangelina Sondon
11: Ado Natriss
12: Wolffy Westwell
13: Agosto Longstreeth

Name
Charmekwan
Phone
97940664
Address
street
Email
cccc@gmail.com

Add
Update

Item#	Item Name	Unit Price	Quantity	Sub. Total
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h) Add a new customer, input information for new customer and press add button

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer

Customerid	Name	Phone	Address	Email
15	Stacy Groundwater	819-594-5811	317 Barbey Place	sgroundwatore@zdnnet.com
16	Rab Browne	986-127-0556	27455 Arkansas Terrace	rbrownef@usda.gov
17	Faber Laurenz	342-276-8753	89688 Banding Pass	flaurenzg@symantec.com
18	Tasia Jepps	647-492-3982	89130 Schmedeman Street	tjeppsh@howstuffworks.com
19	Carleen Marjoram	132-563-0975	74 Shelley Pass	cmajorami@yale.edu
20	Niki Stradling	892-852-8956	4 Lighthouse Bay Circle	nstradling@taobao.com
21	Charmekwan	97940664	street	cccc@gmail.com

Category Type Voltage Current Version

Light Relay Energy Meter ON/OFF Switch Movement Defector 230V Faston with Range 1 1 Phase 3 Phase Plug-in 5mm pin 12-48V 110-240V 120V 24V 230V 3x230/400V 12V 200mA 39mA 6A 8A 25A 65A 10A AC DC

Selected Items Quantity 1 Add Item Delete Item

Item#	Item Name	Unit Price	Quantity	Sub. Total
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Total Price = Order

i) New customer is added to customer table in Admin tab

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
Evangeline Sondon	110-240V AC - 39mA - Movement Detector	10	300	Jul 20, 2018	311-863-4227	248 Cody Street
Evangeline Sondon	230V AC - 10A plug-in 5mm pin	10	40	Mar 30, 2017	311-863-4227	248 Cody Street
Wolffy Westwell	230V AC - 25A Single-Phase	50	1250	Dec 23, 2015	895-812-2017	0617 Glendale C...
Agosto Longstreeth	230V AC - 25A Single-Phase	75	1875	Jan 13, 2017	845-592-7849	8529 Troy Center
Carleen Majoram	12-48V AC - 200mA - ON/OFF Switch	25	500	Aug 12, 2019	132-563-0975	74 Shelley Pass
Carleen Majoram	120V AC - 16A Faston with Range Mount	70	700	May 20, 2019	132-563-0975	74 Shelley Pass
Niki Stradling	120V AC - 6A Plug-in	20	100	Sep 22, 2017	892-852-8956	4 Lighthouse Ba...
Niki Stradling	120V AC - 6A Faston with Range Mount	30	240	Sep 22, 2017	892-852-8956	4 Lighthouse Ba...

Delete Order

Delete All Orders

Clear Filter

Filter

7. Ofelia Ebbens
8. Lindsey Hauger
9. Bendick Petersen
10. Evangeline Sondon
11. Ada Natrisa
12. Wolffy Westwell
13. Agosto Longstreeth
14. Sigmund Pibworth
15. Stacy Groundwater
16. Ruby Bovine
17. Faber Laurentz
18. Tasia Jepps
19. Carleen Majoram
20. Niki Stradling
21. Charmekwan

6. 24V DC - 6A Plug-in
7. 120V AC - 6A Faston with Range Mount
8. 24V DC - 6A Faston with Range Mount
9. 120V AC - 8A Plug-in
10. 24V DC - 8A Plug-in
11. 120V AC - 8A Faston with Range Mount
12. 24V DC - 8A Faston with Range Mount
13. 230V AC - 25A Single-Phase
14. 3-220/400V AC - 65A Three-Phase
15. 230V AC - 10A plug-in 5mm pin
16. 12V DC - 10A plug-in 3.5mm pin
17. 48V DC - 16A PCB 3.5mm pin flat
18. 110V AC - 8A plug-in 5mm pin
19. 24V DC - 16A PCB Mount
20. 120V AC - 16A Faston with Range Mount

j) Now the new customer can place new order.

