Final Project of Storing and Retrieving Data - Group A

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For our final group project, we decided to create a database for our jewelry store, AITI Jewels.

To become a customer of the AITI Jewels, our clients must fill a form composed by their name, birth year, phone number (optional) and email.

Additionally, to know our clients better we save the number of orders made and the money spent on it.

Products are sold with high-quality standard. On our website clients can search which category they want to see, then the products are showed with a small description, their name, price, rating (given by the customers) and if a discount is available.

A client can make an order by selecting the quantity of each product he wants and then needs to provide a location (where the product will be delivered). After choosing the products and before the payment, the client can apply any discount code available. An order is only considered finished when the payment of the order is made. The client ends up with a register where he can check when the order was made and the expected due date.

Our store provides the delivery service which is totally free unless the client makes an urgent request.

To maintain the security of our website we dispose of an online security system (log) which stores every change made by the employees on the product prices.

Recently, our business was prospering so we decided to acquire a small shop that was near to bankruptcy and to make a promotion campaign in order to turn the old business clients ours by giving discounts in their first order.

We offered a bigger discount to the clients that spent the biggest amount of money in the old store (our potential best clients).

A few notes regarding the project:

- Receiving the old shop's customers database:
  - We decided to keep the names that had "strange" characters because we supposed that could be company names.
  - To create the email addresses, we opted to replace every blank space by an underscore and lowercased the name component for the email.
  - We created the birth year field, because we think that is more useful since is an immutable attribute. To do that, we considered the current year 2020 and the client's age.
  - We used the spending scores to create the spending category as follows:

#	Lower Bound	Upper Bound	Value
1		20.0	Very Low Spender
2	20.0	40.0	Low Spender
3	40.0	60.0	Average Spender
4	60.0	80.0	High Spender
5	80.0		Very High Spender

- Queries:
  - For the 4th and 5th queries, we considered location as a combination of the country and the city.

Important Note: In Pentaho, in order to run everything properly we ask you to go to the 'Project_connection' and change the settings to adapt to your MySQL server.

Our ERD diagram (with the log and the campaign tables from the other exercises)