CSE255 - Common Phase I Solution
ER Diagram with Assumptions
Baseline solution for Generating Relations (Phase II)

Notes
• This represents a core solution that describes all of the required behavior for an extended BooksforTomorrow web site.
• Please feel free to modify and extend to capture you needed requirements. The intent is that everyone is working from essentially the same diagram - but of course, extensions are promoted to allow each team to capture any unique requirements that they may have already designed in Phase I.
• The ER diagram should be relatively independent of all UML diagrams for your team. That is, the use-case, state, and activity diagrams are all basically action oriented, and don't consider data to a great extent. You should be able to adapt your UML diagrams to work with this ER diagram as you proceed to Phase II and Phase III.
• Recall three parts to Phase II:
  a. A Relational Schema From the Entity Relationship Model Produced in Phase I
  b. The Set of Functional Dependencies Used to Evaluate If the Resulting Schema is BCNF or 3NF
  c. The Normalization Process (If Necessary) That Transforms the Relational Schema to a Relational Schema in BCNF or 3NF
• All Team Members Must participate!
• Due Date: Thursday, March 27, at 3pm

Assumptions
• A customer may not have more than one membership. However, a customer may upgrade his/her membership.
• A customer may keep on record a single favorite author, subject, as well as a preferred shipping method.
• A customer may keep a list of books for which the customer wishes to be notified of upon availability.
• The database will not contain any reviews belonging to books that the company does not intend to sell.
• The database will not include any information on an author unless the company intends to sell books written by the individual.
• The assumption will be made that every book does, in fact, have an author.
• The database will not include any information on a publishing company unless the company intends to sell books published by that company.
• The database will not include any information on another bookstore unless they will interact as the role of a supplier.
• It is assumed that a single subject will categorize every book.
• A book will have only one publisher.
• We are assuming now that all customers reside in the United States, this may however change.