



Entity Sets:

- 1) Textbook - contain attributes Title, Author, Image, ISBN #, Publisher, and Year of Publication. It is a Weak Entity Set with supporting set Accounts. Key is its own attribute ISBN #, and Account's User ID. Each entity represent one textbook listed for sale in the application
- 2) Category - An entity set with key category_id and attribute category name. Each entity set represents a category that textbooks belongs to.
- 3) Orders - an entity set representing a transaction made (order histories). Contains key Order ID, and attribute textbooks, User ID, and Price
- 4) Accounts - An entity set representing the users of our application. Two subclasses representing the two types of users we expect - Customer and Admin.

- 5) Users entity set is the subclass of Accounts.
- 6) Admins entity set is the subclass of Accounts.

Relationship:

- 1) Listing is a supporting many-to-one relationship between accounts and textbooks. Each user would be able to add many textbook listings for sale.
- 2) Wishlist is a many-to-one relationship between accounts and textbooks. Each user would be able to add many textbooks into their wishlist.
- 3) Checkout is a many-to-one relationship between accounts and order. The user would be able to add to cart and check out many orders.
- 4) Contains is a many-to-one relationship between textbook and orders. The order could contains many textbooks.
- 5) Has is the many-to-many relationship between textbook and category. A textbook could be in multiple categories and a category can have many textbooks.