

Database Design Process for Mt. Angel Abbey



(Picture from <http://www.mtangel.edu/library/main/library.htm>)

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Introduction: Mt. Angel Abbey Archives

Mt. Angel Abbey was founded in 1882 by Benedictine monks from the Abbey of Engelberg in Switzerland. Mt. Angel Abbey Library serves patrons including monks of the abbey, students and faculty of the affiliated seminary and researchers.

The Abbey Archives is a primary focus of the library. The geographic focus of the archive collection is Mt. Angel Abbey and its various apostolates, with the primary collection subject area being all areas regarding life at the Abbey. The primary collection includes: liturgies, the work of the seminary, the library, and all activities sponsored by the Abbey. A secondary collecting subject area is Catholic history in Oregon, including early territorial history. The Abbey Archives also houses individual collections of original music by several of the monks including Father Dominic Waedenschlyer and Abbot Placidus Fuerst.

While the Abbey restricts access to its archives collections, arrangements can be made through scheduled appointments for research.

Archives contact:

Suzanne McKenzie, Chief Archivist

smckenzie@mtangel.edu

(503) 845-3101

One Abbey Drive, St. Benedict, Oregon 97373

Interview process

I am working mainly with chief archivist, Suzanne McKenzie and Father Karl Nielson. When I first met Sister McKenzie and Father Nielson at a statewide archival class, I learned that they had a problem. The abbey has traditionally kept its items in accession order (that is, in order of when the materials were obtained). The problem that Sister McKenzie and Father Nielson face, as they originally explained to me, was this: when patrons come to them asking for information, it is difficult to quickly find or retrieve items matching their requests from the archive. They did not know how best to rearrange their archive: should they index by date, person or event? And if they chose one of these methods of arrangement, say by date, how could they easily retrieve items if someone framed their request in a different way, say by person? This sounded like an ideal problem for a database to solve, so I offered to help.

After our meeting, I interviewed Sister McKenzie via email. These are the questions that I asked:

- Please tell me more about the types of items that are stored in the Mt. Angel archive.

- In the workshop, it was mentioned that you might need to sort these items either by event or by person. Are there any additional ways that you would like to be able to sort these items?
- Some possible information about the items in your archives might be: creator, department, event, date of event, date of creation, type of item, location stored. Is there any other information you might like to record about your archived records and pictures?
- If I could create the perfect database for you, what would it be like?
- What might discourage you or those you work with from using a database to find items within the archive?
- Currently if someone asks for an item from your archive, what is your process of location and retrieval?
- Is there anything difficult about finding and retrieving items currently? How could this process be easier?
- What is an estimated size of your archive (either in square feet or number of items stored)?
- According to a link on the Marion County Historical Society, the mission of the Mt. Angel Abbey archives is: "The archives of Mt. Angel Abbey preserves the records, documents and history of the religious community. It provides a resource for the various departments at the Abbey and a source for outside researchers." Is there anything you might add to or subtract from this statement?
- Would you be interested in making finding aids for all materials in your archive available online?
- Are there different levels of security for information in your archive or is all material intended to be available to the public?
- Who are the primary users of your archive?
- Which library and abbey personnel work with your archive most?

From this interview, I learned that the archive contains approximately 475 boxes, each about 4.5 inches wide. This is a substantial number of boxes and explains why they are having difficulty locating materials. I also learned that, "the items in the archives are arranged by record group. Within the record group the information was put together rather arbitrarily . . . in somewhat of an alphabetical way. The file numbers run continually, starting at 1000. The first number (or two numbers after "9") of the file indicates the record group. The files are put in the boxes in numeric order and as one box is filled the next is started." I also determined that the archives contain a wide variety of materials, including: photographs, "liturgies, the work of the seminary, the library, and all activities held here or sponsored by the Abbey," early territorial history, and "original music by several of the monks, including Father Dominic Waedenschlyer and Abbot Placidus Fuerst."

After this interview, I informally interviewed Anne Prah Levant, curator of the Oregon Jewish Museum, because I learned from her that her database is similar to the one that I am hoping to create for Mt. Angel. After visiting with Anne Prah

Levant, I learned that archivists have an existing system of description for objects in a database. Typically they arrange their holdings by collections. Collections are determined by provenance (that is, by donor) and arranged by original order (that is, loosely by how the donor arranged the items). However, she informed me that it is not necessary to maintain this structure in order to take advantage of other professional best practices and that even some large state archives use accession order the way that the Abbey does. She recommended that I consult Describing Archives: A Content Standard (DACS), which is similar to MARC, except for archivists. In addition, she personally showed me the ins and outs of her current database.

Materials about the organization

Because the organization does not currently have a database, I will provide examples of the types of forms and reports like the ones that I intend to develop for Mt. Angel.

