# Storing and Retrieving Data – Final project

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This project will try to reproduce a Healthcare Online Shop where it sells vitamins, supplements and ecological solutions for skincare/cosmetic, from five different popular brands for this niche.

Firstly, let me tell a bit of the history of the company and its policies. All started from a side-business from a software developer engineer student when he was at last year of college. However, after the first three months of its existence, the number of orders skyrocketed when a variety of studies demonstrated that an organism with all levels of vitamins and others substances/elements can provide a very strong immunity system, which can prevent a lot of potential diseases or infections.

Secondly, the registration method in the website is very simple. A customer just needs to sign in with his/her email that must be unique and a password. All others fields are optional (primarily the  address was mandatory, although because of an acquisition of a small company, with the objective to retain its customers, it was set as optional).

Thirdly, all products that are available in shop's warehouse inventory are free from taxes, which means, that the real unit cost of any product will be increase by 13% (tax associated by law for this type of product).

Finally, due to not having any venture capital from possible investors, the company, at this moment, don't deliver to any others countries except for USA. The shipping cost is about 1,99$ (although, if the order subtotal is greater than 100$, shipping cost is free). Another policy is relative to the spending score, in other words, this attribute is correlated with the amount spent history and it leads to a voucher of 10% discount, if the score is greater than 50.

In the image below, it will be an entity relationship diagram where all entities' relationships are defined by their primary key (as a golden key) and foreign key (red symbol), the rest being entities' attributes.

# PHYSICAL ERD SCHEMA FOR SUPPLEMENTS ONLINE SHOP

**categories**
- category_id INT(11)
- category_name VARCHAR(255)
- Indexes

**brands**
- brand_id INT(11)
- brand_name VARCHAR(255)
- Indexes

**ratings**
- rating_id INT(11)
- product_id INT(11)
- customer_id INT(11)
- rating_star INT(11)
- Indexes
- Triggers

**products**
- product_id INT(11)
- product_name VARCHAR(255)
- brand_id INT(11)
- category_id INT(11)
- unit_cost FLOAT(6,2)
- inventory INT(11)
- Indexes
- Triggers

**customers**
- customer_id INT(11)
- age INT(11)
- customer_name VARCHAR(225)
- customer_phone VARCHAR(20)
- customer_email VARCHAR(200)
- customer_password VARCHAR(225)
- street_address VARCHAR(225)
- city VARCHAR(50)
- state VARCHAR(50)
- zip VARCHAR(50)
- spending_score INT(11)
- voucher_promo BINARY(1)
- Indexes

**log_table**
- log_id INT(11)
- product_id INT(11)
- pre_unit_cost FLOAT(6,2)
- pos_unit_cost FLOAT(6,2)
- Indexes

**invoices_details**
- invoice_detail_id INT(11)
- invoice_id INT(11)
- product_id INT(11)
- quantity INT(11)
- unit_cost FLOAT(6,2)
- amount FLOAT(9,2)
- Indexes
- Triggers

**purchases**
- purchase_id INT(11)
- supplier_id INT(11)
- product_id INT(11)
- purchase_date DATE
- inventory_bought INT(11)
- amount FLOAT(6,2)
- Indexes
- Triggers

**invoices**
- invoice_id INT(11)
- customer_id INT(11)
- order_date DATE
- date_deadline DATE
- shipped_date DATE
- warehouse_id INT(11)
- subtotal FLOAT(9,2)
- item_discount FLOAT(4,2)
- discount_amount FLOAT(6,2)
- tax_rate FLOAT(2,2)
- tax_amount FLOAT(6,2)
- shipping_cost FLOAT(3,2)
- amount_net FLOAT(9,2)
- payment_method_id INT(11)
- Indexes

**suppliers**
- supplier_id INT(11)
- supplier_name VARCHAR(50)
- Indexes

**staff**
- staff_id INT(11)
- staff_name VARCHAR(225)
- email VARCHAR(255)
- phone VARCHAR(25)
- salary FLOAT(9,2)
- warehouse_id INT(11)
- job VARCHAR(45)
- hire_date DATE
- Indexes

**company**
- warehouse_id INT(11)
- company_name VARCHAR(255)
- phone VARCHAR(25)
- email VARCHAR(255)
- website VARCHAR(255)
- street VARCHAR(255)
- city VARCHAR(255)
- state VARCHAR(15)
- zip_code VARCHAR(5)
- Indexes

**payment_method**
- payment_method_id INT(11)
- payment_type VARCHAR(30)
- Indexes