Antony Gavidia

CIS 3400
Summer 2016

Database Project

1) Proposal:

Ginseng Vitamins, a small company that has been selling dietary supplements for 5 years, is trying to carry out an ambitious plan to expand on the East Coast. Ginseng Vitamins has been able to attract the attention of new investors and raise enough capital to begin implementation. Our company, Data Pro, has been contracted to design and implement a new database, one that could capture all the details and requirements for the new business model they are trying to implement. After several meetings with management and owners we have been able to understand their current position and all the requirements needed for the new stores.

As of today, Ginseng Vitamins has only 2 stores that resell generic supplements like single vitamins and minerals from known brands like Spring Valley and Nature Made. They were able to function without a centralized database, using only tools like Microsoft Excel and online accounting applications. They are expecting to open no less than 6 new stores in at least 2 states within the next year so they urgently require a centralized database with information for every store.

One of the changes to implement includes the addition of health specialists in every store. These professionals will include not only conventional doctors but alternative medicine specialists as well. This addition will create a huge competitive advantage over general resellers like Vitamin Shoppe or GNC. Health specialists will be working all day on weekend and will be called only by appointment on week days. Customers will have the freedom to choose the doctor and specialty they feel more comfortable with. It is very important to track the hours and stores where the doctors will be working since they will be constantly moving as requested.

Customers now will have the option to get memberships. There will be 2 types of memberships, A and B. Type B will get a 25% discount in all products (cost will be $50.00 per year). Type A will get them a 35% discount in all products, a free blood test, and priority over other customers to select appointments with health specialists (cost will be $100 per year). Both types of membership will get a free bottle from the new line of Ginseng supplements whenever they are released for sale (Ginseng products will be explained later).

Personnel data and positions must be recorded now for all stores since more collaborators will be added to guide customers. Special training programs and bonuses are also to be expected with a new competitive compensation plan. Positions will include collaborators, supervisors, and managers. Categorization and product display will also change. Before stores where displaying products with traditional labels like Vitamins, Minerals, Herbs, etc. A new system of categories by condition/necessity will be implemented. This list will constantly change due to the nature of the industry. New trends and scientific discoveries are always changing the focus and understanding of customers. Ginseng Vitamins is expecting to start small with only 8 categories and will update later according to trends. Categories will include: Brain Health, Cholesterol Management, Digestion Support, Immune Support, Inflammation Management, Joint Support, Single Vitamins, and Sports Performance. Moreover, due to space constraints, every store is not expected to stock products for

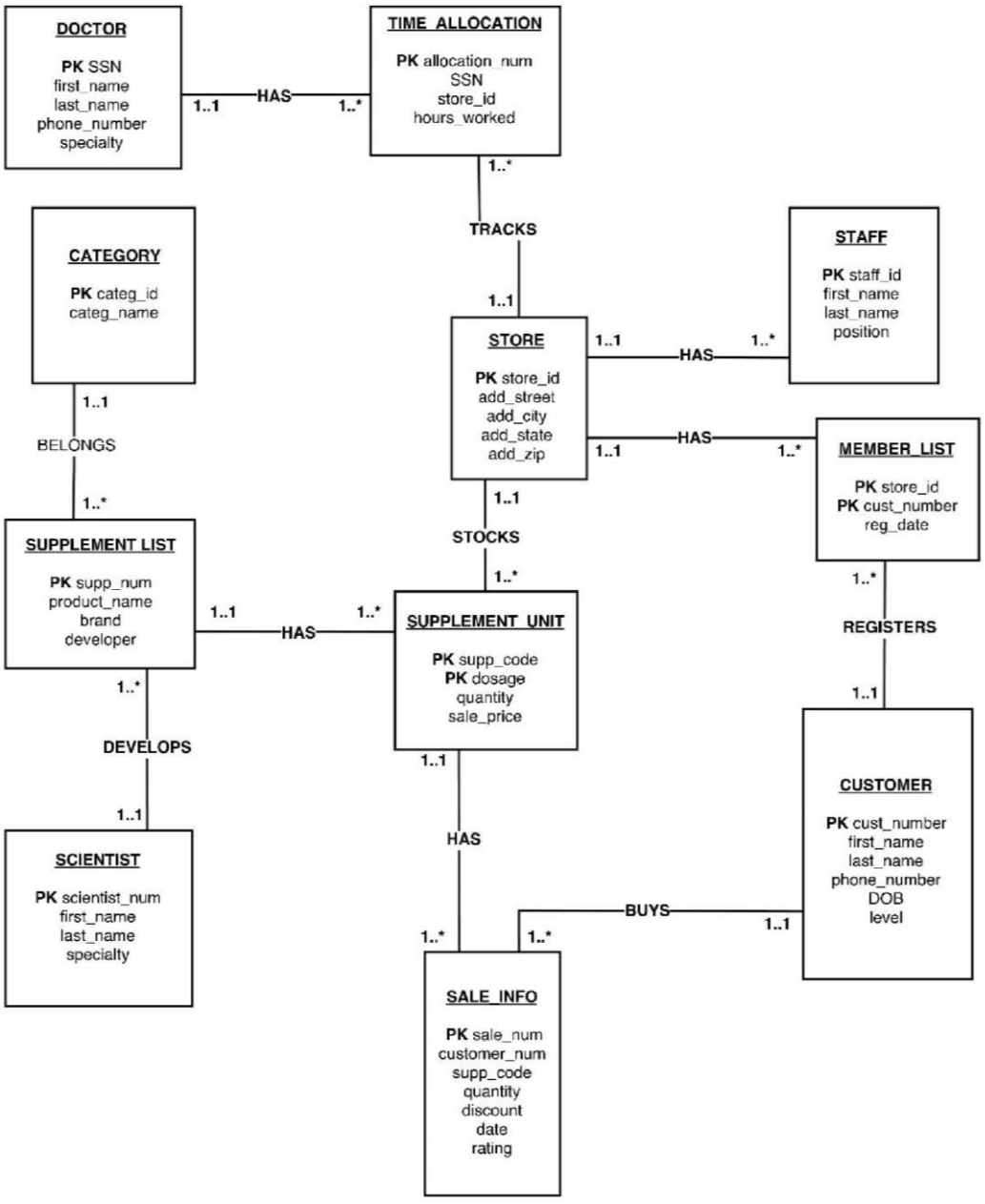
every single category, but they must at least have 5 relevant categories to target customers in their geographical area.