2. Manager Tab

Main Form

Electronic Shop Form

Administrator Manager Sales Order Database Backup

InventoryId	Name	UnitInStock	UnitPrice	CategoryId	Type	Current	Voltage	Version
1	12-48V AC - 200mA...	100	20	1	ON/OFF Switch	200mA	12-48V	AC
2	110-240V AC - 39mA...	100	20	1	ON/OFF Switch	39mA	110-240V	AC
3	12-48V AC - 200mA...	100	30	1	Movement Detector	200mA	12-48V	AC
4	110-240V AC - 39mA...	100	30	1	Movement Detector	39mA	110-240V	AC
5	120V AC - 6A Plug-in	100	5	2	Plug-in	6A	120V	AC
6	24V DC - 6A Plug-in	100	5	2	Plug-in	6A	24V	DC
7	120V AC - 6A Fast...	100	8	2	Faston with Range ...	6A	120V	AC
8	24V DC - 6A Fasto...	100	8	2	Faston with Range ...	6A	24V	DC

Add OR Update Inventory

a) dataGridView displays the items in inventory with their unit price and quantity in stock. Press Add OR Update button to add or update inventory. This will open inventory child form.

Add or update inventory child form

Electronic Shop Form

Administrator Manager Sales Order Database Backup

InventoryId	Name	UnitInStock	UnitPrice	CategoryId	Type	Current	Voltage	Version
1	12-48V AC - 200mA...	100	20	1	ON/OFF Switch	200mA	12-48V	AC
2	110-240V AC - 39mA...	100	20	1	ON/OFF Switch	39mA	110-240V	AC
3	12-48V AC - 200mA...	100	30	1	Movement Detector	200mA	12-48V	AC
4	110-240V AC - 39mA...	100	30	1	Movement Detector			
5	120V AC - 6A Plug-in	100	5	2	Plug-in			
6	24V DC - 6A Plug-in	100	5	2	Plug-in			
7	120V AC - 6A Fast...	100	8	2	Faston with Range			
8	24V DC - 6A Fasto...	100	8	2	Faston with Range			

Add OR Update Inventory

AddUpdateInventory

Inventory

- 12-48V AC - 200mA - ON/OFF Switch
- 110-240V AC - 39mA - ON/OFF Switch
- 12-48V AC - 200mA - Movement Detector
- 110-240V AC - 39mA - Movement Detector
- 120V AC - 6A Plug-in
- 24V DC - 6A Plug-in
- 120V AC - 6A Faston with Range Mount
- 24V DC - 6A Faston with Range Mount
- 120V AC - 8A Plug-in
- 24V DC - 8A Plug-in
- 120V AC - 8A Faston with Range Mount
- 24V DC - 8A Faston with Range Mount
- 230V AC - 25A Single-Phase
- 3x230/400V AC - 65A Three-Phase
- 230V AC - 10A plug-in 5mm pin
- 12V DC - 10A plug-in 3.5mm pin
- 48V DC - 16A PCB 3.5 mm pin flat

Category

Light
Relay
Energy Meter

Name Type Voltage Version

Current Unit Price Quantity

Add Update

- b) Child form inventory display all the items within the inventory in a list box, user can add or update the inventory using Category list box and all related text boxes.

Update the name of inventory, update the name in Manager tab and Order tab as well

Electronic Shop Form

Administrator Manager Sales Order Database Backup

InventoryId	Name	UnitInStock	UnitPrice	CategoryId	Type	Current	Voltage	Version
1	12-48V AC - 200mA...	100	20	1	ON/OFF Switch	200mA	12-48V	AC
2	110-240V AC - 39mA...	100	20	1	ON/OFF Switch	39mA	110-240V	AC
3	12-48V AC - 200mA...	100	30	1	Movement Detector	200mA	12-48V	AC
4	110-240V AC - 39mA...	100	30	1	Movement Detector			
5	120V AC - 6A Plug-in	100	5	2	Plug-in			
6	24V DC - 6A Plug-in	100	5	2	Plug-in			
7	120V AC - 6A Fast...	100	8	2	Faston with Range			
8	24V DC - 6A Fasto...	100	8	2	Faston with Range			

Add OR Update Inventory

AddUpdateInventory

Inventory

- 12-48V AC - 200mA - ON/OFF Switch
- 110-240V AC - 39mA - ON/OFF Switch
- 12-48V AC - 200mA - Movement Detector
- 110-240V AC - 39mA - Movement Detector
- 120V AC - 6A Plug-in
- 24V DC - 6A Plug-in
- 120V AC - 6A Faston with Range Mount
- 24V DC - 6A Faston with Range Mount
- 120V AC - 8A Plug-in
- 24V DC - 8A Plug-in
- 120V AC - 8A Faston with Range Mount
- 24V DC - 8A Faston with Range Mount
- 230V AC - 25A Single-Phase
- 3x230/400V AC - 65A Three-Phase
- 230V AC - 10A plug-in 5mm pin
- 12V DC - 10A plug-in 3.5mm pin
- 48V DC - 16A PCB 3.5 mm pin flat

Category

Light
Relay
Energy Meter

Name Type Voltage Version

Updated Name ON/OFF Switch 12-48V AC

Current Unit Price Quantity

200mA 20 100

Add Update

- c) To update an inventory, select an item from list box inventory, the information for that product is auto populated into the category list box and all the related text boxes. You can change the value for any of the products and hit update button.

