Data & Applications

Project Phase 3: Relational Model and Normal Forms

Team 25

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Explanations:

Changes made from ERD > Relational Model:

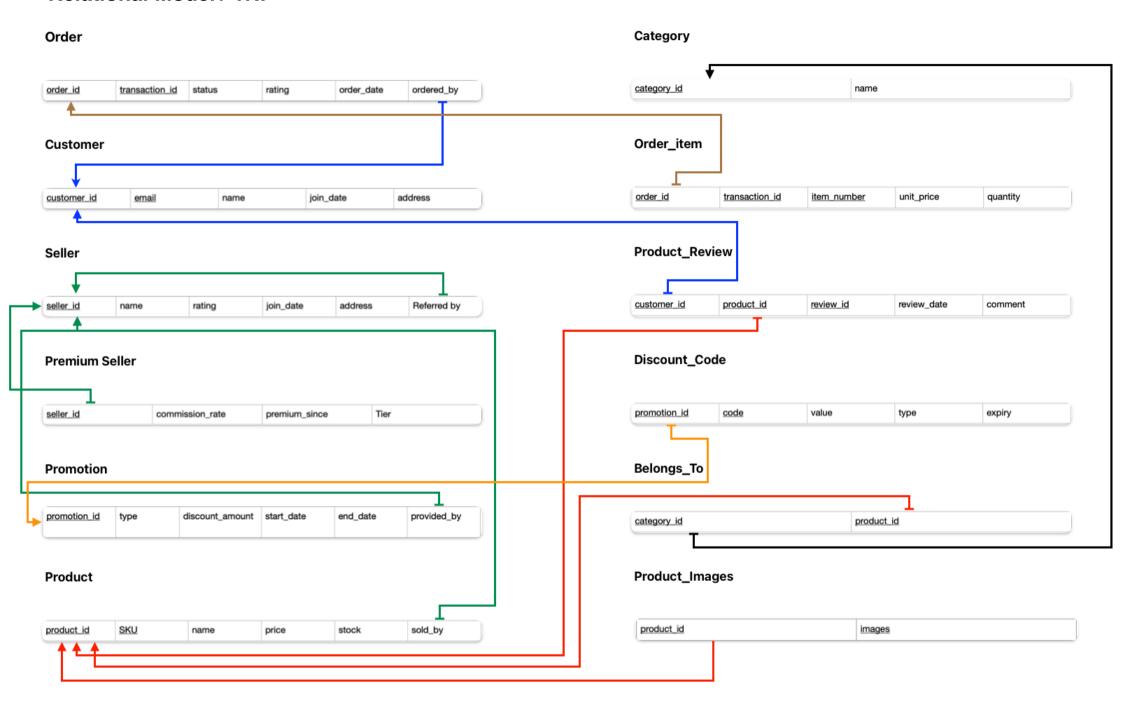
- * Composite attributes as represented using there Umbrella term (eg: street etc are clubbed under address).
- * 1-1 and 1-N relationships are indicated by including the 1 sided relation's primary key in the other sided relation and the relationship is indicated using an arrow in the RM.
- * Subclasses, Multivalued attributes, M-N relationships and Weak entities are represented via another relation which has the the primary key of its owner relation as its Primary/Foreign key.

Changes made from Relational Model > Normal Forms:

- * The Relational Model was made in accordance with the formal definition and is therefore inclusive of the First Normal Form.
- * The Second Normal Form is formed after 1 change to the Relational Model Review date and comments given only depend on the review id and the review id is dependent on the product id and customer id. The reason this is not included in the conversion to 3NF is because the X attribute in X > Y, i.e review_id is a prime attribute.
 - * The Third Normal Form is included in the Second Normal Form as there are no Transitive Dependencies.

Below are the images for the relational model / 1NF and 2NF / 3NF.

Relational Model / 1NF



2NF / 3NF