Arguably the best innovation by Ginseng Vitamins will be the creation of its own line of products. They are planning to leave the 'reseller' label behind and step up to compete with major supplement brands in specific niches. A renowned team of 4 scientists have been gathered to work on new formulations with the most powerful indigenous herbs known to science. Their names are: Nicolas Flamel (nutrition researcher), Wei Boyang (chemist), James Price (herbalist), and Rudolf Steiner (epidemiologist). So far, This team has developed 5 products that will be launched at the end of the year. 2 will be marketed as performance enhancers for athletes and 3 marketed as nootropics. It is imperative for Ginseng Vitamins to keep track of all the scientists that have worked to develop their products since their names will be disclosed as a marketing campaign. The strategy also contemplates to recruit more scientists, or to even contract other laboratories and scientists overseas as long as they accept to publicly disclose their names for the products they have helped to develop. Scientists can work in 1 or many projects at the same time (together or independently). The company doesn't direct their work; they are independents.

The usual information at the point of sale will be registered. This information includes the customer number and name, item code, discount given (if registered with membership), and date and time of sale. A rating number will also be requested. Customers will be asked to rate their experience at the store from 1 to 5 (1 being the worst experience). This data will be used as a powerful indicator for customer satisfaction.

Due to time constraints and technical requirements, our company, Data Pro, has entrusted this project to its best, most capable database designers. There is only 30 days left to complete this project.

2) Entity Relational Diagram:



3) Relational Model:

GINSENG VITAMINS RELATIONAL MODEL

1) Doctor (docSSN, docFname, docLname, phone, docSpecialy)

PK ={docSSN}

2) Time_Alloc (allocNum, docSSN, storeID, date, hours)

PK ={allocNum}
FK1={docSSN} ref PK of Doctor FK2={storeID} ref PK of Store

3) Store (storeID, street, city, state, zip)

PK ={storeID}

4) Staff (stID, stFname, stLname, position, storeID)

PK = {stID}
FK2={storeID} ref PK of Store

5) Membership (storeID, custNum, regDate)

PK ={storeID, custNum}
FK1={storeID} ref PK of Store FK2={custNum} ref PK of Customer

6) Customer (custNum, custFname, custLname, custPhone, custDOB, level)

PK ={custNum}

7) Supp_Unit (suppCode, storeID, quantity)

PK ={suppCode, storeID}
FK1={suppCode} ref PK of Supp_List FK2={storeID} ref PK of Store

8) Supp_List (suppCode, suppName, categNum, brand, price, sNum)

PK ={suppCode}
FK1={categNum} ref PK of Category FK2={sNum} ref PK of Scientist

9) Category (categNum, categName)

PK ={categNum}

10) Scientist (sNum, sFname, sLname, specialty)

PK ={sNum}

11) Sales_Info (SaleNum, suppCode, storeID, custNum, qty, Sdate, rating)

PK ={SaleNum}
FK1={suppCode, storeID} ref PK of Supp_Unit FK2={custNum} ref PK of Customer

Normal Form Check:

1) FIRST NORMAL FORM: all tables are in 1NF. There are no multivalued attributes.

2) SECOND NORMAL FORM:
all tables are in 2NF. There are 2 tables that contain a primary key with 2 attribute (Membership and Supp_Unit) but they only have 3 attributes in total so they can't have partially dependent attributes. All tables therefore are automatically in 2NF.

3) THIRD NORMAL FORM:

- Doctor: there is no transitive dependencies. Table is in 3NF.

- Time_Alloc: there is no transitive dependencies. Table is in 3NF.

- Store: there is the possibility to normalize this table by separating state, city and zip code to create a new table. But since any change in cities (if it ever occurs) won't create any anomaly (insert or delete anomalies) it would be considered overdesigned for our model. There is no need to further normalize this table.

- Staff: there is no transitive dependencies. Table is in 3NF.

- Membership: there is no transitive dependencies. Table is in 3NF.

- Customer: there is no transitive dependencies. Table is in 3NF.

- Supp_Unit: there is no transitive dependencies. Table is in 3NF.

- Supp_List: there is no transitive dependencies (SuppName could be the same for 2 or more products, especially in the vitamins and herbs sections where there are generic names. Therefore, there is no possibility of transitive dependencies on SuppName). Table is in 3NF.

- Category: there is no transitive dependencies. Table is in 3NF.

- Scientist: there is no transitive dependencies. Table is in 3NF.

- Sales_Info: there is no transitive dependencies (none of the non-key attributes solely depends on a single attribute). Table is in 3NF.

4) Queries and Reports:

QUERIES:

- 1) qryAverageRatingByStore: Customer satisfaction is collected at point of sale (scale from 1 to 5). This query helps to identify the stores with highest and lowest customer satisfaction throughout the year. Many Strategies can be implemented to reward or help stores according to customer satisfaction.

```
SELECT st.storeid, st.street, st.city, state, Round(Avg(rating),1) AS Rating_Average
FROM store AS st, membership AS m, customer AS c, sales_info AS s
WHERE (st.storeid)=[m].[storeid] AND (c.custnum)=[m].[custnum] And (c.custnum)=[s].[custnum]
AND Year([s.sdate]) = Year(Date())
GROUP BY st.storeid, st.street, st.city, state
ORDER BY Round(Avg(rating),1) DESC;
```

qryAverageRatingByStore				
Store ID	**Store Street**	**Store City**	**Store State**	**Rating_Average**
1007	14 College Ave.	East Northport	NY	3.7
1006	325 Valley Ave.	Bronx	NY	3.7
1005	8887 Jackson Drive	Levittown	NY	3.7
1001	24 Brandywine Street	Manitowoc	WI	3.7
1002	592 Delaware St.	Astoria	NY	3.5
1009	7637 Lafayette St.	Lancaster	NY	3.4
1008	301 Mayfield Ave.	East Meadow	NY	3.4
1000	410 Wayne Avenue	Stamford	CT	3.4
1004	58 Forest Dr.	Syosset	NY	3.3
1003	7 Ivy Rd.	Freeport	NY	3.3

