

Running head: SILICON VALLEY SWIMMING FACILITIES

A Database of Silicon Valley Swimming Facilities:

An Analysis of Requirements, the Metadata, and the Data

Kristin Yiotis

LIBR 247.01 Vocabulary Design

San Jose State University School of Library and Information Science

Judy Weedman

December 9, 2005

Abstract

This database of swimming facilities is designed for two user groups. The first group would use the database for personal reasons, such as looking for lap swimming, recreational swimming, swimming instruction, water aerobic classes, water polo games, synchronized swimming, swim teams for children, or Masters swimming. The second group would use the database for business reasons, such as looking for swimming pools as a market for products or services, as possible places of employment, or as evidence of community development.

The database involves two segments: the front end search engine and the back end database. The search interface allows for basic searching of a limited number of fields acting as facets designed to aggregate responses. Users browse through the list of responses and select pools about which they want more information. Providing users more complete information about each pool required creating additional fields and gathering data from each pool facility to complete the back end database. An advanced search option would also be useful. Advanced search would provide additional fields to initiate a search. [I think this is a good idea; the most commonly used fields for most people, but access to the others for those who want them.](#)

The facets to which the basic search is limited are: zip code, city/town, type of pool, type of access to the pool, and possibly type of activities at the pool. So users of the first group, those wanting to swim, could search for all pools that offer children's swim lessons, or that have Masters swim. Users of the second group, those wanting to contact pools for commercial reasons, would benefit from the advanced search mode. This would search by zip code, by city, by management type, and other categories. Once users have brought up a list of pools, they can narrow their search further or select specific pools by name to get the full details about each pool.

Silicon Valley Swimming Facilities:

An Analysis of Requirements, the Metadata, and the Data Don't

repeat title page information at the start of the body of the work.

Swimming is a major sport in California for people of all ages. Starting at middle school, physical education curricula in public schools includes swimming. Studies show that swimming is a life long activity and adds to the health and well being of a community (United Kingdom Parliament, 2002). The number of new swimming pools in the Silicon Valley [source of the statistics for number of new swimming pools? and what are the statistics? this isn't a defensible assertion as it stands.](#) indicates that interest in swimming is expanding. But these new pools are not being built in back yards. In fact, anecdotal evidence shows examples of families with small children removing backyard pools. This database was created with the belief that individuals and families will continue to swim, but will go to pools in their communities rather than swim at home. [This is important, but it would be a stronger statement with statistics about new public pools \(and if possible removal of backyard pools – but your statement that it's anecdotal evidence at least provides some information\)](#)

Scope of the domain

The objective of this study is to prepare an information retrieval system of swimming pools in the Silicon Valley including cities of Cupertino, Los Altos, Los Gatos, Mountain View, Palo Alto, San Jose, Santa Clara, and Saratoga. While the goal of the project is to create a comprehensive record of all swimming pools in this area, the current database is limited to [certain process for selecting these pools?](#) pools in Cupertino, Mountain View, San Jose, Santa Clara, and Sunnyvale.

Some potential users and possible searches ???????? [Is this an incomplete sentence or an](#)

unmarked section heading?

The database has been organized to enable users to search for information for various purposes. Users are of two groups: One group of people uses the database for personal reasons because they're interested in swimming themselves or are looking for activities such as swim lessons for their children. The following are possible searches by this group: You are a senior citizen and want to take water aerobics classes. This person would search the activities field looking for water aerobics. This search would aggregate all pools that offered water aerobics classes. The user could narrow the search using additional fields like indoor or outdoor pools, disabled access, changing facilities. You are a housewife and want to find swim lessons for your children. This person would be interested in knowing what pools had swim lessons, the size of the pool possibly, the changing facilities. You want to lap swim for exercise and may be interested in Masters Swim. Information retrieved from these searches would supply facility contact information, such as name and address, Web URL, telephone number, email address, physical details about the facility, such as size of pool, kinds of activities in the pool, safety equipment and physical structures at the facility, and lastly subjective information about the pool, such as ambience or atmosphere, state of repair and cleanliness.