Electronic Shop Form

Administrator Manager Sales Order Database Backup

InventoryId	Name	UnitInStock	UnitPrice	CategoryId	Type	Current	Voltage	Version
1	Updated Name	100	20	1	ON/OFF Switch	200mA	12-48V	AC
2	110-240V AC - 39m...	100	20	1	ON/OFF Switch	39mA	110-240V	AC
3	12-48V AC - 200m...	100	30	1	Movement Detector	200mA	12-48V	AC
4	110-240V AC - 39m...	100	30	1	Movement Detector	39mA	110-240V	AC
5	120V AC - 6A Plug-in	100	5	2	Plug-in	6A	120V	AC
6	24V DC - 6A Plug-in	100	5	2	Plug-in	6A	24V	DC
7	120V AC - 6A Fast...	100	8	2	Faston with Flange ...	6A	120V	AC
8	24V DC - 6A Fasto...	100	8	2	Faston with Flange ...	6A	24V	DC

Add OR Update Inventory

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
Lanni MacKessock	12-48V AC - 200mA - Movement Detector	15	450	Oct 07, 2011	647-442-1228	374 Sullivan Alley
Lanni MacKessock	230V AC - 10A plug-in 5mm pin	15	60	Oct 07, 2011	647-442-1228	374 Sullivan Alley
Lanni MacKessock	3x230/400V AC - 65A Three-Phase	5	225	Jan 25, 2013	647-442-1228	374 Sullivan Alley
Anne-marie Gurnett	12-48V AC - 200mA - Movement Detector	25	750	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gurnett	120V AC - 6A Plug-in	90	450	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gurnett	230V AC - 25A Single-Phase	55	1375	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gurnett	120V AC - 16A Faston with Range Mount	100	1000	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gurnett	12V DC - 10A plug-in 3.5mm pin	80	320	Aug 14, 2012	667-599-7561	79 Quincy Park...
Nicola Mackerel	12V DC - 10A plug-in 3.5mm pin	50	200	May 06, 2013	874-233-7813	68772 Parkside ...

Delete Order

Delete All Orders

Clear Filter

1. Kara O'Marrion
2. Lanni MacKessock
3. Anne-marie Gurnett
4. Jojo Pinckney
5. Yasmin Wile
6. Nicola Mackerel
7. Ofelia Ebbens

1. Updated Name
2. 110-240V AC - 39mA - ON/OFF Switch
3. 12-48V AC - 200mA - Movement Detector
4. 110-240V AC - 39mA - Movement Detector
5. 120V AC - 6A Plug-in
6. 24V DC - 6A Plug-in
7. 120V AC - 6A Faston with Range Mount

Filter

- d) Once you hit update button, the specific product information is updated with new value in the inventory table. This reflects product information in both manager tab and sales order tab.

Select the Category from the list box, enter the data in textbox, then Add the New Inventory

Electronic Shop Form

Administrator Manager Sales Order Database Backup

InventoryId	Name	UnitInStock	UnitPrice	CategoryId	Type	Current	Voltage	Version
1	Updated Name	100	20	1	ON/OFF Switch	200mA	12-48V	AC
2					OFF Switch	39mA	110-240V	AC
3					ement Detector	200mA	12-48V	AC
4					ement Detector	39mA	110-240V	AC
5					in	6A	120V	AC
6					in	6A	24V	DC
7					on with Flange ...	6A	120V	AC
8					on with Flange ...	6A	24V	DC

AddUpdateInventory

Inventory

- 1: Updated Name
- 2: 110-240V AC - 39mA - ON/OFF Switch
- 3: 12-48V AC - 200mA - Movement Detector
- 4: 110-240V AC - 39mA - Movement Detector
- 5: 120V AC - 6A Plug-in
- 6: 24V DC - 6A Faston
- 7: 120V AC - 6A Faston with Flange Mount
- 8: 24V DC - 6A Faston with Flange Mount
- 9: 120V AC - 8A Plug-in
- 10: 24V DC - 8A Plug-in
- 11: 120V AC - 8A Faston with Flange Mount
- 12: 24V DC - 8A Faston with Flange Mount
- 13: 230V AC - 25A Single-Phase
- 14: 3x230/400V AC - 65A Three-Phase
- 15: 230V AC - 10A plug-in 5mm pin
- 16: 12V DC - 10A plug-in 3.5mm pin
- 17: 48V DC - 16A PCB 3.5 mm pin flat