- 2) qryCategListByStore: list of categories that are currently displayed in stores.

```
SELECT DISTINCT store.storeid, street, city, category.categname
FROM category, supp_list, supp_unit, store
WHERE category.categnum = supp_list.categnum AND supp_list.suppcode = supp_unit.suppcode
AND supp_unit.storeID = store.storeID;
```

qryCategListByStore			
Store ID	**Store Street**	**Store City**	**Categ Name**
1000	410 Wayne Avenue	Stamford	Brain Health
1000	410 Wayne Avenue	Stamford	Cholesterol Management
1000	410 Wayne Avenue	Stamford	Bone Health
1001	24 Brandywine Street	Manitowoc	Bone Health

1001	24 Brandywine Street	Manitowoc	Brain Health
1001	24 Brandywine Street	Manitowoc	Cholesterol Management
1001	24 Brandywine Street	Manitowoc	Digestion Support
1002	592 Delaware St.	Astoria	Herbs
1002	592 Delaware St.	Astoria	Bone Health
1002	592 Delaware St.	Astoria	Cholesterol Management

- 3) qryCustomerDisc%Parameter: this query asks the user to enter the discount level (as a parameter). Level 0 = no discount, level 1 = 25% discount, and level 2 = 35% discount (as explained in the proposal). All customers with the selected parameter will show up in the report.

```
SELECT m.custnum, c.custfname, c.custlname, m.storeid, s.street, s.city, m.regdate, c.level
FROM store AS s, membership AS m, customer AS c
WHERE (((m.custnum)=c.custnum) And ((c.level)=[Enter level (0,1,2):]) And ((s.storeID)=m.storeid));
```

qryCustomerDisc%Parameter

Customer Number	Cust First Name	Cust Last Name	ID	Store Street	Store City	Registration Date	Discount Level
10	Lorena	Clerk	1000	410 Wayne Avenue	Stamford	05/01/2016	1
11	Juan	Guitierrez	1001	24 Brandywine Street	Manitowoc	05/02/2016	1
13	Tony	Lander	1003	7 Ivy Rd.	Freeport	05/04/2016	1
14	Sebas	Clear	1004	58 Forest Dr.	Syosset	05/05/2016	1
15	Andres	Shane	1005	8887 Jackson Drive	Levittown	05/06/2016	1
16	Nora	Gavidia	1006	325 Valley Ave.	Bronx	05/07/2016	1
17	Noriega	Garcia	1007	14 College Ave.	East Northport	05/08/2016	1
18	Phillips	Davila	1008	301 Mayfield Ave.	East Meadow	05/09/2016	1
19	Juanca	Hong	1009	7637 Lafayette St.	Lancaster	05/01/2016	1

- 4) qryDocTotalHoursYear: total hours worked by doctors. Doctors with more hours are the most preferred by customers (customers select their doctors by appoiments).

```
SELECT a.docssn, docfname, doclname, sum(hours) AS totalHours
FROM doctor AS d, time_alloc AS a
WHERE d.docSSN = a.docSSN AND Year([tdate]) = Year(Date())
```

```
GROUP BY a.docssn, docfname, doclname
ORDER BY sum(hours) DESC;
```

qryDocTotalHoursYear			
Doc SSN	**Doc First Name**	**Doc Last Name**	**totalHours**
746368790	Karl	Smith	9
746325740	Pedro	Williams	9
766328790	Albert	Ying	6
766228791	Daniel	Rock	5
766328123	Joel	Jones	3
736358790	Austin	Johnson	3
766901790	Abel	Harris	2
766374590	Richard	Lee	2

- 5) qryGinsengDevelopers: list of scientists/developers and the supplements they have developed for the Ginseng Brand.

```
SELECT s.snum, sFname, sLname, suppname
FROM scientist AS sc, supp_list AS s
WHERE sc.snum = s.snum AND brand = 'ginseng'
ORDER BY sc.snum;
```

qryGinsengDevelopers			
Developer	**First Name**	**Last Name**	**Supp Name**
1	Nicolas	Flamel	ArthroMax
1	Nicolas	Flamel	Advanced Turmerones
1	Nicolas	Flamel	Bone Plus
2	Wei	Boyang	Brain Plus
3	James	Price	Lipid Control
4	Rudolf	Steiner	Florassist
4	Rudolf	Steiner	Bioactive Creatine
4	Rudolf	Steiner	Bone Essentials
5	Marie	Curie	Mind Power
5	Marie	Curie	Argi-Ornithine
6	Linus	Pauling	CHOL Support
6	Linus	Pauling	Reishi Complex
7	John	Dalton	Extra Enzymes

9	Nicolas	Flamel	Immune Shield
10	Robert	Boyle	Cytokine Suppress
10	Robert	Boyle	Super Chondro

- 6) qryNonGinsengProducts: list of other supplements sold in stores that don't belong to the Ginseng brand.

```
SELECT suppcode, suppname, brand, price
FROM supp_list
WHERE BRAND <> 'ginseng';
```

qryNonGinsengProducts			
Supp Code	**Supp Name**	**Brand**	**Price**
3	Bone Strength	Vitals	$19.99
4	Grow Bone	Swanson	$19.99
7	Focus	Now Foods	$19.99
8	Brain Octane	Swanson	$19.99
11	Policosanol	Vitals	$19.99
12	Super Ubiquinol	Swanson	$19.99
15	Eso Guardian	Natrol	$19.99
16	Theralac	Bragg	$19.99
17	Echinacea	Life	$19.99

- 7) qryProductsByCategory: list of all products sold in all stores arranged by categories.

```
SELECT c.categnum, c.categname, s.suppcode, s.suppname
FROM category AS c, supp_list AS s
WHERE c.categnum = s.categnum;
```

qryProductsByCategory			
Categ Number	**Categ Name**	**Supp Code**	**Supp Name**
1	Brain Health	5	Brain Plus
1	Brain Health	6	Mind Power
1	Brain Health	7	Focus
1	Brain Health	8	Brain Octane
2	Cholesterol Management	9	Lipid Control
2	Cholesterol Management	10	CHOL Support
2	Cholesterol Management	11	Policosanol

