

Final Project Paper

Group 1: Suit Guys



Neal Patel

Jose Guarneros

SangWon Im

Joao Paulo Macedo

Catherine Kirkham



Table of contents

Project Overview.....	3
User Requirements.....	4
Business Rules	6
Business Questions.....	7
Physical ERD.....	8
Database implementation.....	9
Business Question Answers.....	10



Project Overview

The Goal of Our Organization:

The clothing industry has been always evolving in order to meet the customer's expectations and requirements for their own style and way of shopping. Based on that, we analyzed the needs of customers and opportunities on the market to create Suit Guys.

Business Model:


The order of creating personalized clothing in support of customer ideas was the foundation around which our project was founded. Customers have the option of ordering suits in person or online. Every store has a department, and there are two different personnel types: salespeople and tailors who can take orders from customers.

How Does our Company make profit and provides services:

Within Our ERD Diagram we can generate more personalized customer order and also store the value either in In-Store and Online based system. We hope to increase the revenue while categorizing precise customer demand and store the value in a specific entity.

User Requirements

- a. Suit Companies keep track of OrderID, EmployeeID, CustomerID and StoreID, along with Date, TotalPrice and Type of Order.
- b. There must be at least one Customer to buy an Order but consumer can buy zero or more Order
 - i. Company keeps CustomerID, First, Last name and their address
- c. ORDER must have at least one EMPLOYEE but Employee can be zero or more for each ORDER
 - i. Company keeps Employee ID, Last, first name and types of Comp and StoreID
 - ii. Two types of Employees are stored in the system, SalesPerson and Tailor. There must be at least One Employee but one or more SalesPerson. There must be at least one Employee but one or many Tailor
 - iii. SalesPerson and Tailor shares TypeofCompensation but SalesPerson have Commission and Tailor as Years of Expiration
- d. Products can have a one or more Order and there must be at least one order to be put in the system for Products. Products keep track of Prod_ID and have SuitID, Productname, Type and VendorID.
- e. Within Products there are RTW Suit and Custom Suit. RTW Suit must have at least one Product and Products must have at least one RTW Suit. RTW Suit tracks ProductID, Color, size and PantsSize.

- 
- f. CustomSuit must have at least one Product, Products must have at least one CustomerSuit. Customer can order custom Suit which store SuitID and has variation of Height,Weight,Color,PantSize, and TypeofMaterials
 - g. Every PRODUCTS must have at least one Order but all PRODUCTS can have multiple INVENTORY. INVENTORY keeps InventoryID, ProductID, VendorID and StoreID, also keeps Date, quantity and cost of Ordered Products.
 - h. When Customer Order Products it will have at least one Vendor connected. Vendors can have zero or more quantity ordered from customers. VendorID will be stored in the system along with Name, address, material and Product type customer demand.
 - i. There must be at least one Order for ONLINE and In Store purchases but can be One or Morder request order to go through ONLINE and INSTORE
 - i. For Online requests company stores Online_ID, OrderID, ProdID and Quantity, Price, and TrackingID
 - ii. For IN Store there are INstoreID, OrderID,ProdID,Quantity and Price

Business Rules

- An Employee may take care of many Orders.
- An Order may be made Online.
- An Order may be made In Store.
- Each Order may have one or many Products.
- A Customer may have many Orders.
- A Store has many Customers.
- A Store may use many Inventories.
- A Vendor provides for many Stores.
- A Vendor has many Inventories.
- A Vendor may have many Products.
- Each Product comes from many Inventories.
- A Product has many Orders.
- An Employee is distinctly one and only one position of Salesperson or Tailor.
- A Product is distinctly one and only one type of RTW Suit or Custom Suit.
- Each Order has one and only one Employee taking care of it.
- Each Order has one and only one Customer.
- Each Store has one and only one Vendor.
- The Inventory provides to optional many Stores.

