Guidelines for IOP collections
Spring 2016

Normally when we design information systems, there is an approach in the real-world that is called the “User Centered Design Method”. It goes something like this:

1. We identify a group of people, such as corporate sales persons or engineers, American history students, elementary school teachers, parents of young children, do-it-yourselfer home repair buffs, etc, that when taken all together, need information of a similar sort.
2. We study the group in detail, determining the sorts of information they need, the way they go about looking for that information, they way they conceive of that information in their head, the amount they need, the way they need it delivered, and the relative depth (in terms of sophistication) of the information.
3. We look around to see if that type of information is available, say in books, journals, websites, etc.
4. We gain access to that information by buying books, journals, etc., thus forming a collection of objects.
5. We organize that collection of objects along some type of commonality, like subject, title, author, etc.
6. We figure out a way to encapsulate important information (like title, author, subject, etc) about each object into some sort of representation tool, like a database, library catalog, or an index*.
7. We make sure that our encapsulated information makes sense according to what we learned in step 2.
8. We deploy the representation tool to the user, so that they can find the right objects in the collection.
9. We evaluate the tool’s performance and the collection’s organization periodically to see if we got it all right.

* sometimes instead of building our own, we buy an off-the-shelf database such as Infotrac, Periodical Abstracts, etc that meet most of our needs.
Unfortunately in INFO 5200 we do not have time to do all these steps. In fact, Steps 1-3 might constitute another 4-hour course all by themselves!

So here is what you need to do:

1. Think of a collection of objects (books, videos, CD’s, etc) that interest you and to which you have reasonable, semester long access (this simulates steps 3 and 4 above).
2. Think of a body of users (high school students, engineers, etc) that might use this collection. (This simulates step 1 above).
3. Run your topic by me and I will respond with whether or not I think this combination will work as a good collection. **(At institute, wait for me to say when it is ok to begin doing this)**
4. Think about how the users behave, as in step 2 above.
5. The rest of the semester, we will work as if steps 1-4 are already done (in other words we are faking 1-4) and we will proceed with steps 5-9 as the “5200 experience”.

So what makes a good project? Any of the following:

- books, so long as they are not too broad (books on every subject) or too narrow (a collection of leather-bound 1st edition, signed by the author copies of The Hobbit
- videos/DVD’s, so long as they are not too narrow (a collection of documentaries on spider-web spinning)
- music, so long as there is a good variety in the collection

Some things that might work:

- paintings, post-cards, artwork, so long as the art depicted captures readily identifiable, describable objects. For example, a postcard collection of Boston row houses would not work, while a collection of postcards each depicting an historic building, such as Chartres Cathedral would
- sculptures, for the same reasons
- collectible cards of some sorts. Sports cards tend not to work, collectible game cards such as Magic: The Gathering and Pokemon do work.
- collections of letters
- sewing or quilt patterns

Some things that usually do not work:

- sheet music
- technical documents
- training manuals
- 3-D artifacts of a non-historical nature (cars, for example)
- china
- dolls
Some considerations:

In order for your collection to be workable, it must meet all of the following 4 tests:

1. There must be potentially more than 1000 objects in the collection. It is OK if your personal collection does not have 1000 objects, as long as potentially, there COULD be 1000’s of unique objects. We will pretend that the collection DOES have 1000+. This means collections like “Disney Princess Movies” will not work, as there are less than 20 of those, whereas “Disney Movies” might indeed work, as there were thousands of those.

2. There must be hundreds of users. The exercise is to build a sample of a large database that will serve a large clientele. This means that your immediate family, your 3rd grade class, the teachers at your school, etc. will not work. However, the 7th and 8th grade students at your school, or in your district, etc might work.

3. The objects in the collection must have readily identifiable subjects. Here we are using subject in the simplest sense: What is it about? A bottle of Coca Cola has no subject. A copy of War and Peace has lots of subjects. A common road sign like a stop-sign has no subject, but a collection of clever, witty phrases on shop signs does.

4. The objects in the collection must have readily identifiable proper names associated with them. In other words, they must have an author, or publisher, or illustrator, or manufacturer.

Examples:

A collection of Science Fiction books works well. Why?

- There are tens of thousands of them
- There are potentially hundreds of users if the setting is a school or club
- They have lots readily identifiable subjects: aliens, computers, exploration, war, robots, etc.
- They have lots of readily identifiable proper names: most have at least one author, a publisher, etc.

A collection of sheet music does not work. Why?

- There are tens of thousands of them (pass)
- There are potentially hundreds of users (pass)
- They generally do not have readily identifiable subjects (fail)
- They have lots of readily identifiable proper names (maybe pass)

A collection of salt shakers does not work. Why?
- There are hundreds of them (pass, maybe)
- There are not potentially hundreds of users of the collection (fail)
- They do not have readily identifiable subjects (fail)
- They generally do not have readily identifiable proper names (fail)

A collection of dog training books works. Why?

- There are tens of thousands of them
- There are potentially hundreds of users
- They have lots readily identifiable subjects: hunting, dog whisperers, bark control, housebreaking, retrieving, etc.
- They have lots of readily identifiable proper names: most have at least one author, a publisher, etc.

To get further ideas, go to the Readings and Assignments Icon on this website and look at “Student IOP Descriptions” to see examples of what past students have used for their collections.

Goals and objectives:

- You are not out to invent something that has never been done before. This is not an exercise where the point is to wow your instructor with something new, or invent some new process. You are learning the ways that have been tried and true in the past. Nor is it a good time to introduce yourself to a never before experienced body of literature. Stick with something you know.
- Pick a topic that is enjoyable, even if it seems simple. Trust me…. Simple is better. Simple is survivable. The more complex your collection, the more work you will be doing. There is no glory, nor any part of the grade based on complexity.

Last caveats:

- Make sure you pick a topic where you will have access to the material, or at least a minimum the bibliographic description of the material, all semester. Once in a while we have a problem when the student’s collection disappears mid-semester.
- Try not to solve a work problem with this assignment. Eventually you will find yourself in a place where you have to choose which direction to go… good grade in class or finish work project. Occasionally we have had cases where students have tried to solve work problems, only to have their bosses catch on, get real enthused, and attempt to direct the project, eventually pulling the project away from class requirements.