2	Cholesterol Management	12	Super Ubiquinol
3	Digestion Support	13	Florassist
3	Digestion Support	14	Extra Enzymes
3	Digestion Support	15	Eso Guardian
3	Digestion Support	16	Theralac

- 8) qryTotalInventoryByStore: inventory currently in stock by stores.

```
SELECT s.StoreID, street, city, sum(quantity) AS Total_Inventory
FROM supp_unit AS su, store AS s
WHERE su.storeID = s.storeID
GROUP BY s.storeId, street, city;
```

qryTotalInventoryByStore			
Store ID	**Store Street**	**Store City**	**Total_Inventory**
1000	410 Wayne Avenue	Stamford	1942
1001	24 Brandywine Street	Manitowoc	1800
1002	592 Delaware St.	Astoria	4671
1003	7 Ivy Rd.	Freeport	5191
1004	58 Forest Dr.	Syosset	4418
1005	8887 Jackson Drive	Levittown	4280
1006	325 Valley Ave.	Bronx	4777
1007	14 College Ave.	East Northport	4394
1008	301 Mayfield Ave.	East Meadow	3531
1009	7637 Lafayette St.	Lancaster	3453

- 9) qryTotalRegist%ByStore: list of total memberships with discounts (level 1 or 2 only) per store. Useful to see which stores are doing a better job at registering customers with discounts (customers with discounts pay a monthly registration fee and get extra benefits with stores).

```
SELECT s.storeID, s.city, s.state, count(c.level) AS TotalMemberships
FROM customer AS c, store AS s, membership AS m
WHERE c.custnum = m.custnum AND m.storeID = s.storeID AND c.level > '0'
GROUP BY s.storeID, s.city, s.state
ORDER BY count(c.level) DESC;
```

qryTotalRegist%ByStore			
Store ID	**Store City**	**Store State**	**TotalMemberships**
1000	Stamford	CT	3

1009	Lancaster	NY	2
1008	East Meadow	NY	2
1007	East Northport	NY	2
1006	Bronx	NY	2
1005	Levittown	NY	2
1004	Syosset	NY	2
1003	Freeport	NY	2
1001	Manitowoc	WI	2
1002	Astoria	NY	1

- 10) qryYearSalesByCustomer: total sales by customers for the current year.

```
SELECT c.custnum, c.custfname, c.custlname, FORMAT(Sum((spl.price*sales.qty)),"currency") AS
Total
FROM sales_info AS sales, supp_list AS spl, supp_unit, customer AS c
WHERE (sales.suppcode)=supp_unit.suppcode And ((supp_unit.suppcode)=spl.suppcode) And
((c.custnum)=sales.custnum) And ((sales.storeID)=supp_unit.storeID) And
(Year([sales.sdate])=Year(Date()))
GROUP BY c.custnum, c.custfname, c.custlname
ORDER BY Sum(spl.price*sales.qty) DESC;
```

qryYearSalesByCustomer			
Cust Number	**Cust First Name**	**Cust Last Name**	**Total**
6	Sophie	Morris	$239.88
7	Sofia	Glay	$219.89
2	Angel	Smith	$199.90
4	Ines	Gray	$199.90
8	Carlos	Ruiz	$199.90
3	Angelica	Baul	$199.90
5	Carla	Oke	$199.90
1	Angie	Engel	$199.90
15	Andres	Shane	$179.91
10	Lorena	Clerk	$179.91
18	Phillips	Davila	$179.91

- 11) qryYearSalesByStore: total sales by stores in the current year.

```
SELECT s.storeID, s.street, s.city, s.state, FORMAT((ROUND(Sum(spl.price*sales.qty),2)),"currency")
AS Total_Sales
FROM store AS s, membership AS m, customer AS c, sales_info AS sales, supp_unit AS supu, supp_list
AS spl
WHERE (((s.storeId)=[m].[storeid]) AND ((m.custnum)=[c].[custnum]) AND
((c.custnum)=[sales].[custnum]) AND ((sales.suppcode)=[supu].[suppcode]) AND
((supu.suppcode)=[spl].[suppcode])) AND ((sales.storeID)=[supu].[storeID]) AND Year([sales.sdate]) =
Year(Date())
GROUP BY s.storeID, s.street, s.city, s.state
ORDER BY (Sum(spl.price*sales.qty)) DESC;
```

qryYearSalesByStore				
Store ID	**Store Street**	**Store City**	**Store State**	**Total_Sales**
1006	325 Valley Ave.	Bronx	NY	$479.76
1008	301 Mayfield Ave.	East Meadow	NY	$479.76
1007	14 College Ave.	East Northport	NY	$479.76
1004	58 Forest Dr.	Syosset	NY	$479.76
1003	7 Ivy Rd.	Freeport	NY	$459.77
1005	8887 Jackson Drive	Levittown	NY	$439.78
1001	24 Brandywine Street	Manitowoc	WI	$419.79
1000	410 Wayne Avenue	Stamford	CT	$379.81

- 12) qryYearSalesBySupplement: total sales by supplements in the current year.

```
SELECT s.storeID, s.street, s.city, s.state, FORMAT((ROUND(Sum(spl.price*sales.qty),2)),"currency")
AS Total_Sales
FROM store AS s, membership AS m, customer AS c, sales_info AS sales, supp_unit AS supu, supp_list
AS spl
WHERE (((s.storeId)=[m].[storeid]) AND ((m.custnum)=[c].[custnum]) AND
((c.custnum)=[sales].[custnum]) AND ((sales.suppcode)=[supu].[suppcode]) AND
((supu.suppcode)=[spl].[suppcode])) AND ((sales.storeID)=[supu].[storeID]) AND Year([sales.sdate]) =
Year(Date())
GROUP BY s.storeID, s.street, s.city, s.state
ORDER BY (Sum(spl.price*sales.qty)) DESC;
```

qryYearSalesBySupplement			
Supp Code	**Supp Name**	**Categ Name**	**Total_Sales**
1	Bone Plus	Bone Health	$399.80
5	Brain Plus	Brain Health	$339.83
9	Lipid Control	Cholesterol Management	$299.85
4	Grow Bone	Bone Health	$259.87