Category

- Light
- Relay
- Energy Meter
- Light
- Relay
- Energy Meter

Name Type Voltage Version

NewInventory Light 12V DC

Current Unit Price Quantity

2A 10.99 2

Add Update

e) You can choose a category from list box and input new product information within the related text boxes and press add button to add a new product to the inventory table.

Added the new inventory in Manager and Sales Order tab.

Electronic Shop Form

Administrator Manager Sales Order Database Backup

InventoryId	Name	UnitInStock	UnitPrice	CategoryId	Type	Current	Voltage	Version
15	230V AC - 10A plu...	100	4	2	Plug-in 5mm pin	10A	230V	AC
16	12V DC - 10A plug-...	100	4	2	Plug-in 3.5mm pin	10A	12V	DC
17	48V DC - 16A PCB ...	100	4	2	PCB 3.5 mm pin flat	16A	48V	DC
18	110V AC - 8A plug4...	100	4	2	Plug-in 5mm pin	8A	110V	AC
19	24V DC - 16A PCB ...	100	10	2	PCB Mount	16A	24V	DC
20	120V AC - 16A Fas...	100	10	2	Faston with Range ...	16A	120V	AC
21	NewInventory	2	10.99	1	Light	2A	12V	DC

Add OR Update Inventory

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
Lanni MacKessock	12-48V AC - 200mA - Movement Detector	15	450	Oct 07, 2011	647-442-1228	374 Sullivan Alley
Lanni MacKessock	230V AC - 10A plug-in 5mm pin	15	60	Oct 07, 2011	647-442-1228	374 Sullivan Alley
Lanni MacKessock	3x230/400V AC - 65A Three-Phase	5	225	Jan 25, 2013	647-442-1228	374 Sullivan Alley
Anne-marie Gurnett	12-48V AC - 200mA - Movement Detector	25	750	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gurnett	120V AC - 6A Plug-in	90	450	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gurnett	230V AC - 25A Single-Phase	55	1375	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gurnett	120V AC - 16A Faston with Flange Mount	100	1000	May 29, 2017	667-599-7561	79 Quincy Park...
Anne-marie Gurnett	12V DC - 10A plug-in 3.5mm pin	80	320	Aug 14, 2012	667-599-7561	79 Quincy Park...
Nicola Mackerel	12V DC - 10A plug-in 3.5mm pin	50	200	May 06, 2013	874-233-7813	68772 Parkside ...

Delete Order

Delete All Orders

Clear Filter

6: Nicola Mackerel
7: Ofelia Ebbens
8: Lyndsey Hauger
9: Bendick Petersen
10: Evangelina Sondon
11: Ado Natties
12: Wolfy Westwell
13: Agosto Longtreath
14: Sigmund Ploworth
15: Stacy Groundswator
16: Rab Brownie
17: Faber Laurenz
18: Tasia Jepps
19: Carleen Marjoram
20: Niku Strading

7: 120V AC - 6A Faston with Flange Mount
8: 24V DC - 6A Faston with Flange Mount
9: 120V AC - 8A Plug-in
10: 24V DC - 8A Plug-in
11: 120V AC - 8A Faston with Flange Mount
12: 24V DC - 8A Faston with Flange Mount
13: 230V AC - 25A Single-Phase
14: 3x230/400V AC - 65A Three-Phase
15: 230V AC - 10A plug-in 5mm pin
16: 12V DC - 10A plug-in 3.5mm pin
17: 48V DC - 16A PCB 3.5 mm pin flat
18: 110V AC - 8A plug-in 5mm pin
19: 24V DC - 16A PCB Mount
20: 120V AC - 16A Faston with Range Mount
21: NewInventory

Filter

- f) Once you hit add button, new product is added to the inventory table, and this will reflect both manager tab and sales order tab. Now you have new product in the inventory.

