

Relational Model

Proposal (proposalID, proposedTitle, proposedSubtitle, dateProposed)
PK: proposalID

Project (projectID, transmittalDate, contractDate, dateFiled, *staffApproval*,
proposalID)
PK: projectID
FK: staffApproval references Staff (staffID)
FK: proposalID references Proposal (proposalID)

Staff (staffID, firstName, lastName, title, phoneNo, eMail)
PK: staffID

Topic (topicAreaID, topicArea, *projectID*)
PK: topicAreaID
FK: projectID references Project (projectID)

AssignedStaff (assignedStaffID, dateAssigned, *managerStaffID*, *projectID*)
PK: assignedStaffID
FK: managerStaffID references Staff (staffID)
FK: projectID references Project (projectID)

Book (bookID, title, subtitle, ISBN, ISBN-13, description, pubDate, NoPages,
projectID)
PK: bookID
FK: projectID references Project (projectID)

BookReview (bookID,reviewerID, *bookID*, *reviewerID*)
PK: bookID,reviewerID
FK: bookID references Book (bookID)
FK: reviewerID references Reviewer (reviewerID)

Reviewer (reviewerID, firstName, lastName, address, phoneNo, eMail)
PK: reviewerID

AreaExpertise (subjectID, subject, *reviewerID*)
PK: subjectID
FK: reviewerID references Reviewer (reviewerID)

BookAuthor (bookID,authorID, *bookID*, *authorID*)

PK: bookID,authorID

FK: bookID references Book (bookID)

FK: authorID references Author (authorID)

Author (authorID, firstName, lastName, address, phoneNo, eMail, bio)

PK: authorID

Bid (projectID,vendorID, dateSent, dateReceived, dateSelected, *projectID*, *vendorID*)

PK: projectID,vendorID

FK: projectID references Project (projectID)

FK: vendorID references Vendor (vendorID)

Vendor (vendorID, companyName, companyAddress, phoneNo, eMail, *busTypeID*)

PK: vendorID

FK: busTypeID references BusinessType (busTypeID)

BusinessType (busTypeID, businessType)

Assumptions:

1. To simplify the model, I have assumed that Chicago Press needs to keep only one address, one phone number, and one email for each staff member, reviewer, author, and vendor. If multiple values are required for any (or all) of these attributes, it becomes a multivalued dependency and would be separated out into its own table.
2. Although an email for vendors was not mentioned in the requirements, I have added it because I thought the client would quite likely want it.
3. The requirements mentioned keeping a business type for each vendor. I have assumed that there are too many to put into a drop down list and created a table for them. I have also assumed each vendor has only one business type.
4. The requirements mentioned keeping a link to project files, but no entity was created for them in the phase I solution ERD. This could be handled by putting a projectFiles attribute in the project table and assigning it a data type of "attachments" or by creating a ProjectFiles entity. Again, for simplicity, I followed the phase I solution closely and did not address this issue.
5. Since the relationship between TransmittalRecord and Project was given as 1 to1 full participation, I have combined the tables. In a database this small, the theoretical efficiency gained by keeping the tables separate would probably not be detectable in practice.
6. The media type attribute mentioned in the requirements also did not appear in the phase I solution ERD, so again, for simplicity and clarity I left it out. We could add this as another entity or as a drop down list in the Book table if there are few enough media types.