3	Bone Strength	Bone Health	$239.88
6	Mind Power	Brain Health	$199.90
7	Focus	Brain Health	$199.90
30	ArthroMax	Joint Support	$139.93
32	Bio Collagen	Joint Support	$139.93
2	Bone Essentials	Bone Health	$139.93
28	Vitalzym	Inflammation Management	$139.93

qryYearSalesBySupplement

Supp Code	Supp Name	Categ Name	Total_Sales
10	CHOL Support	Cholesterol Management	$119.94
39	Super Carnosine	Sports Performance	$119.94
40	Factors IGF	Sports Performance	$119.94

- 13) qryYearTotalDiscount: total discounts given to customers in the current year.

```
SELECT qt.custnum, qt.custfname, qt.custlname, qt.custDOB, qt.total_Disc_Given
FROM (SELECT c.custnum, c.custfname, c.custlname, c.custDOB,
Format((Round(Sum(spl.price*sales.qty),2)),"Currency") AS Total_Sales,
IIf([c].[level]='2',0.35,IIf([c].[level]='1',0.25,0)) AS [Discount%],
FORMAT(((Format((Round(Sum(spl.price*sales.qty),2)),"Currency")) *
(IIf([c].[level]='2',0.35,IIf([c].[level]='1',0.25,0)))),"Currency") AS total_Disc_Given FROM store AS s,
membership AS m, customer AS c, sales_info AS sales, supp_unit AS supu, supp_list AS spl WHERE
(((s.storeId)=m.storeid) And ((m.custnum)=c.custnum) And ((c.custnum)=sales.custnum) And
((sales.suppcode)=supu.suppcode) And ((supu.suppcode)=spl.suppcode) And
((sales.storeID)=supu.storeID) And ((Year([sales.sdate]))=Year(Date()))) GROUP BY c.custnum,
c.custfname, c.custlname, c.custDOB, IIf([c].[level]='2',0.35,IIf([c].[level]='1',0.25,0)))  AS qt
WHERE total_Disc_Given > 0
ORDER BY total_Disc_Given DESC;
```

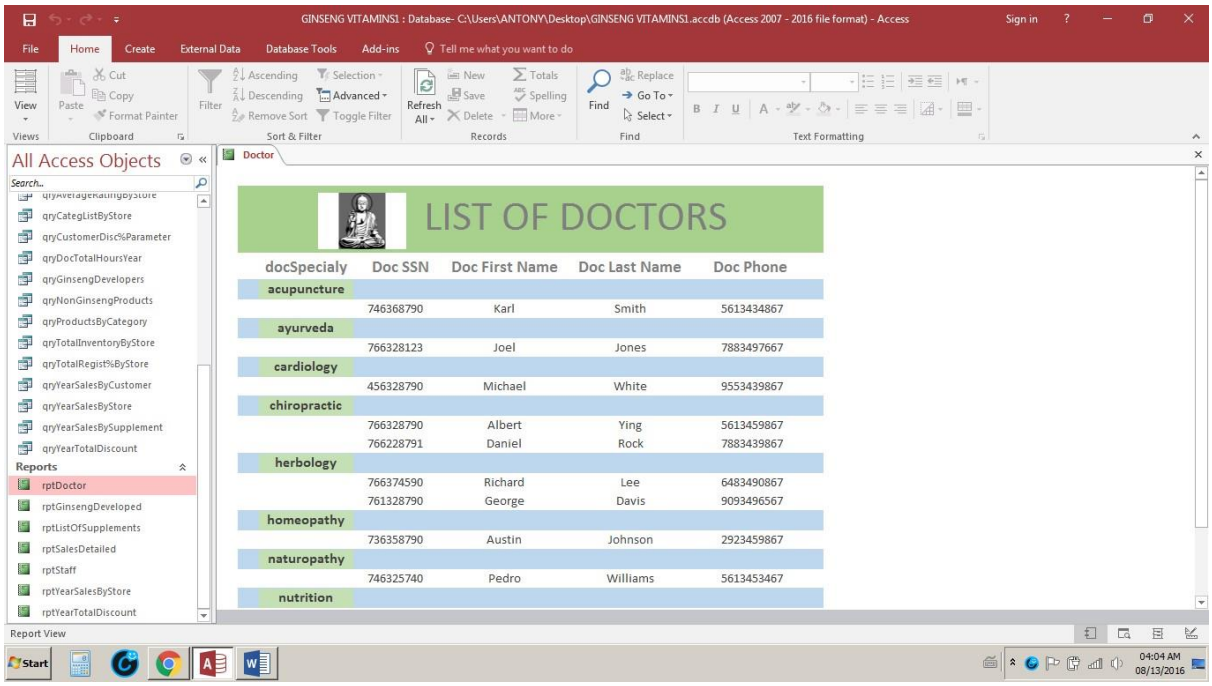
qryYearTotalDiscount

Cust Number	Cust First Name	Cust Last Name	DOB	total_Disc_Given
27	Boris	Valdivia	05/16/1978	$48.98
23	Alex	Blue	01/12/1974	$48.98
14	Sebas	Clear	04/26/1983	$44.98
15	Andres	Shane	05/04/1984	$44.98
18	Phillips	Davila	08/26/1987	$44.98
10	Lorena	Clerk	09/12/1978	$44.98
19	Juanca	Hong	09/26/1978	$39.98