3. Sales Order Tab

Initially, all the customer and inventory in listbox are selected, so it shows all the order

Electronic Shop Form

Administrator | Manager | Sales Order | Database Backup

	Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
▶	Kara UpdateName	24V DC - 6A Plug-in	3	15	Dec 07, 2021	753-739-0862	17 Pearson Drive
	Lanni MacKessock	12-48V AC - 200mA - Movement Detector	15	450	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	230V AC - 10A plug-in 5mm pin	15	60	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	3x230/400V AC - 65A Three-Phase	5	225	Jan 25, 2013	647-442-1228	374 Sullivan Alley
	Anne-marie Gurnett	12-48V AC - 200mA - Movement Detector	25	750	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gurnett	120V AC - 6A Plug-in	90	450	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gurnett	230V AC - 25A Single-Phase	55	1375	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gurnett	120V AC - 16A Faston with Range Mount	100	1000	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gurnett	12V DC - 10A plug-in 3.5mm pin	80	320	Aug 14, 2012	667-599-7561	79 Quincy Park...

Delete Order

Delete All Orders

Clear Filter

7: Ofelia Ebbens
8: Lindsey Hauger
9: Bendick Petersen
10: Evangelina Sondon
11: Ado Nattiss
12: Wolfo Westwell
13: Agostio Longstreeth
14: Sigmund Ploworth
15: Stacy Groundwater
16: Rab Browne
17: Faber Lauenz
18: Tasia Jeppe
19: Carleen Majoram
20: Niki Strading
21: Channekwan

6: 24V DC - 6A Plug-in
7: 120V AC - 6A Faston with Range Mount
8: 24V DC - 6A Faston with Range Mount
9: 120V AC - 8A Plug-in
10: 24V DC - 8A Plug-in
11: 120V AC - 8A Faston with Range Mount
12: 24V DC - 8A Faston with Range Mount
13: 230V AC - 25A Single-Phase
14: 3x230/400V AC - 65A Three-Phase
15: 230V AC - 10A plug-in 5mm pin
16: 12V DC - 10A plug-in 3.5mm pin
17: 48V DC - 16A PCB 3.5 mm pin flat
18: 110V AC - 8A plug-in 5mm pin
19: 24V DC - 16A PCB Mount
20: 120V AC - 16A Faston with Range Mount

Filter

- a) Sales order tab previews the information of all customers and their orders, there are 2 list boxes, one for the customer and one for the inventory. Initially all customers and products of inventory are selected to show all the customers and their orders.

Select one customer, then press Filter. (It is allowed to select more than one customer)

Electronic Shop Form

Administrator | Manager | Sales Order | Database Backup

	Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
▶	Lanni MacKessock	12-48V AC - 200mA - Movement Detector	15	450	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	230V AC - 10A plug-in 5mm pin	15	60	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	3x230/400V AC - 65A Three-Phase	5	225	Jan 25, 2013	647-442-1228	374 Sullivan Alley

Delete Order

Delete All Orders

Clear Filter

1: Kara UpdateName
2: Lanni MacKessock
3: Anne-marie Gurnett
4: Jojo Pinckney
5: Yasmin Wile
6: Nicola Mackereel
7: Ofelia Ebbens
8: Lindsey Hauger
9: Bendick Petersen
10: Evangelina Sondon
11: Ado Nattiss
12: Wolfo Westwell
13: Agostio Longstreeth
14: Sigmund Ploworth
15: Stacy Groundwater

1: 12-48V AC - 200mA - ON/OFF Switch
2: 110-240V AC - 39mA - ON/OFF Switch
3: 12-48V AC - 200mA - Movement Detector
4: 110-240V AC - 39mA - Movement Detector
5: 120V AC - 8A Plug-in
6: 24V DC - 6A Plug-in
7: 120V AC - 6A Faston with Range Mount
8: 24V DC - 6A Faston with Range Mount
9: 120V AC - 8A Plug-in
10: 24V DC - 8A Plug-in
11: 120V AC - 8A Faston with Range Mount
12: 24V DC - 8A Faston with Range Mount
13: 230V AC - 25A Single-Phase
14: 3x230/400V AC - 65A Three-Phase
15: 230V AC - 10A plug-in 5mm pin

Filter

- b) You can click on one or more customer, then if you press filter, you may view selected customers order and all their orders for all the selected products in inventory. You can clear filter to reselect all customers and inventory products list boxes.