The second group uses the database for business-related reasons because they're looking for swimming pools as a market for products or services, as possible places of employment, or as evidence of community development. The following are possible searches by this group: Your company provides pool maintenance services; you are looking for more clients. This user would search fields like owner type, management type, year built, year refurbished, and basic contact information. You are the sales agent for a pool supplies company and looking to expand your market territory. This person would be interested in knowing owner and management type,

address, changing facilities. You are a college student looking for a job as a lifeguard or swim instructor and would want to know what pools use lifeguards and on what basis, seasonally or year round. You are a real estate agent and want to find sports facilities in your sales area to use on your advertising or as selling points in presentations. You are a committee member on the board of supervisors in your town. Your committee is working on a land use survey to determine the ratio of parks and recreation areas to residences. You could use the database to create a map of neighborhoods and pinpoint pool locations.

How the database is designed check APA for heading levels. None of the 5 levels is like this. If you have 2 levels of headings, this should be in italics.

The initial search is basic, just a few fields, maybe the first 5 fields in my metadata. This initial search acts to aggregate pools. Then the searcher discriminates the pools they want more information about by choosing by name or other search terms. This could be clearer: what will the searcher see after the initial search? Will they then search within that set? Why not include the additional search terms initially? This pulls up a final page for each pool, which gives a detailed description of each pool. So do I really need to create a field for each of these descriptions? Yes because of the difference between the back end and the front end. The front end is what the user sees and uses. The back end is what the indexer uses to input data into the database. I'm compiling the metadata tags for the indexers that prepare an extensive description of the pools. good

The Requirements Analysis APA correct

User needs analysis APA: italicize

I researched the library and information science literature and the Internet for studies about users of sports facilities, recreation centers, and swimming pools. I found enough

information to make this project feasible. Atlis, a guide to Internet resources in hospitality, leisure, sport and tourism, based at the University of Birmingham in Great Britain, is a scholarly search engine that located 90 articles when searching for sports facilities, the broader term that includes swimming pools. Twenty-nine of these articles were potentially relevant to my study, but I have selected fewer to review here.

The British Parliament, House of Commons, Select Committee on Culture, Media and Sport, published the “Second Report: Testing the Waters: The Sport of Swimming,” January 2002, which presents evidence on the sport of swimming in England. Evidence reports swimming to be “the nation's most popular physical sporting activity, with nearly 12 million people swimming regularly, and an estimated 80 million visits to public sector pools a year. Swimming is the most popular sport for girls, and the second most popular for boys, with 50 per cent of children regularly participating” (Second Report, 2002, Appeal of Swimming section, #4). Swimming as stated in the report is “the best all round sport for our health” (Second Report, 2002, Introduction section), and “uniquely beneficial across the whole of society...” (Specific benefits of swimming subsection, #13). Swimming is the least discriminating sport in terms of age and ability (Introduction section).

The Report considers the state of England’s historic swimming pools, swimming facilities in communities, and training facilities available for competitive swimmers (Introduction section) [only give specific pages/sections when you’ve quoted directly](#). The report concludes that “as the country's most popular sporting activity [swimming] merits appropriate investment” (Second Report, 2002, Summary of Conclusions (a) section). The report states government’s intention to support refurbishing of existing swimming facilities, preservation of historical pools, building of competitive, 50-meter training pools, and including swimming and

water safety in school curricula with the goal that “every child should have the opportunity, and access to facilities, to learn to swim” (Second Report, 29002, (f) section).

The Report’s Minutes of Evidence provide memoranda in which communities have analyzed their existing sports facilities, conducted user surveys, and drafted business plans for new facilities that include swimming pools. The Shoreditch New Deal Trust Healthy Living Center, Hackney, London, is an excellent example (Shoreditch, 2002). Appendices 1-48 provide more evidence supporting the Report’s position on the state of the sport of swimming in England.

In October 2002, Sport England published the “National Benchmarking Service for sports halls and swimming pools: Guidance and survey documentation,” authorized by the Select Committee’s Report. Sport England is a quasi-government organization responsible for delivering the British government’s sporting objectives for England. The Benchmarking Service provides guidance to local authorities to organize and manage user surveys, provides survey documentation, and survey results assessment. The surveys are to be carried out by managers of sports facilities and swimming pools at all levels and in locations throughout the country.

Finding these documents astounded me: That an entire country was performing user surveys for their swimming pools and recreation centers, sponsored at a national level, encouraged me immensely. From what I can gather, the Benchmarking Service and the surveys themselves are not designed for the creation of a sports information retrieval system, but in response to a broader mandate from the government. The mandate, made clear in the Second Report, is to compile evidence of the use of existing facilities to monitor current need, to prepare for future needs, to understand how current facilities will meet that need, and as evidence for the need of new facilities. [good summary of the information here and the nature of the body](#)

compiling it. but since this is a requirements analysis, you need to say what from this report went into your determination of the requirements for this project.