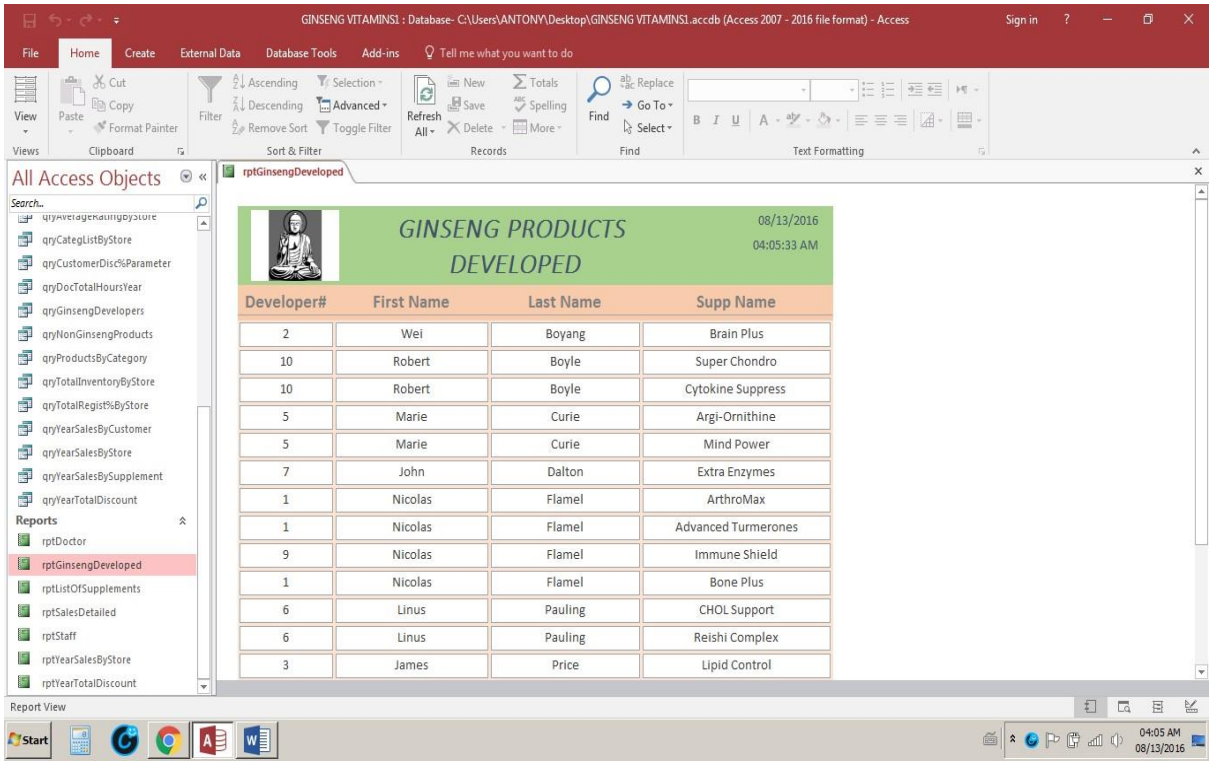
11	Juan	Guitierrez	01/12/1988	$39.98
16	Nora	Gavidia	06/08/1985	$34.98
20	Nicas	Hiromi	10/10/1971	$34.98
30	Tito	Monte	07/29/1990	$34.98
22	Mondragon	Gorge	12/12/1973	$34.98
24	Ale	Rice	02/13/1975	$34.98
26	Bruce	West	04/15/1977	$34.98
28	Gospel	Lima	06/18/1979	$34.98
17	Noriega	Garcia	07/09/1986	$29.99
13	Tony	Lander	03/16/1982	$29.99
25	Alexis	Balck	03/14/1976	$20.99
29	Gianca	Cali	07/26/1989	$20.99
21	Albert	Uehara	11/11/1972	$20.99

REPORTS:

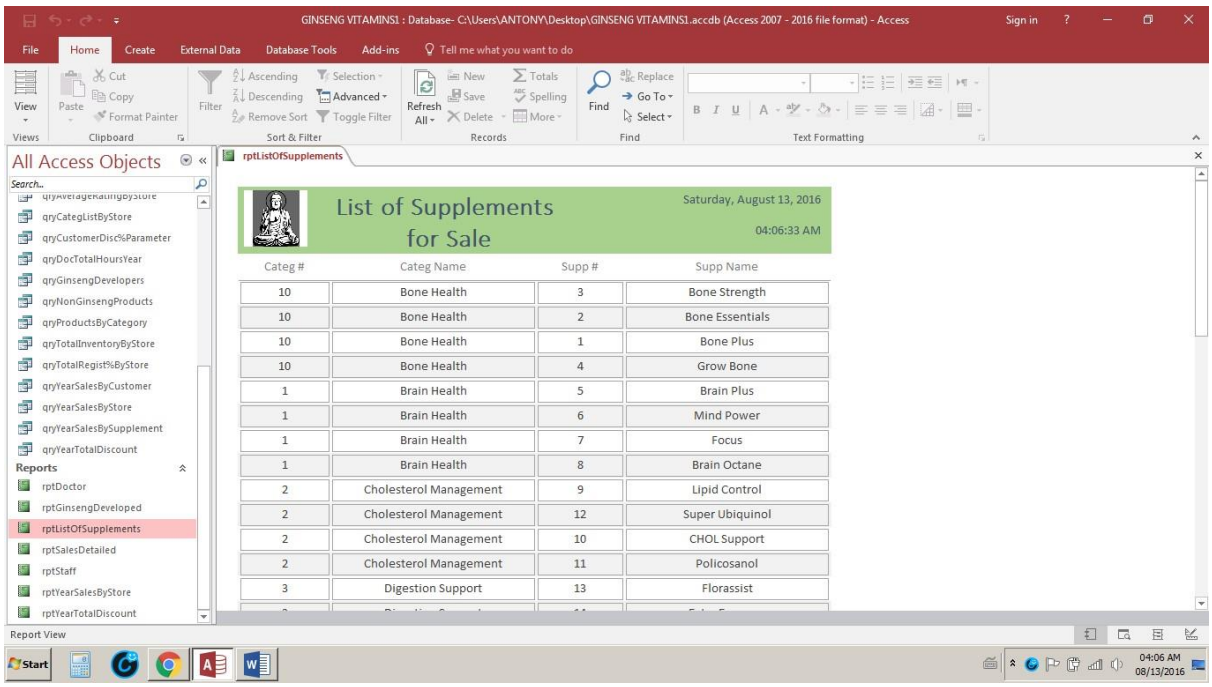
- 1) rptDoctor: list of all doctors enrolled with stores to be called.