Select one inventory, then press Filter. (It is allowed to select more than one inventory)

Electronic Shop Form

Administrator Manager Sales Order Database Backup

	Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
▶	Anne-marie Gurnett	230V AC - 25A Single-Phase	55	1375	May 29, 2017	667-599-7561	79 Quincy Parkw...
	Wolff Westwell	230V AC - 25A Single-Phase	50	1250	Dec 23, 2015	895-812-2017	0617 Glendale C...
	Agosto Longtreeth	230V AC - 25A Single-Phase	75	1875	Jan 13, 2017	845-592-7849	8529 Troy Center

Delete Order

Delete All Orders

Clear Filter

7: Ofelia Ebbens
8: Lindsey Hauger
9: Bendick Petersen
10: Evangelina Sondon
11: Add Natrisa
12: Wolff Westwell
13: Agosto Longtreeth
14: Sigmund Plbworth
15: Stacy Groundwater
16: Rob Browne
17: Faber Laurenz
18: Tasia Jepps
19: Carleen Majoram
20: Niki Stradling
21: Channekwan

1: 12-48V AC - 200mA - ON/OFF Switch
2: 110-240V AC - 39mA - ON/OFF Switch
3: 12-48V AC - 200mA - Movement Detector
4: 110-240V AC - 39mA - Movement Detector
5: 120V AC - 6A Plug-in
6: 24V DC - 6A Plug-in
7: 120V AC - 6A Faston with Range Mount
8: 24V DC - 6A Faston with Range Mount
9: 120V AC - 8A Plug-in
10: 24V DC - 8A Plug-in
11: 120V AC - 8A Faston with Range Mount
12: 24V DC - 8A Faston with Range Mount
13: 230V AC - 25A Single-Phase
14: 3x230/400V AC - 65A Three-Phase
15: 230V AC - 16A plug-in 5mm pin

Filter

- c) You can click on one or more inventory item, then if you press filter, you may view sales orders of all customers for the selected products. You can clear filter to reselect all customers and inventory products list boxes.

Select one row from the datagridview, then press Delete Order

Electronic Shop Form

Administrator Manager Sales Order Database Backup

	Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
▶	Lanni MacKessock	12-48V AC - 200mA - Movement Detector	15	450	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	230V AC - 10A plug-in 5mm pin	15	60	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	3x230/400V AC - 65A Three-Phase	5	225	Jan 25, 2013	647-442-1228	374 Sullivan Alley
	Anne-marie Gurnett	12-48V AC - 200mA - Movement Detector	25	750	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gurnett	120V AC - 6A Plug-in	90	450	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gurnett	230V AC - 25A Single-Phase	55	1375	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gurnett	120V AC - 16A Faston with Range Mount	100	1000	May 29, 2017	667-599-7561	79 Quincy Park...
	Anne-marie Gurnett	12V DC - 10A plug-in 3.5mm pin	80	320	Aug 14, 2012	667-599-7561	79 Quincy Park...
	Nicola Mackerel	12V DC - 10A plug-in 3.5mm pin	50	200	May 06, 2013	874-233-7813	68772 Parkside ...

Delete Order

Delete All Orders

Clear Filter

7: Ofelia Ebbens
8: Lindsey Hauger
9: Bendick Petersen
10: Evangelina Sondon
11: Add Natrisa
12: Wolff Westwell
13: Agosto Longtreeth
14: Sigmund Plbworth
15: Stacy Groundwater
16: Rob Browne
17: Faber Laurenz
18: Tasia Jepps
19: Carleen Majoram
20: Niki Stradling
21: Channekwan

6: 24V DC - 6A Plug-in
7: 120V AC - 6A Faston with Range Mount
8: 24V DC - 6A Faston with Range Mount
9: 120V AC - 8A Plug-in
10: 24V DC - 8A Plug-in
11: 120V AC - 8A Faston with Range Mount
12: 24V DC - 8A Faston with Range Mount
13: 230V AC - 25A Single-Phase
14: 3x230/400V AC - 65A Three-Phase
15: 230V AC - 10A plug-in 5mm pin
16: 12V DC - 10A plug-in 3.5mm pin
17: 48V DC - 16A PCB 3.5mm pin flat
18: 110V AC - 8A plug-in 5mm pin
19: 24V DC - 16A PCB Mount
20: 120V AC - 16A Faston with Range Mount

Filter

- d) You can delete a specific sales order if you select an item from dataGridView in Sales order tab and press on Delete Order button.