Sample Forms and Reports: attached as PDF

Other Information:

Mount Angel Abbey Library Website

<http://www.mtangel.edu/library/main/library.htm>

Marion County Historical Society Website

“Other Research Collections in Marion County”

www.open.org/mchs/other_research_collections_in_marion_county.pdf

Mission statement for database

The aims of the database for Mt. Angel’s archives are:

- To be low maintenance after completion
- To have a user friendly interface for the volunteers and clergy
- To allow staff to quickly and accurately locate materials without a major re-arrangement of Mt. Angel’s entire collection
- To make materials within the archives easily accessible by person, date, or event

Analysis of current database

Mt. Angel Abbey currently does not have a digital system for information storage in their archive. The Abbey is interested in creating a database to cross reference material, more easily locate items within the archive (for instance, to search by both author and event), and make finding aids and post them online. Currently the archive only has finding aids for its photographs and these aids are not online.

Proposed tables and fields

Folders

Box_ID

Items

Item_Name
File_Number
Item_Type
Creation_Date
Accession_Date
Publication_Rights
Description
Keywords
Department

Events

Event_Name
Item_Name
Event_Date
Event_Place

Boxes

Box_ID
Box_Location
Record_Group
Box_Size

Names Relationships

Item_Name
Personal_Name
Relationship_Item (short for relationship of person named to an item, eg. creator, pictured, mentioned)

Personal Names

Item_Name
First_Name
Last_Name
Title
Relationship_Abbey (short for relationship with abbey, eg. seminary student, abbot, nun)

Record Groups

Record_Group
Group_Location
Group_Date_Range
Scope_Contents
Access_Restrictions

Departments

Department_Name

Relationship Types

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Relationship_Item

Place Names

Item_Name

City

State

County

Place_Name (eg. Linda Tate's garden)

Item Attributes

Item_Name

Attribute_Name (eg. color)

Attribute_Value (eg. red)

Attribute Types

Attribute_Name

Item_Type (eg. book)

Business rules for database

Organizational level rules:

- The Creation_Date cannot be after the Accession_Date.
- An Event_Date cannot be after the Accession_Date.
- The Creation_Date cannot be before the Event_Date.
- A box can contain a file, but a file cannot contain a box.
- An item cannot be in more than one record group.
- An item cannot be in more than one box.
- An item cannot be in more than one file.
- All items have a creator.
- Boxes must have Box_IDs.
- People mentioned in relation to an item must have an explicit relationship to the item.
- File numbers must be greater than 1000.
- Boxes must have locations.

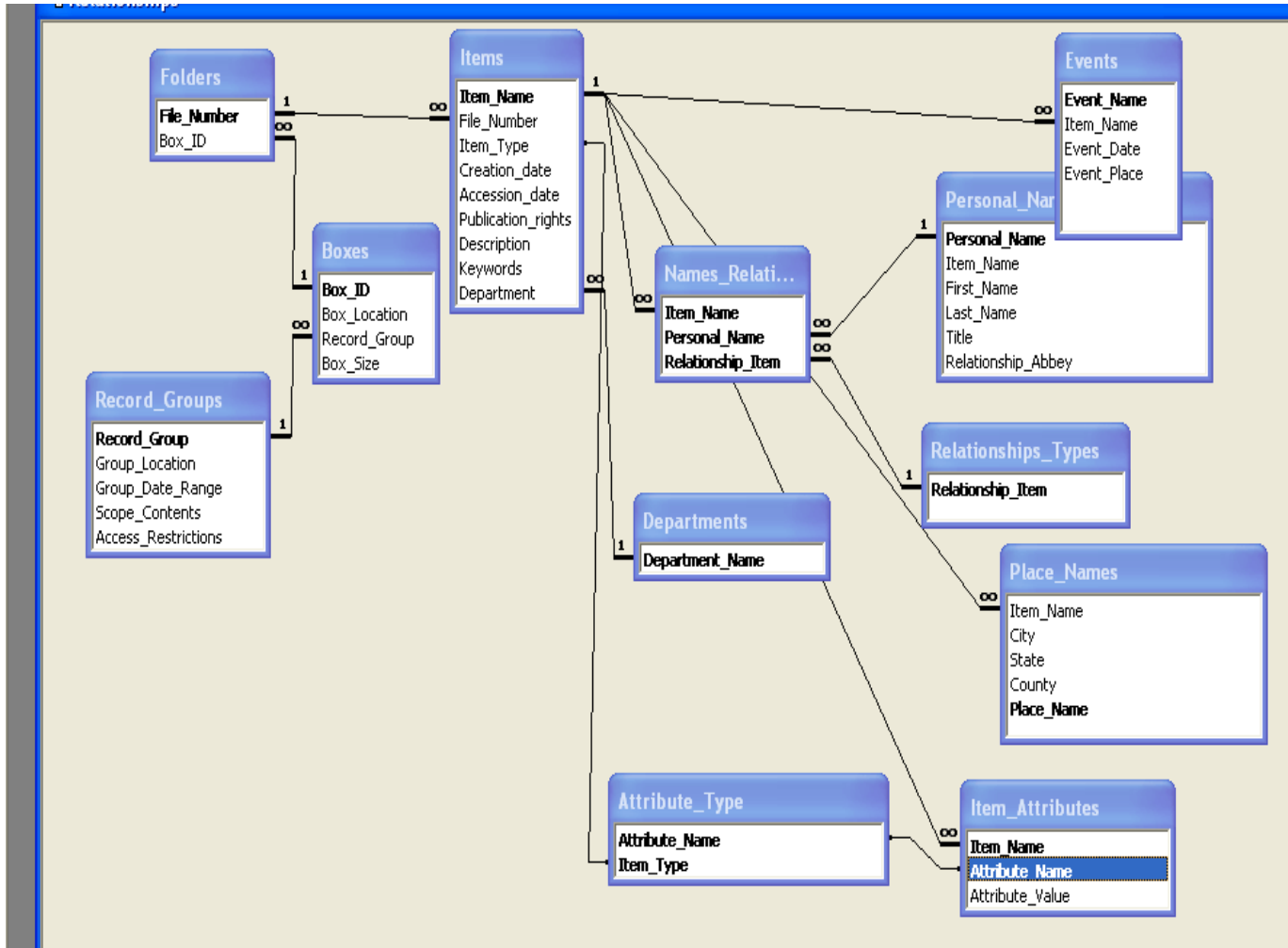
Database level rules:

- Items must have Item_Names.
- Events, Place_Names, and Departments must be related to an Item.
- Departments can only be chosen from an existing list of department names.
- An Item cannot have more than one Item_Type.
- Attribute_Values can only exist if Attribute_Names are present.
- Record groups must be described with text titles.
- An Attribute_Type can have an Attribute_Name, but not an Attribute_Value.
- Only Attribute_Names can have Attribute_Values.

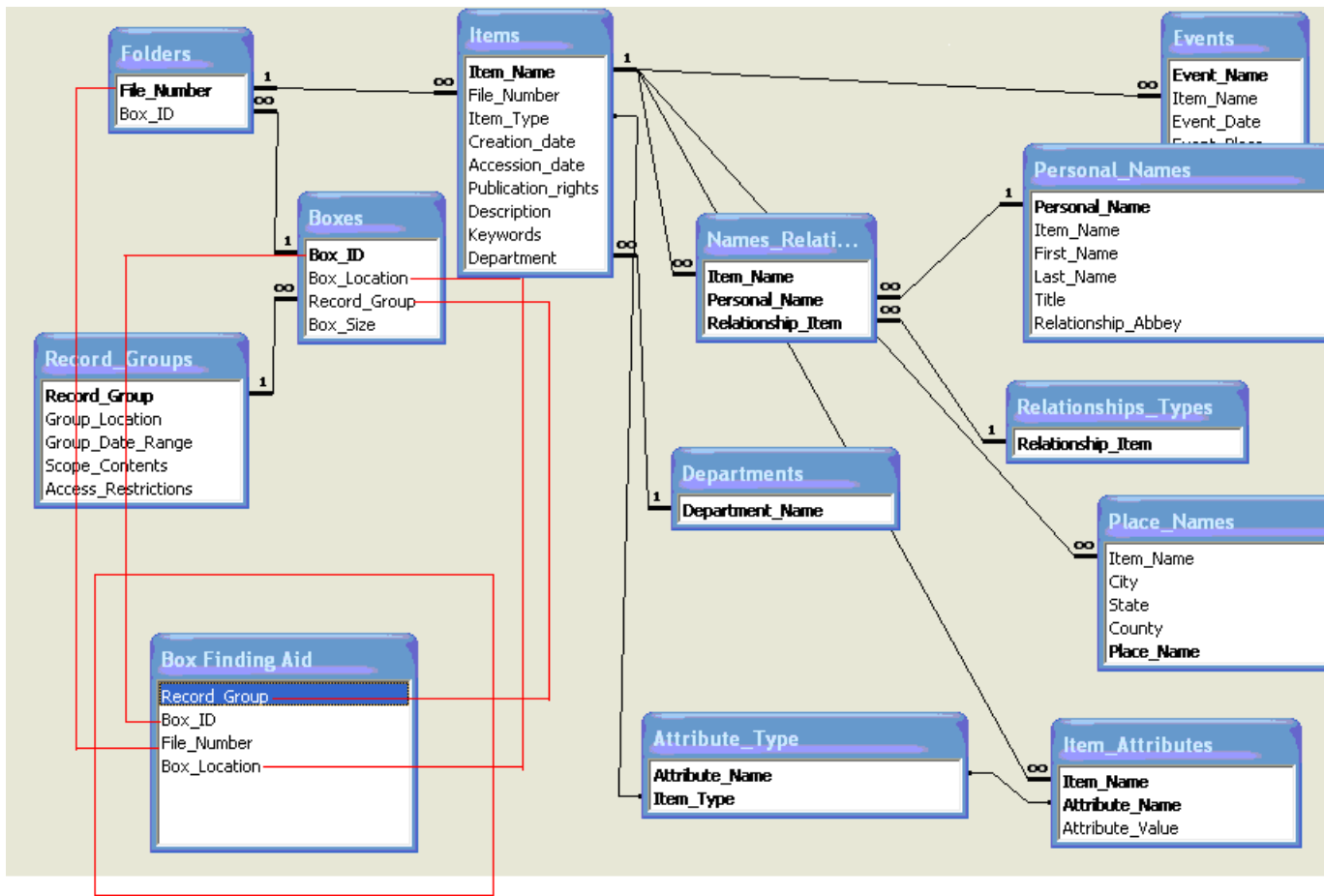
Diagram of database

This is a picture of my database structure.

- Primary keys are in bold.
- Foreign Keys have infinity signs next to them.
- Table names are in blue and white.
- Relationships illustrated with lines.
- One-to-many indicated by 1 connecting to infinity sign.
- Many-to-many indicated by infinity sign connecting to infinity sign.



This is a picture of a Finding Aid View of the diagram. The Box Finding Aid has been highlighted with red square and red connector lines show relationships:



Summary of design process

After my meeting with Anne Prah Levant, curator of the Oregon Jewish Museum, I wondered if it would make more sense to rearrange the archives of Mt. Angel into the more commonly accepted structure of provenance and original order. This would bring the collections in line with best practices in the archival field and also make the items easier to enter into a database as like items would be grouped with like items. In other words, by rearranging, I would not need to find a way to accommodate the retrieval and description of items arranged not by type and in an almost random order (that is, by accession date). However, upon realizing how many boxes the Abbey contains (over 400) and consulting with staff members, it became clear to me that rearranging the archives is not an option given the limited amount of staff time to devote to the archives as it is. In addition, the original goal of my project was to allow staff to use a database to cut

through the already created complexity to find items with ascribed similarities (such as place or personal name) throughout the archives.

A second decision that had to be made was at what level to archive. Finding aids are typically at collection and not item-level, however, in the case of the Mt. Angel Abbey, I would not be able to create a working finding aid unless it is at an item level, because the entire archives constitutes a single unsorted collection. Therefore, each item must be described in order to access it. Initially I struggled quite a bit with deciding how to achieve this and first tried to use subset structures from chapter seven. However, I found this solution