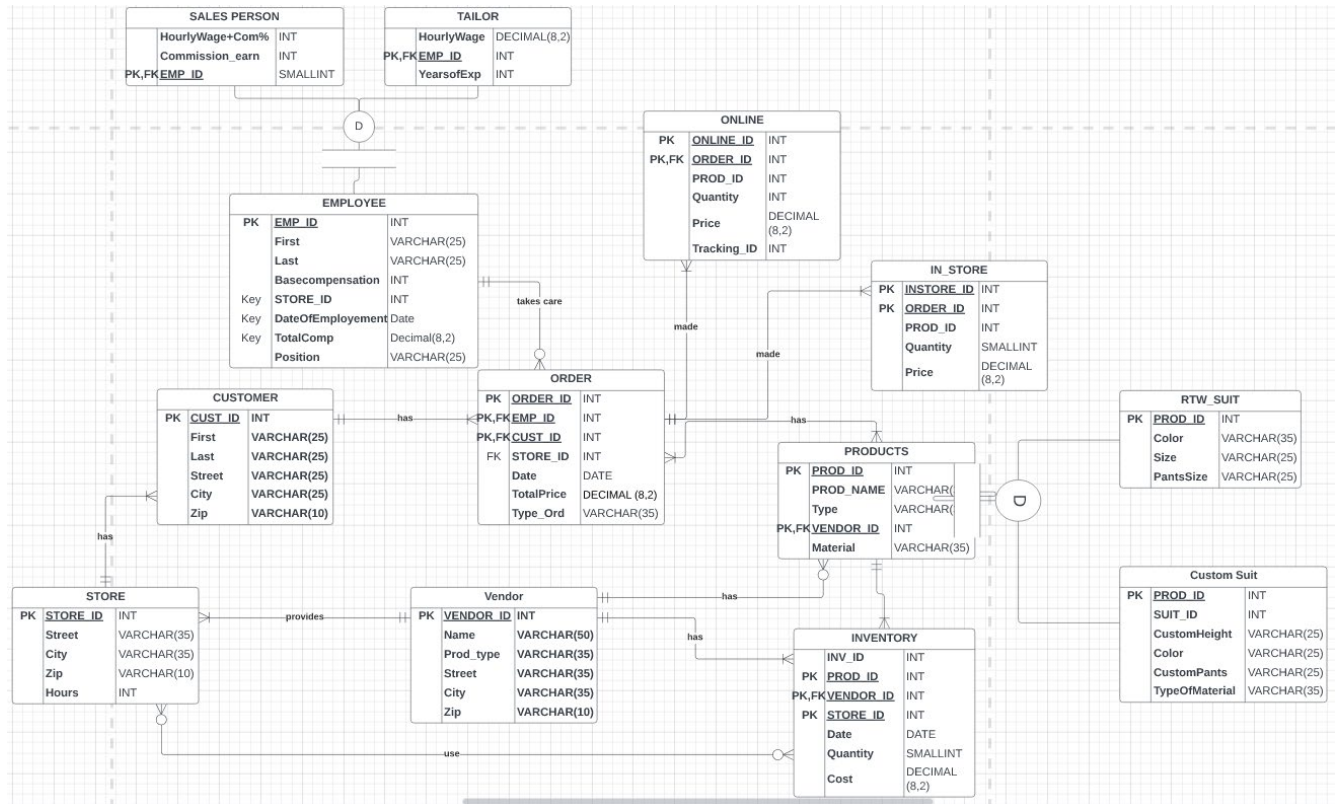


Business Questions:

- 1) What Type of products do we sell?
- 2) Who are our vendors and what do they supply us with?
- 3) What are our employees' names and positions?
- 4) What Type of orders were made at what store & total price.
- 5) How much did the salespeople earn in commission?
- 6) Who supplies our products, what types of products, and inventory available?
- 7) What Employee works at what store alongside the store address?
- 8) What type of orders were fulfilled online?
- 9) Who are our employees?

Who are our top sales representatives?

Physical ERD



Link to ERD: https://lucid.app/lucidchart/95a201fc-d00e-4d00-a064-fc3dddadd4f1/edit?viewport_loc=-88%2C39%2C2346%2C1272%2C0_0&invitationId=inv_03484b0a-92c1-4c45-bbc6-a47097539b2a#