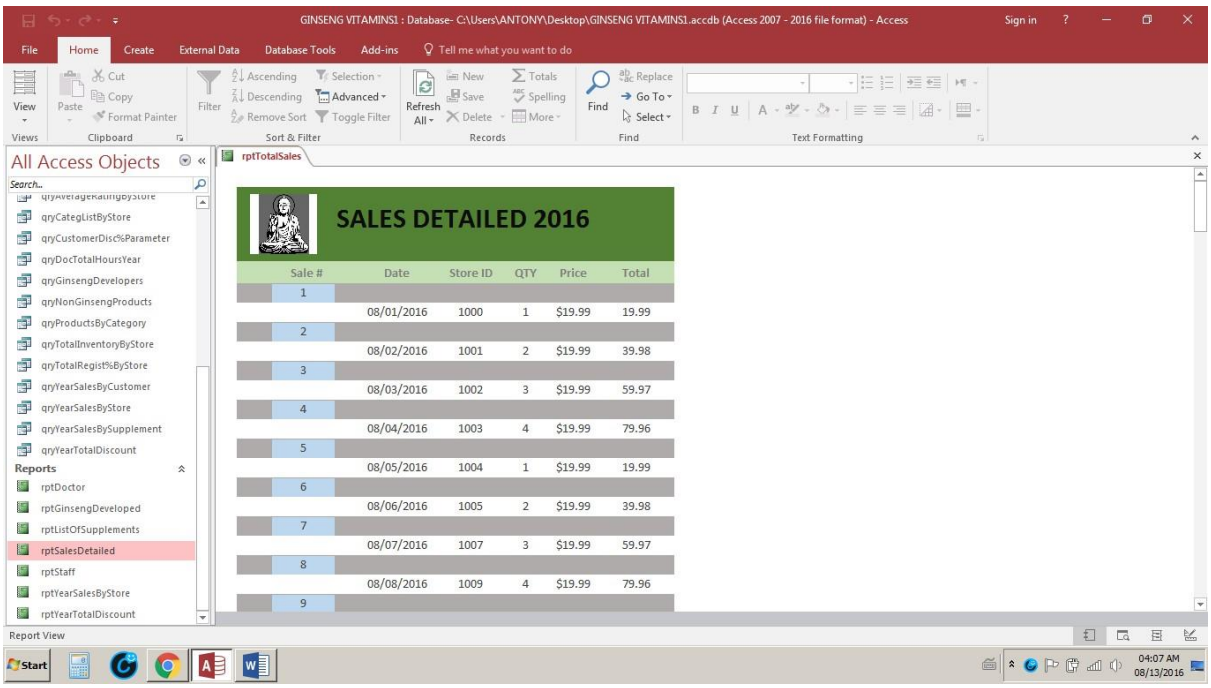
- 2) rptGinsengDeveloped: list of all products developed for Ginseng to date.



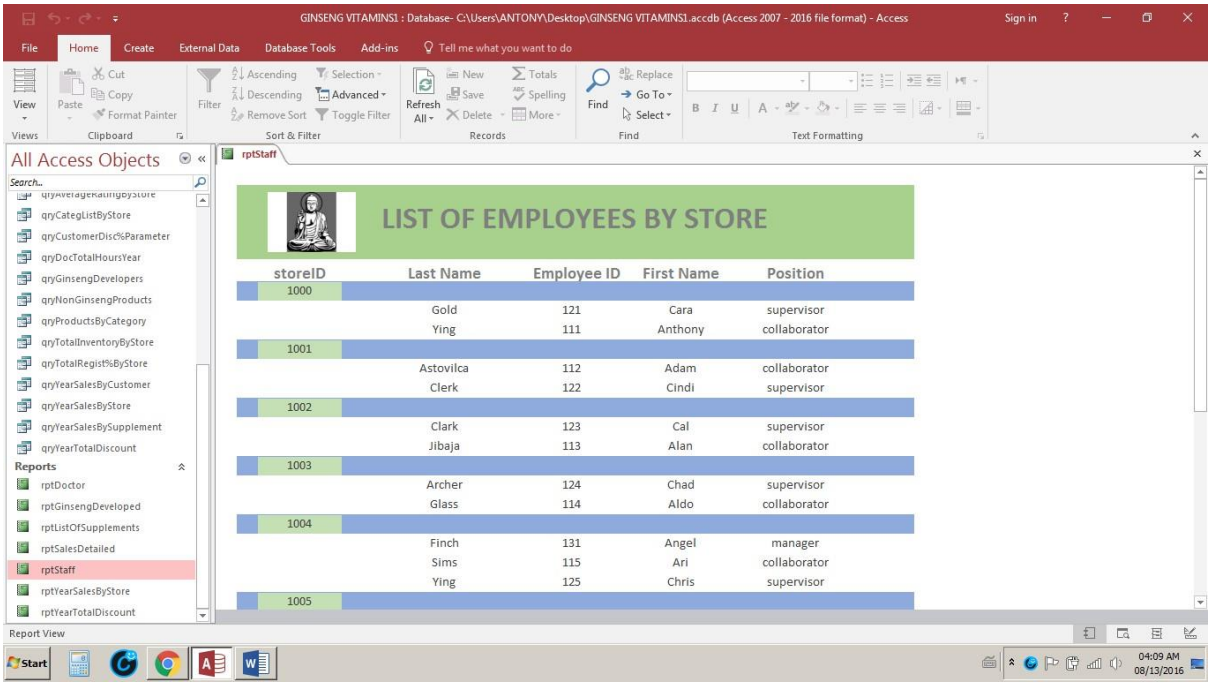
- 3) rptListOfSupplements: List of all supplements currently for sale.