unsatisfactory because I realized that it would require me to create an entire subset for every new type of material and the abbey currently contains at least eight types of materials and will probably collect new types in the future. For the sake of making it easier for the staff to enter records, I decided to stick with a single table for all item types. In order to describe attributes of items that might vary from item type to item type (for instance, books have binding types but photographs do not have binding types), I set up a series of validation tables for item types and their attributes.

Next, I had to determine how to split up item types from item descriptions such as place. This seemed easy enough until I realized that some materials, such as brochures for activities sponsored by the abbey, and letters from the early territorial history of the town of Mt. Angel, are hard to categorize. Is a play by an early nun a work of the abbey or a work of the nun? At first I had creator listed as a field under the Items table. Then, however, I saw that, since each person would need to have its relationship to the item explained, it would be better to treat the creator as a relationship just like the relationships of “person in photograph” or “musician” and to institute a business rule to ensure that all items have creators. I did this by designing a Names_Relationship table to be a linking table between the item and the personal name that would define the relationship between the item and the person.

In order to determine business rules, I first thought about the organization as a whole and how they are already structured. Then, to determine database level business rules, I used the guidelines on p.421 “Defining and Establishing Relationship Specific Business Rules.” However, because the rules for the database will be too many to include here (for instance, explicitly stating every field as mandatory or voluntary, as being text or an integer), I only included a few of the more unique database level rules.

At this point in the process, I hope to refine my database plan as I begin to implement it. The biggest challenge I foresee in the immediate future is creating forms and reports that are user friendly, especially since the organization does not currently have a database and primarily uses volunteer labor. In addition, I would like to consider the use of EADs, and how much of Describing Archives: A Content Standard (DACS) I should try to incorporate into my final design, given

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that the archives have already determined that they will not follow either provenance or original order.