Press Delete All Orders

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
---------------	----------------	----------------	--------------	------------	----------------	------------------

Delete Order

Delete All Orders

Clear Filter

Filter

7: Ofelia Ebbens
8: Lindsey Hauger
9: Bendick Petersen
10: Evangeline Sondon
11: Ada Natissa
12: Wolfy Westwell
13: Agosto Longstreeth
14: Sigmund Ploworth
15: Stacy Groundwater
16: Rab Browne
17: Faber Laurenz
18: Tasia Jepps
19: Carleen Majoram
20: Niki Stradling
21: Channellwan

6: 24V DC - 6A Plug-in
7: 120V AC - 6A Faston with Range Mount
8: 24V DC - 6A Faston with Range Mount
9: 120V AC - 8A Plug-in
10: 24V DC - 8A Plug-in
11: 120V AC - 8A Faston with Range Mount
12: 24V DC - 8A Faston with Range Mount
13: 230V AC - 25A Single-Phase
14: 3x220/400V AC - 65A Three-Phase
15: 230V AC - 10A plug-in 5mm pin
16: 12V DC - 10A plug-in 3.5mm pin
17: 48V DC - 16A PCB 3.5mm pin flat
18: 110V AC - 8A plug-in 5mm pin
19: 24V DC - 16A PCB Mount
20: 120V AC - 16A Faston with Range Mount

- e) You can delete all the sales orders if you simply press on Delete All Orders button in Sales Order Tab.

4. Database Backup Tab

All Orders gone, go to the Database Backup Tab and retrieve all the data back to the WinForm

Electronic Shop Form

Administrator Manager Sales Order Database Backup

Backup Data to XML File

Restore Data from XML File

Electronic Shop Form

Administrator Manager Sales Order Database Backup

	Customer Name	Inventory Name	Order Quantity	Total Amount	Order Date	Customer Phone	Customer Address
▶	Lanni MacKessock	12-48V AC - 200mA - Movement Dete...	15	450	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	230V AC - 10A plug-in 5mm pin	15	60	Oct 07, 2011	647-442-1228	374 Sullivan Alley
	Lanni MacKessock	3x230/400V AC - 65A Three-Phase	5	225	Jan 25, 2013	647-442-1228	374 Sullivan Alley
	Anne-marie Gumett	12-48V AC - 200mA - Movement Dete...	25	750	May 29, 2017	667-599-7561	79 Quincy Parkway
	Anne-marie Gumett	120V AC - 6A Plug-in	90	450	May 29, 2017	667-599-7561	79 Quincy Parkway
	Anne-marie Gumett	230V AC - 25A Single-Phase	55	1375	May 29, 2017	667-599-7561	79 Quincy Parkway
	Anne-marie Gumett	120V AC - 16A Faston with Range Mo...	100	1000	May 29, 2017	667-599-7561	79 Quincy Parkway
	Anne-marie Gumett	12V DC - 10A plug-in 3.5mm pin	80	320	Aug 14, 2012	667-599-7561	79 Quincy Parkway
	Nicola Mackerel	12V DC - 10A plug-in 3.5mm pin	50	200	May 06, 2013	874-233-7813	68772 Parkside Lane