Database Implementation

DDL & DML CODE Examples:

```
DROP TABLE IF EXISTS Customer;
CREATE TABLE Customer
(
    CustomerID INT NOT NULL IDENTITY(1,1),
    FirstName VARCHAR(25) NOT NULL,
    LastName VARCHAR(25) NOT NULL,
    StreetAddress VARCHAR(255) NOT NULL,
    State VARCHAR(2) NOT NULL,
    City VARCHAR(25) NOT NULL,
    ZipCode VARCHAR(10) NOT NULL,
    CONSTRAINT PK_Customer_CustomerID PRIMARY KEY ( CustomerID )
);

DROP TABLE IF EXISTS Store;
CREATE TABLE Store
(
    StoreID INT NOT NULL IDENTITY (1,1),
    StreetAddress VARCHAR(255) NOT NULL,
    City VARCHAR(25) NOT NULL,
    ZipCode VARCHAR(10) NOT NULL,
    CONSTRAINT PK_Store_StoreID PRIMARY KEY (StoreID)
);

DROP TABLE IF EXISTS Vendor;
CREATE TABLE Vendor
(
    VendorID INT NOT NULL,
    VendorName VARCHAR(25) NOT NULL,
    ProductType VARCHAR(25) NOT NULL,
    StreetAddress VARCHAR(255) NOT NULL,
    City VARCHAR(35) NOT NULL,
    ZipCode VARCHAR(10) NOT NULL,
    CONSTRAINT PK_Vendor_VendorID PRIMARY KEY ( VendorID )
);

DROP TABLE IF EXISTS Products;
CREATE TABLE Products
(
    ProductID INT NOT NULL,
    ProductName VARCHAR(35) NOT NULL,
    ProductType VARCHAR(35) NOT NULL,
    VendorID INT NOT NULL,
    CONSTRAINT PK_Products_ProductID PRIMARY KEY ( ProductID ),
    CONSTRAINT FK_Products_VendorID FOREIGN KEY ( VendorID ) REFERENCES Vendor ( VendorID )
);

---Store Data---
insert into Store (StreetAddress, City, ZipCode) values ('4 Arapahoe Road', 'Lincoln', '68517');
insert into Store (StreetAddress, City, ZipCode) values ('54874 Becker Trail', 'Washington', '20029');
insert into Store (StreetAddress, City, ZipCode) values ('7 Hansons Pass', 'Alexandria', '22333');
insert into Store (StreetAddress, City, ZipCode) values ('6 Dahle Lane', 'Scottsdale', '85271');
insert into Store (StreetAddress, City, ZipCode) values ('128 Rutledge Drive', 'Shawnee Mission', '66215');
insert into Store (StreetAddress, City, ZipCode) values ('2124 Hanson Center', 'Denver', '80279');
insert into Store (StreetAddress, City, ZipCode) values ('452 Haas Street', 'Anderson', '29625');
insert into Store (StreetAddress, City, ZipCode) values ('44257 Namekagon Road', 'Denver', '80270');
insert into Store (StreetAddress, City, ZipCode) values ('27423 Bonner Lane', 'New Orleans', '70116');
insert into Store (StreetAddress, City, ZipCode) values ('2 Hifflin Circle', 'Vero Beach', '32969');
insert into Store (StreetAddress, City, ZipCode) values ('74594 Hansons Parkway', 'Nashville', '37220');
insert into Store (StreetAddress, City, ZipCode) values ('93568 Burrows Terrace', 'Lima', '45007');
insert into Store (StreetAddress, City, ZipCode) values ('28337 Lerdahl Plaza', 'Saint Louis', '63143');
insert into Store (StreetAddress, City, ZipCode) values ('88 East Terrace', 'Salem', '97312');
insert into Store (StreetAddress, City, ZipCode) values ('78794 Buell Street', 'Denver', '80249');

---Vendor Data---
insert into Vendor (VendorID, VendorName, ProductType, StreetAddress, City, ZipCode) values ('123', 'Sharp Suits', 'Sport Coat', 'MI', '53210', '48956');
insert into Vendor (VendorID, VendorName, ProductType, StreetAddress, City, ZipCode) values ('124', 'Clothing Tact', 'Socks', 'TX', '76178', '08695');
insert into Vendor (VendorID, VendorName, ProductType, StreetAddress, City, ZipCode) values ('125', 'Clothing Mist', 'Shirts', 'MS', '39282', '71161');
insert into Vendor (VendorID, VendorName, ProductType, StreetAddress, City, ZipCode) values ('126', 'Clothing Main', 'Pants', 'VA', '22301', '37939');
insert into Vendor (VendorID, VendorName, ProductType, StreetAddress, City, ZipCode) values ('127', 'Suits Tender', 'Shoes', 'AL', '35285', '66205');
insert into Vendor (VendorID, VendorName, ProductType, StreetAddress, City, ZipCode) values ('128', 'Suits Star', 'French Shirts', 'VA', '23228', '44118');
insert into Vendor (VendorID, VendorName, ProductType, StreetAddress, City, ZipCode) values ('129', 'Suits Palace', 'Pocket Hanky', 'MO', '64199', '23551');
insert into Vendor (VendorID, VendorName, ProductType, StreetAddress, City, ZipCode) values ('130', 'Suit Drip', 'Belts', 'FL', '32259', '88579');
```

