Diagram

Description automatically generated

DB DESIGN

What is Normalization?

* Normalization is the process of organizing the data in the database.
* Normalization is used to minimize the redundancy from a relation or set of relations. It is also used to eliminate undesirable characteristics like Insertion, Update, and Deletion Anomalies.
* Normalization divides the larger table into smaller and links them using relationships.
* The normal form is used to reduce redundancy from the database table.
* Normalization prevents update, deletion, and insertion anomaly.

## First Normal Form

This rule defines that all the attributes in a relation must have atomic domains.

Table

Description automatically generated with medium confidence

In the above table we can see that atomicity is followed for the same order id.

## Second Normal Form

Every non-prime attribute should be fully functionally dependent on prime key attribute.

Table

Description automatically generated

* In the above table we can see that all non-prime attributes (image, name, price and create\_date) is dependent on the prime key(code).

Table

Description automatically generated

* In the above table we are accessing ‘orders’ table and ‘products’ table using ‘order-id’ and ‘product-id’ respectively.