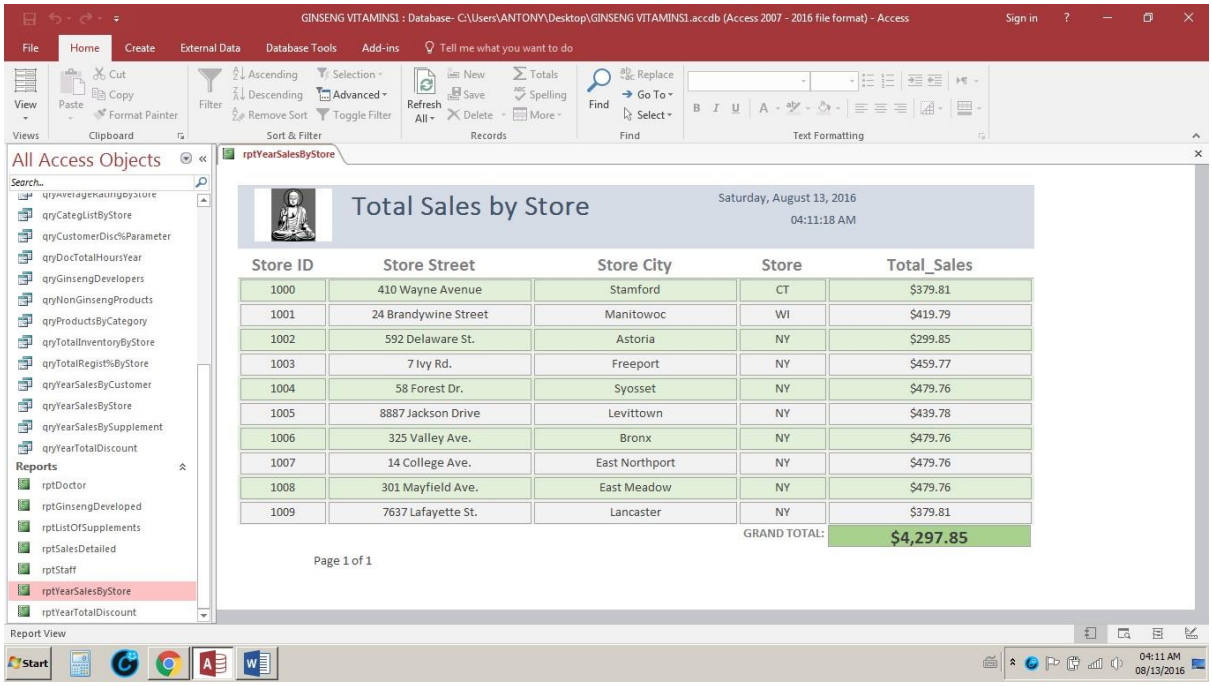
- 4) rptSalesDetailed: a detailed sales report with date, store and quantities.



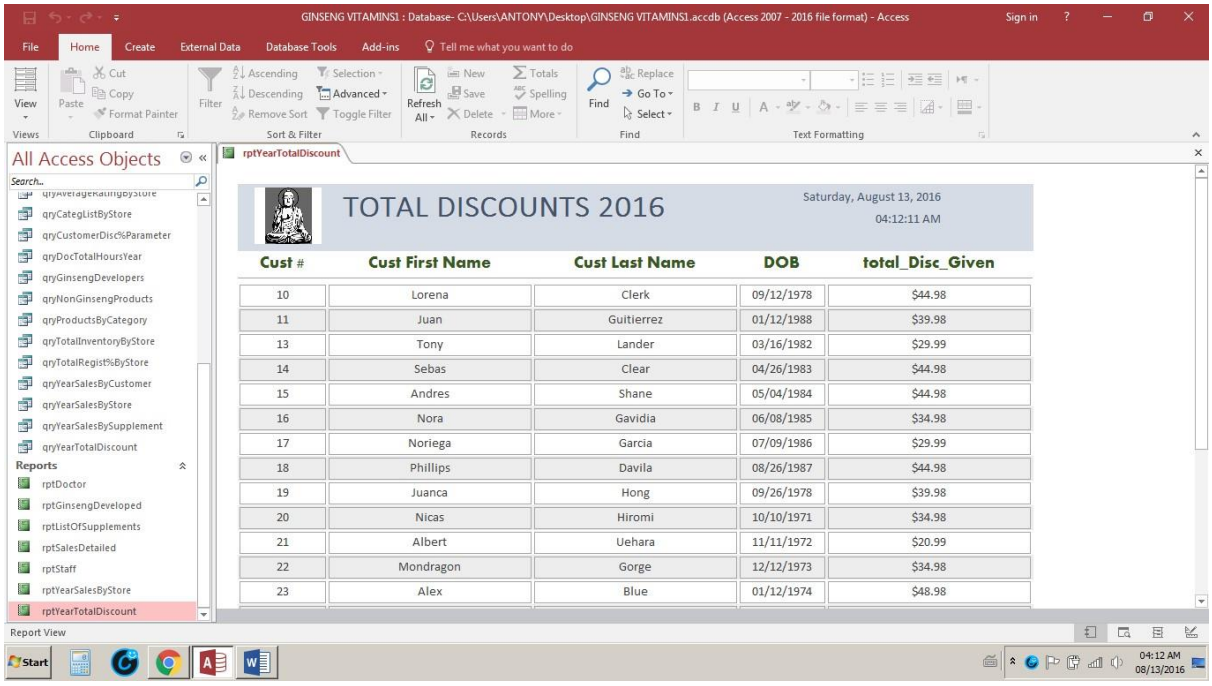
- 5) rptStaff: List of store employees with positions.



- 6) rptYearSalesByStore: total sales by stores in the current year.



- 7) rptYearTotalDiscount: total discounts given to customers.



5) Creating a login screen:

For this step, you can chose between using VBA or Forms. Steps to create this screen using a Form are:

- First create a new table with 2 essential fields: Username and password. You can add any other columns like first name, last name, email, etc. Populate the table with a couple of rows for test. - Create a Form from this new table selecting only username and password from the column names. - Create a textbox. This will be the area were the user will enter his/her password. For this textbox create the following restriction "=[password]".
- Create a drop down list for the label with "Username" so the user can look only usernames within the table.
- Set the password field under NOT visible.
- Add corresponding button with Macros to close current form and go to the main database form only IF user password matches what's in the hidden password column.
- Create a form that will add information to the Users table and link it with a button to the login screen. Also add a button to the login screen to open this form in case the user doesn't have an account.

There you have it. A complete login and create user screen without VBA. After basic steps just do some formatting and set all kind of restrictions (through data validation and data validation texts) to secure proper user input. Don't forget to add some message boxes in macros (with buttons) to better lead the user.

Create Profile

CREATE PROFILE

FirstName:

LastName:

Email:

Username:

Password:

Retype Password:

Create Profile | Cancel