Business Question Answers:

1.What Type of products do we sell?



A screenshot of a SQL query result window. The window has two tabs: 'Results' and 'Messages'. The 'Results' tab is active, showing a table with two columns: 'ProductID' and 'ProductType'. The table contains 15 rows of data. The first row is highlighted.

	ProductID	ProductType
1	11	Shirt
2	12	Shirt
3	13	Shoes
4	14	Shoes
5	15	Shoes
6	16	Suit
7	17	Suit
8	18	Suit
9	19	Tie
10	20	Tie
11	21	Tie
12	22	Pants
13	23	Pants
14	24	Pants
15	25	Pants

2.Who are our vendors and what do they supply us with?



A screenshot of a SQL query result window. The window has two tabs: 'Results' and 'Messages'. The 'Results' tab is active, showing a table with two columns: 'VendorName' and 'ProductType'. The table contains 15 rows of data. The first row is highlighted.

	VendorName	ProductType
1	Sharp Suits	Sport Coat
2	Clothing Tact	Socks
3	Clothing Mat	Shirts
4	Clothing Main	Pants
5	Suits Tender	Shoes
6	Suits Star	French Shirts
7	Suits Palace	Pocket Hanky
8	Suit Drip	Belts
9	Suit Drip	Cufflinks
10	Suit Drip	cologne
11	Suits Star	Vest
12	Suits Hut	Blazer
13	Suits Hut	Outerwear Jacket
14	Clothing Supply	Tux
15	Clothing Supply	Bow Tie

3.What are our employees' names and positions?



A screenshot of a SQL query result window. The window has two tabs: 'Results' and 'Messages'. The 'Results' tab is active, showing a table with two columns: 'EmployeeName' and 'Position'. The table contains 30 rows of data. The first row is highlighted.

	EmployeeName	Position
1	Cassie Lisciantri	Tailor
2	Blake Ham	SalesPerson
3	Skippy Davidwitz	SalesPerson
4	Barclay Lefley	SalesPerson
5	Christalle Stoddard	SalesPerson
6	Marlyn Towhey	SalesPerson
7	Holly-anne Aubrey	Tailor
8	Hilton Mewhiter	Tailor
9	Lyn Barthrup	Tailor
10	Iolande Hallick	Tailor
11	Philomena Riddell	Tailor
12	Kerk Hathwaite	Tailor
13	Huntley Van Der Weedenburg	Tailor
14	Isabelle Littler	Tailor
15	Dwayne Organer	Tailor
16	Yuri Bathowe	Tailor
17	Rhea Koryakov	Tailor
18	Fiona Cousen	Tailor
19	Raynard Longhome	SalesPerson
20	Karalynn Cristofari	SalesPerson
21	Marybeth Munnis	SalesPerson
22	Becky Hesserthaler	SalesPerson
23	Priscella Dybell	SalesPerson
24	Berni Hedding	Tailor
25	Britt Camplin	SalesPerson
26	Steward Puddin	Tailor
27	Faunie Harlock	SalesPerson
28	Farleigh Cottrell	SalesPerson
29	Eddie Mingame	SalesPerson
30	Dun Henker	SalesPerson