In searching the library and information science databases for articles about user surveys and sports facilities, I found two articles. “A Walk-Up-and-Use Information System for the Sydney Olympics: A Case Study in User-Centered Design” reports on the design of *info*, the official information retrieval system for the Sydney Olympics designed by IBM **interesting!** as the next generation of the system used at the Nagano Olympics. The team used classic user-centered design strategies at each stage in the creation process. They conducted two user task analysis at the IBM facility in San Jose, CA in the development stage to determine a list of processes that represented the user’s views of how they performed tasks (Healy, 2002, p. 337). They conducted a design walk through in San Francisco, CA, where samples were presented to intended users from around the world. Team members walked through the top ten tasks and presented results that included evaluations and recommendations (Healy, p. 338). The team also collected user satisfaction surveys at the main *info* workstations after the Sydney games. The article provides a standard for developing a product that includes input from users. **You don’t say what from this report was used in determining what you would do (the requirements for) this assignment.**

The second article, “Information-Seeking Behavior for Recreational Activities and its Implications for Libraries,” reported research results of a user survey sent out to wilderness hikers and campers. The researchers wanted to know where hikers looked for information on the wilderness areas, how often the Internet and how often the library served as the main source of information. One conclusion was that libraries figured strongly in information seeking behavior despite the rise of information about wilderness areas available on the Internet. Of main interest

to me was the format of the user survey and how it was administered. [good – here you almost describe the use of this article in your requirements analysis](#) The article also gave a comprehensive review of the literature of studies of information seeking behavior from the 1970s forward (Earnest, 2005, p. 89).

Another way of doing a needs analysis is to interview potential users. I want to interview people from both my user groups to discover how they would want to search for swimming pools, in terms of facets or search fields. I would choose someone looking for a lifeguard job for example [does this person fit into your two identified user groups?](#) and someone looking the local lap swimming. I was also hoping to interview pool users to collect subjective data for the subjective categories. Because I couldn't do this, I am depending on the pool managers' point of view for the subjective data about each pool, which is not really valid, as people's whose job is involved cannot be totally subjective [true – but sometimes it's the best you can get; it's okay to use that information as long as you indicate the source and possible problems with the data](#) . Interviewing people beyond pool managers to supply contact information and physical data about pools as not possible based on my current time limit.

Existing retrieval systems for swimming pools

The most important existing retrieval system for swimming pools is the Active Places database sponsored by Sport England and developed by Landmark Information Group. Landmark published a case study of the development of Active Places in which the objective of the Web portal was to “establish a single authoritative database of sports facilities for England and to disseminate this information freely to the public, central and local government, ...commercial organizations, applicants for funding...”, and that this database “should become the definitive source for identifying, using and panning sports facilities” (Landmark Solutions,

2005, ¶ 1).

They faced three major challenges in meeting their objective. In the first stage of the project, Landmark worked to bring together, in one comprehensive database, information about sports facilities collected and maintained by many organizations in varying degrees of completeness and in differing formats. Landmark had to go through the contents of each existing database and transfer information into the new structure, which involved matching up contents, reduplicating and recoding. The second major challenge was to figure out how to make all this information accessible to the public in a format that was fast, reliable, and easy to use, yet provided enough detail for organizations involved in planning future facilities. The third difficulty was keeping the system, which depended on a high level of availability and fast response to users, secure and resistant to hardware or software failures.

Active Places provides map-based tools that enable users to search for sports facilities of interest. There are three search tools. The “find nearest” tool allows users to locate sports facilities by type, within a distance of 1-50 miles within a postcode. The “facility finder” tool allows searching by type of facility, by name of the facility, by town, local authority, and by postcode. The “freestyle” search lets the user click on an interactive map and zoom in to the location of the facility of their choice. After the user has identified a facility, they can click to open an overlaying page that provides complete details or link directly to the facility’s own website (Landmark Solutions, 2005, Active Places subsection). In this database, I was interested in only one type of sports facilities, swimming pools, which in this database has five subtypes. I modified these subtypes to use as the controlled vocabulary for my type of swimming pool category. *Good. This would be strengthened by more specificity, though – what were the five subtypes and how did you modify them? (later: I see you did do more of this subsequently in the*

paper; it would be helpful, then, to say that you will review the studies here and discuss their implications for your information system afterwards)

