

# **Book Store Management System**

## **DMDD - P3 – Group 18**

Changes made to the model:

1. All entities have been appropriately linked with primary and foreign keys, ensuring integrity constraints are met.
2. Customer location has been refined into state, city, and zip code attributes, thereby reducing transitive dependencies in the customer relation by introducing a Location entity.
3. The addition of the Book Copy entity facilitates the mapping of data for each copy of a specific book, with ISBN serving as a foreign key referenced from the book entity.
4. The Book Entity represents a unique book and stores pertinent information about it.
5. The ITEM\_ID foreign key has been introduced in the order item entity to accommodate either a Merchandise ID or Book ID, with the Item\_Type attribute distinguishing between the two types of items being ordered.
6. The relationship of Merchandise and book copy entities to the order item entity has been altered, now reflecting a unique merchandise and book copy scenario with a mandatory one-to-optional one relationship.
7. Two new attributes have been incorporated into the review entity: Item\_ID foreign key, which stores either a Book ID or Merchandise ID, and Item\_Type, indicating whether the review pertains to a book or a merchandise. Additionally, the relation has been adjusted from review to book to review to book copy.
8. The composite key for customer name has been decomposed into First name and Last name.
9. The composite key for author name has been decomposed into Author First name and Author Last name.
10. The composite key for employee name has been decomposed into Emp First name and Emp Last name.
11. The promotion table now includes start date and end date attributes, specifying the duration of each promotion.
12. The Associate entity, acting between Book and Author, is represented by the Wrote entity, which features a composite primary foreign key comprising Author Id and Book Id.