4. What Type of orders were made at what store & total price.

	StoreID	TypeOfOrder	TotalPrice
1	5	Ready To Wear	434.00
2	2	Custom Suit	899.00
3	1	Custom Suit	928.00
4	13	Custom Suit	599.00
5	7	Ready To Wear	499.00
6	8	Custom Suit	1239.00
7	14	Custom Suit	332.00
8	11	Ready To Wear	344.00
9	4	Custom Suit	934.00
10	3	Custom Suit	1534.00
11	15	Custom Suit	543.00
12	14	Ready To Wear	342.00
13	12	Ready To Wear	235.00
14	13	Ready To Wear	199.00
15	4	Custom Suit	853.00
16	3	Ready To Wear	253.00
17	9	Ready To Wear	357.00
18	4	Ready To Wear	135.00
19	3	Custom Suit	867.00
20	15	Ready To Wear	324.00
21	7	Ready To Wear	599.00
22	2	Ready To Wear	624.00
23	6	Custom Suit	987.00
24	3	Custom Suit	903.00
25	13	Ready To Wear	224.00
26	6	Ready To Wear	435.00
27	8	Ready To Wear	642.00

5. How much did the salespeople earn in commission?

	EmployeeID	CommissionEamed
1	2	60596
2	3	44900
3	4	29635
4	5	25176
5	6	30302
6	19	39802
7	20	64351
8	21	81812
9	22	52878
10	23	77300
11	25	91618
12	27	109203
13	28	73762
14	29	55331
15	30	81449

6. Who supplies our products, what types of products, and inventory available?

Results		Messages		
	ProductID	ProductType	VendorID	Quant
1	11	Shirt	125	16
2	12	Shirt	125	16
3	11	Shirt	125	12
4	12	Shirt	125	12
5	16	Suit	134	26
6	17	Suit	134	26
7	19	Tie	137	4
8	20	Tie	137	4
9	21	Tie	137	4
10	13	Shoes	127	26
11	14	Shoes	127	26
12	15	Shoes	127	26
13	13	Shoes	127	24
14	14	Shoes	127	24
15	15	Shoes	127	24
16	11	Shirt	125	29
17	12	Shirt	125	29
18	19	Tie	137	48
19	20	Tie	137	48
20	21	Tie	137	48
21	16	Suit	134	9
22	17	Suit	134	9
23	16	Suit	134	10
24	17	Suit	134	10
25	19	Tie	137	4
26	20	Tie	137	4
27	21	Tie	137	4
28	22	Pants	126	32
29	23	Pants	126	32
30	24	Pants	126	32
31	25	Pants	126	32
32	22	Pants	126	6
33	23	Pants	126	6
34	24	Pants	126	6
35	25	Pants	126	6
36	22	Pants	126	13
37	23	Pants	126	13
38	24	Pants	126	13
39	25	Pants	126	13
40	11	Shirt	125	19
41	12	Shirt	125	19

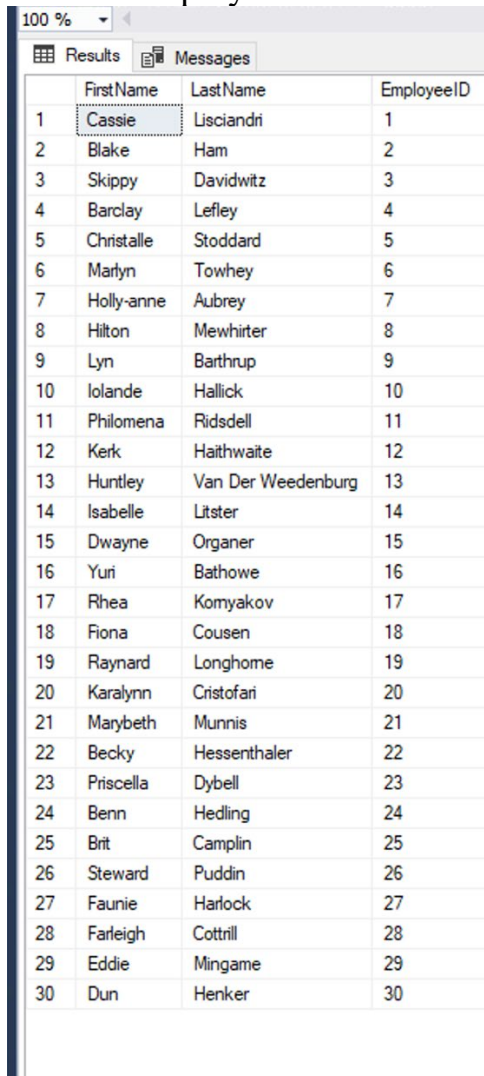
7.What Employee works at what store alongside the store address?