Active Places - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.activeplaces.com/Index_lowgraphic.asp Go Links Google active places england McAfee VirusScan

NETZERO powered by YAHOO! search Type 'Search' Here Go Search! Inbox MegaMail HiSpeed Connect

SPORT ENGLAND

The nation's biggest supporter

[Home](#) | [Print](#) | [Site Map](#) | [FAQ](#) | [Help](#) | [Sign In](#) | [Register](#)

Welcome to Active Places

find nearest

enter postcode

Postcode (Minimum first part)

(e.g. TQ1 3QP)

select facility

Facility type

Sub-type

specify distance

How far from your location do you want to search?

(Range :1 - 50 Miles)

[Search](#)

quick help

Find Nearest lets you find a number of sports facilities within a specified distance of a postcode. Remember if you don't know the postcode, you can use the post locator tool available in step one.

[About the Data](#) | [Help](#) | [Terms and Conditions](#)

[Graphics Version](#) | [Contact us](#) | [Feedback](#)

The Recreation Department of the City of Philadelphia has an online database where users can search the Department's Activity List by recreation center name, street address, zip code, or by the location of the recreation center on a city map. The search page also enables searching the Activity List by activity name, day of the week, or age range. The map divides Philadelphia into geographic areas made up of several neighborhoods. Clicking on one of geographic regions brings up a page of neighborhood recreation centers, giving name, address, and sports programs at that center and their days and times. Clicking on a recreation center links users to a page with more detailed information about that center and the programs available there including the name and address of the center, names of contact people and telephone numbers,

activity types (such as swimming), the names of the classes or programs within that activity (such as children's swim instruction), months that the activity is available (swimming is available June-August only), days of the week and hours that the activity is open, and age range of participants (age 7-11).

The site provides a comprehensive record for every center in Philadelphia that supplies city-supported, recreational, after school care, and tutorial programs from Brazilian Portuguese language classes to Golden Breath Tai Chi to Ceramics for Tots. The user interface is adequate, but the system can be slow. The basic search fields have controlled vocabularies-- name of the center, zip codes, and name of the activity--, except for street name, which is a natural language field.

Studying these two existing sports database gave me a clearer understanding of metadata fields dedicated to front end searching, fields that users search on, and back end searching, fields where the indexer enters data to compile detailed descriptions of recreation facilities. [good](#) I realized that the Philadelphia Recreation Department Web site probably came about because the department already had an internal database with information about all their neighborhood recreation centers created for their own purposes like programming and record keeping. [makes sense](#) To this database, they added a front-end search engine with basic search fields and uploaded everything onto the Internet. Thus the information on the internal database became available to the public. Given more time, I would try to locate other online databases of recreation departments in other American cities. [yes](#)

The process that Landmark went through for the Active Places Web site differed slightly. First instead of one back end database, they had to put together many databases because the pool facilities are totally independent of each other and are not run by a single agency like the

Philadelphia Recreation Department. Second, Active Places has more elaborate geospatial capability with their interactive map, where users can zoom in to street grid level and click on colored dots coded according to type of sport facility. Clicking on a dot brings up a page that provides extensive information about the sports facility represented by that dot, information that is located in the back end database. What is similar about the Active Places and the Philadelphia Recreation Department site is that both provide basic search with limited fields for the front end search, generally zip- or postcode, facility type, facility's name, and street or city/town. Both of these sites informed my decisions to provide a limited front end search capability that connects to a back end database with expanded metadata fields that provide additional information loaded by an indexer. [good – this is the kind of information that shows how the requirements analysis was a useful step in planning.](#)

In pursuing the state of swimming pools in Great Britain, I found a site titled “Lidos in the United Kingdom” created by Oliver Merrington. Merrington has researched lidos, the historic open air swimming pools [thanks for explaining the word! \(I had no idea\)](#) of Great Britain, Scotland, and Ireland, and compiled a database of sorts that feature names, locations, photographs, brief histories, and in some cases anecdotal evidence describing ambience. Represented amongst lidos are tidal salt-water, open air swimming pools that fill up with sea water at high tide and are solar heated for an ideal seaside swim without waves or currents. The Sutro Baths in San Francisco may have been an example of a lido in the USA. Some historical lidos have undergone renovation and are now reopened as beautiful outdoor pools generally used for recreational swim. Merrington's database is basically several alphabetical lists of lidos organized by categories, such as Lidos and Open Air Pools in London, 1930s Lidos Outside London, and Other Open Air Pools Outside London. There is no front end search engine.