Delete Order

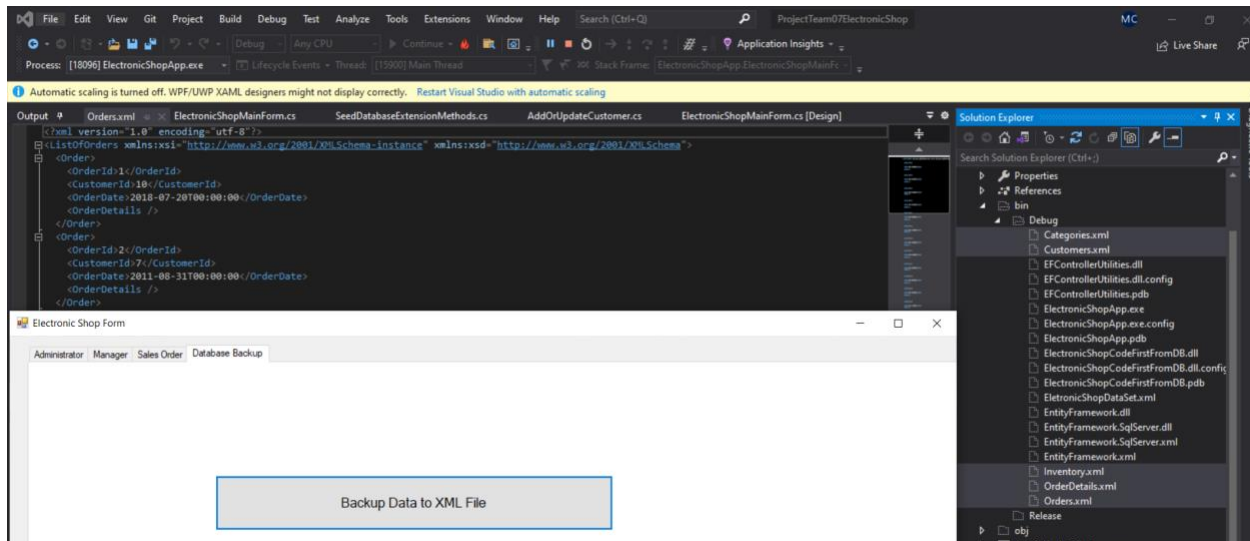
Delete All Orders

Clear Filter

6. Nicola Mackerel
7. Ofelia Ebbers
8. Lendroy Hauger
9. Bendick Patmen
10. Evangelina Sondon
11. Ado Natras
12. Wolfy Westwell
13. Agostio Longtreoth
14. Sigmund Roworth
15. Stacy Groundwater
16. Rab Browne
17. Faber Laurenz
18. Issa Japps
19. Cateen Masaram
20. Niku Strading

6. 24V DC - 6A Plug-in
7. 120V AC - 6A Faston with Range Mount
8. 24V DC - 6A Faston with Range Mount
9. 120V AC - 8A Plug-in
10. 24V DC - 8A Plug-in
11. 120V AC - 8A Faston with Range Mount
12. 24V DC - 8A Faston with Range Mount
13. 230V AC - 25A Single-Phase
14. 3x230/400V AC - 65A Three-Phase
15. 230V AC - 10A plug-in 5mm pin
16. 12V DC - 10A plug-in 3.5mm pin
17. 48V DC - 16A PCB 3.5mm pin flat
18. 110V AC - 8A plug-in 5mm pin
19. 24V DC - 16A PCB Mount
20. 120V AC - 16A Faston with Range Mount

Filter



Press Backup Data to XML File, 5 Entities xml files will be generated and saved at (./bin/Debug).

You can backup data to XML file to be able to restore the same data in case errors happens and something goes wrong, for example all sales orders is deleted by mistake. This way you can safely retrieve all the deleted data.

User Interface

Administrator Screen	
A screen that the user can check and select available items and send the order to the company.	
Component	Description
Customer Details Field	Customers can fill in their information, such as Name, E-mail, Phone Number, Address...
Category ListBox	Listing and selecting all products of the company (Electrical & Lighting Accessories)
Type ListBox	Listing and selecting all types of each product from the category
Voltage ListBox	Listing and selecting all types of voltage from the product category
Pole & Current ListBox	Listing and selecting all the available poles and current from the product category
AC & DC Checkbox	Customer can select either AC or DC power
Add Item Button	A button that users can add selected item from the Listboxes to the DataGridView table
Added Items DataGridView, includes 5 columns, which are: ItemId, ItemName, UnitPrice, Quantity, and SubTotal	Table that shows added items and subtotal of the item from the Listboxes
Calculate Order Button & TextView	A button to calculate the price of total of added items and print final result/number to the nearby TextView
Order Button	A button to send the order to the Manager
Close Button	A button to close the application

Manager Screen	
A screen that the user can manage the inventory of all available products. The manager can add, and update items within the inventory.	
Component	Description
Filter Item TextBox	Search for specific item bases on item Name or Id
Inventory List DataGridView	Listing all the items in the inventory
Quantity & Price TextBox	Provide values to update quantity and price of the item in the inventory
Add Item Button	A button to add new item to the inventory
Update Item Button	A button to update available item (such as price, quantity...) in the inventory
Delete Item Button	A button to delete item from the inventory

Sales Order Screen	
A screen that the user can manage all the sales order of customers	
Component	Description

Filter Order Textbox	Search for specific order bases on Customer Name or Item Id
Order List DataGridView	Listing the ordered items as well as customer information
Delete Order Button	Delete selected order from the list
Clear All Order	Delete all available orders from the list

Database Backup Screen	
Backup Data Button	A button to backup database to XML file
Restore Data Button	A button to restore database from XML file

Project Plan (Timelines)

Key Dates	Benchmarks to finish	Participants
Nov 9	Proposal 1 st draft submission	All
Nov 16	Create the Database and Entity Framework, Insert the data in database, create the publish.xml	All
Nov 23	Admin Screen, Manager Screen, SalesOrder Screen, Database Backup Screen	All
Nov 30	Testing the final application	All
Dec 8	Final Report submission	All

Task assign:

Database and data access	Sadaf, Mei, Quintus
Testing	Mei
Reporting	Sadaf
Integration	Quintus
Sales + Backup Page	Mei
Admin Page	Quintus
Manager Page	Sadaf