Results Messages				
	EmployeeID	EmployeeName	StoreID	StreetAddress
1	1	Cassie Liscandri	2	54874 Becker Trail
2	2	Blake Ham	3	7 Hansons Pass
3	3	Skippy Davidwitz	3	7 Hansons Pass
4	4	Barclay Lefley	2	54874 Becker Trail
5	5	Christalle Stoddard	3	7 Hansons Pass
6	6	Marlyn Towhey	1	4 Arapahoe Road
7	7	Holly-anne Aubrey	3	7 Hansons Pass
8	8	Hilton Mewhirter	2	54874 Becker Trail
9	9	Lyn Barthrup	1	4 Arapahoe Road
10	10	Iolande Hallick	1	4 Arapahoe Road
11	11	Philomena Ridsdell	1	4 Arapahoe Road
12	12	Kerk Hathwaite	2	54874 Becker Trail
13	13	Huntley Van Der Weedenburg	2	54874 Becker Trail
14	14	Isabelle Litster	4	6 Dahle Lane
15	15	Dwayne Organer	5	128 Rutledge Drive
16	16	Yun Bathowe	5	128 Rutledge Drive
17	17	Rhea Komyakov	6	2124 Hanson Center
18	18	Fiona Cousen	6	2124 Hanson Center
19	19	Raynard Longhome	7	452 Haas Street
20	20	Karalynn Cristofari	8	44257 Namekagon Road
21	21	Marybeth Munnis	9	27423 Bonner Lane
22	22	Becky Hessenthaler	9	27423 Bonner Lane
23	23	Priscella Dybell	10	2 Mifflin Circle
24	24	Benn Hedling	10	2 Mifflin Circle
25	25	Brit Camplin	10	2 Mifflin Circle
26	26	Steward Puddin	10	2 Mifflin Circle
27	27	Faunie Harlock	11	74594 Hansons Parkway
28	28	Farleigh Cottrill	11	74594 Hansons Parkway
29	29	Eddie Mingame	12	93560 Burrows Terrace
30	30	Dun Henker	12	93560 Burrows Terrace

8.What type of orders were fulfilled online?

Results Messages				
	OrderID	ProductID	ProductName	ProductType
1	1	11	Single Cuff	Shirt
2	2	12	French Cuff	Shirt
3	3	13	Loafer	Shoes
4	4	14	Monk Strap	Shoes
5	5	15	Brogue	Shoes
6	6	16	Double Breasted	Suit
7	7	17	Single Breasted	Suit
8	8	18	Tuxedo	Suit
9	9	19	Skinny	Tie
10	10	20	Fat	Tie
11	11	21	Bow	Tie
12	12	22	Slim Pants	Pants
13	13	23	Trditional Fit	Pants
14	14	24	Cotton Pants	Pants
15	15	25	linen Pants	Pants

9. Who are our employees?



	FirstName	LastName	EmployeeID
1	Cassie	Lisciadri	1
2	Blake	Ham	2
3	Skippy	Davidwitz	3
4	Barclay	Lefley	4
5	Christalle	Stoddard	5
6	Marlyn	Towhey	6
7	Holly-anne	Aubrey	7
8	Hilton	Mewhirter	8
9	Lyn	Barthrup	9
10	Iolande	Hallick	10
11	Philomena	Ridsdell	11
12	Kerk	Haithwaite	12
13	Huntley	Van Der Weedenburg	13
14	Isabelle	Litster	14
15	Dwayne	Organer	15
16	Yuri	Bathowe	16
17	Rhea	Komyakov	17
18	Fiona	Cousen	18
19	Raynard	Longhome	19
20	Karalynn	Cristofari	20
21	Marybeth	Munnis	21
22	Becky	Hessenthaler	22
23	Priscella	Dybell	23
24	Benn	Hedling	24
25	Brit	Camplin	25
26	Steward	Puddin	26
27	Faunie	Harlock	27
28	Farleigh	Cottrill	28
29	Eddie	Mingame	29
30	Dun	Henker	30

10. Who are our top sales representatives?



	EmployeeName	EmployeeID	CommissionEarned
1	Skippy Davidwitz	3	44900
2	Barclay Lefley	4	29635
3	Christalle Stoddard	5	25176
4	Marlyn Towhey	6	30302
5	Raynard Longhome	19	39802