HM Leisure Planning LTD is an Australian company that provides consulting services for researching and planning recreation and leisure facilities. Areas of specialization that are relevant are community needs surveys, recreation facility program and service inventories and databases. Given more time for this project, I would try to contact them.

Useful metadata schemes

The metadata fields for my retrieval system's front end search engine and the back end database provide three types of information: contact information, physical descriptions, and subjective analysis. The first two types are similar to those on the Active Places Web site, which are also similar to those on Philadelphia Recreation. I added Warner's subjective "aboutness" categories of ambience and state of repair. Warner's metadata grid helped a great deal in conceptualizing the metadata schema because the domain of neighborhoods relates to swimming pools, both being physical entities rather than works or images of art or architecture. I borrowed her requirements axis and modified the field names axis adding many that were used on the Active Places Web site. [good](#)

To better understand how metadata scheme aid searching, I explored Search Tools Consulting, where I found comparisons of faceted searches and traditional searches. I'm designing my metadata schema to be both faceted and traditional. The front end, basic search is organized around facets, while the back end database is organized traditionally around parametric fields for the purpose of entering data into the database.

I have not been able yet to interview a user, so I'm relying on my own knowledge and 14 years of experience as a swimmer. For my personal swimming needs, I would aggregate pools according to these broad categories or facets: by type (indoor/outdoor, lap pool, teaching pool) by access policy (membership only, school, pay to play), by zip code, by activity (water aerobics,

lap swim, children's lessons). These categories for me should be in the basic search. Searching on the basic facets would create a list of pools, for instance all the lap pools in 94087 zip code. I could browse this list for a specific pool. Clicking on a specific pool would open a page that provided information in the additional fields. An advanced search mode would make it possible to search more fields than provided in basic search. For example the manager and owner type fields available in advanced search would aggregate information important to a commercial pool supplies vendor.

Existing vocabularies related to swimming pools

I researched the Internet looking for background information about metadata, thesauri, controlled vocabulary, and searched for swimming pools in published thesauri, to get a sense of what categories swimming pools came under, to figure out if swimming pools was even a used term, and to discover its broader and narrower terms. The best thesauri was the Canadian Thesaurus of Construction Science and Technology [I wouldn't have guessed this – but it makes sense](#) in which swimming pools came under sports facilities—facilities—built environments—physical environments. Art and Architecture Thesauri (AAT) had an interesting hierarchy—with swimming pools coming under water recreation structures—recreation structures—single built works by function—single built works by specific types—built environment, the highest category within the objects. AGIFT, the Australian Governments' Interactive Functions Thesaurus had swimming pools also.

Some of the data elements in my metadata fields require controlled vocabulary and some are natural language. Name, street address, telephone number, email address, Web site URL, year built, length, depth are natural language fields, some numerical. For controlled vocabulary, I borrowed terms from the Red Cross, from the Active Places Web site, and from my own

experience working in and around pools. I wanted to use Iconclass, Division 5 Abstract Ideas and Concepts, for the ambience category but found it is now proprietary. [yes, unfortunately](#)

Every field in the Active Places interface provides the user with a definition when mousing over the field. Fields were either free text, or a controlled vocabulary is provided in a pull down menu. The controlled vocabulary was useful to me but was only available piecemeal from the pull down menus. To make a copy of the controlled vocabulary, I had to shoot the screen while a pull down menu was down. To get a copy of the mouse-over definitions I shot the screen while one was appearing. [that's a pain](#) Definitions not only provided defined fields for users but also acted as scope notes to indexers in entering data into controlled vocabulary fields. [good point](#) The best examples are in the access policy field where scope notes explain the different policies and help both the user and the indexer (see the screen shot below). Pay and play is defined as “the main means of public access to the facility is on payment of a charge, although the facility may also have a membership scheme” (Active Places, 2004). While I’m providing scope notes in my Metadata Table to be used by indexers at the back end, I have yet to figure out how to supply this information to users at the front end.

SITE NAME - DEAN CLOSE SCHOOL SPORTS FACILITIES - Microsoft Internet Explorer

Print | Print all Information | Close window

DEAN CLOSE SCHOOL SPORTS FACILITIES

Site ID: 1006094
Date last checked: 11 March 2005

<p>Address: Shelburne Road, Cheltenham-GL51 6HE</p>	<p>Contact Details: Tel: 01242 258002 Email: admin@bacontheatre.demon.co.uk</p>	<p>Amenities Available: Car Park: Yes, 300 spaces Disability Access: Yes Disability Standard: Finding and reaching the entrance, Reception area , Doorways, Changing facilities, Activity areas, Toilets, Emergency exits</p>
---	---	--

Also known as: DEAN CLOSE SCHOOL Owner Type: Other Independent School
Management Type: School/College/University (in house)

Health and Fitness Suite Sports Hall **Swimming Pool**

Facility ID: 2014117

<p>Sub Type: Access Policy Community Disability S Disability S Finding an Reception Doorways Activity ar Emergency Changing</p>	<p>Access Policy Free Public Access: There is no charge to use the facility Pay and Play: The main means of public access to the facility is on payment of a charge, although the facility may also have a membership scheme, and it may be possible to book the facility for a specific activity or for lessons. Sports Club/Community Association: The main means of public access to the facility is via sports clubs or community associations, which book it for use by their members. Membership of the club or association is based on a particular sport or community group, and is not based on performance criteria or on a particular facility. Registered Membership use: The main public access to the facility is by membership, and members usually pay a joining fee as well as a monthly or annual subscription. Private use: The facility cannot be used by the public, either on a pay and play basis or through a recreational club, except when playing against the owner of the site.</p>
---	---

Year Built:
Has the fa
Date last c
Facility Sta

Location:
X: 392819 Y: 221593.2

Additional Details:
Ward: Park Ward
Local Authority: Cheltenham District
Region: South West Region

[Feedback](#)

[About the Data](#)

All measurements are in meters

All data referring to sports sites and facilities is copyright of Sport England.
Data is regularly reviewed. All comments welcome. Please use the **Feedback** button.

admin@bacontheatre.demon.co.uk

[about the Data](#) | [Help](#) | [Terms and Conditions](#) [Low Graphics Version](#) | [Contact us](#) | [Feedback](#)

The Metadata

The metadata table

Field name	Definition	Data type	Required	Maximum number of values	Term or word indexed	Controlled vocabulary	CV Source	Comment
ID#	Unique identifier for swimming pool record	numerical	yes	1	w	no – sequential		
Name of Facility or Swimming Pool	Local or official name of facility or swimming pool	text	yes	2	w	no		If more than one, enter common name, enter others in Comments field
Address of Facility	Street address	Text	Yes	4	w	no		
City of Facility	Name of city	Text	Yes	1	w	yes	Style sheet: city	Vocabulary to expand with database.
Zip code	Zip code of city	numerical	yes	1	w	yes	Style sheet; Zipcode	Vocabulary to expand with database
Telephone number	Main telephone number	numerical	yes	3	t	no		Format as 408 733 3322
Email address	Email address	text	no	2	w	no		
Website	Web URL	text	no	2	w	no		
Type of swimming pool	Definitions of types see style sheet, scope notes	text	yes	8	t	yes	Style sheet: Pool Type	Allow for selecting more than one type.
Owner	Type of	text	no	1	t	yes	SS Owner type	

Did you consider doing multiple entries so users wouldn't have to know which field to search? It looks like you were going to allow 2 values, but then you Comment seems to contradict that. Why not allow all names?

LIBR 247.01 Metadata schema: Silicon Valley Swimming Facilities....18

Type	owner org						SS=style sheet?	
Manager type	Type of org that manages site	text	no	1	t	yes	SS Manager	
Access policy	Defined as how to access the pool	text	yes	1	t	yes	Style sheet: Access type	Description of access policies see Style sheet scope notes
Number of lanes	Number of pool lanes marked by ropes or otherwise	numerical	no	1	w	no		Total possible lanes even if not normally available
Length	Length of entire pool	numerical	yes	1	w	no	Do you need to standardize entry? – for “feet,” “Ft,” “ ‘ ” etc.?	Accept any standard measure
Width	Width of entire pool	numerical	yes	1	w	no		Accept any standard measure
Maximum depth	Deepest point	numerical	yes	1	w	no		Accept any standard measure
Minimum depth	Shallowest point	numerical	yes	1	w	no		Accept any standard measure
Diving boards	Number of? Diving boards at pool	numerical	yes	2	w	no		If known, put in Comments height of board: 3 meter board, 6 meter bd.
Year built	Year originally built	numerical	no	1	w	no		Use decade if year is unknown.
Year	Reburished	numerical	no	2	t	no		Put in

LIBR 247.01 Metadata schema: Silicon Valley Swimming Facilities....19

refurbished	or resurfaced							Comments major upgrades
Changing facilities	Description of changing facility	text	yes	4	t	yes	SS: Chang. facilit.	Allow for selection of more than one
Disability access	Access Into pool only	text	yes	1	w	yes		Yes/no field
Activities and programs	Scheduled activities only	text	yes	10	t	yes	SS: Activit./progrm	Allow for selection of more than one
Safety equipment	Safety equipment at site	text	yes	no limit to repeatability	t	yes	SS: Red Cross	Allow for selection of more than one
Structural features	Objects, buildings, landscape features, or other notable items at site	text	no	no limit to repeatability	t	yes	SS: Struct. feature	Include flora of note
State of repair of pool site and facilities	General visual impression of cleanliness, upkeep, and safety	text	yes	1	t	y	SS: Repair/cleanliness	If site has areas of differing states of repair, include predominant one here and others in Comments field
Ambience	Subjective impression of the feeling or mood of the pool site as setting	text	yes	no limit to repeatability	t	y	Iconclass: Abstract ideas and concepts But you said this was proprietary and you don't have access – so you needed to	Include crowded, quite, and general description

							develop a vocabulary or find another.	
Comments	Information not entered elsewhere in the record.	text	no	no limit to repeatability	w	n		

very thorough! careful thinking is evident in your table above.

The style sheet

City: Cupertino; Los Altos, Los Gatos; Mountain View; San Jose; Santa Clara; Saratoga; Sunnyvale
Zip code: 94040; 94086; 94087; 95014; 95032; 95051; 05192; 95320; (Not complete)
Pool Type: Diving well; Indoor; Learner/Teaching/Training; Leisure; Main/General; Outdoor; some scope notes would be useful here. what's the difference between "leisure" and "main/general"?
Owner Type: Apt complex; Church; City facility; Commercial; Community college; County facility; Hospital; Independent school; Nonprofit organization; Private member-owned; Private residence; Public school; University;
Management Type: Commercial management; Local authority (in house); Owner or owner-hired manager; School/College/University (in house);
Access policy: (includes scope notes/definitions) Free public access: There is no charge to use this facility. Pay and play: The main means of public access to the facility is on payment of a charge, although the facility may also have a membership scheme. Sports club/School class: The main means of public access to the facility is via sports clubs or school class, which books it for use by their members. Registered membership use: The main public access to the facility is by membership, and members usually pay a joining fee as well as a monthly or annual subscription. Private use: The facility cannot be used by the public either on a pay and play basis, through a recreational club or a school class, or through registered membership.
Changing Facilities: Changing rooms; Lockers; Showers; Toilets;
Activities/Programs: Lap swim; Masters swim; Recreation swim; Seasonal only activities; Swim lessons adult; Swim lessons children; Water aerobics; Water polo; Youth swim team;
Safety Equipment: Automatic Electronic Defibrillator (AED); Backboard; Backstroke flags; Depth marking; Emergency exits; Emergency telephone; Lifeguard; Management on site; Oxygen delivery system; Pool rules; Rescue tube; Resuscitation mask; Ring

buoy; Seasonal lifeguard;
Structural features: BBQ; Benches; Canopy/shade area; Car park area; Indoor social area; Landscaping; Lounge furniture; Picnic area; Play structures; Spectator area; Sports activity area; Umbrellas;
Repair/cleanliness: Areas of disrepair; Clean locker rooms; Disorganized storage areas; Good water clarity; Messy locker rooms; Organized storage areas; Poor water clarity; Well maintained;
Ambience: Adequate; Child-friendly; Competitive; Crowded; Dingy; Fun; Functional; Luxurious; Pleasant; Quiet; Sparkling;

This looks good! One possible problem: your metadata table indicates you will use Iconclass, whereas this indicates you perhaps created your own controlled vocabulary. You need to reconcile this to be consistent.

The indexed records

ID#	1	2	3	4	5	6	7	8	9	10
Name of Facility or Swimming Pool	Aquatics Center, SJSU	De Anza Aquatic Complex	El Camino YMCA	Fairbrae Swim and Racquet	International Swim Center	Jewish Community Center	Kinesiology Dept Pool, SJSU	Kona Kai Swim and Racquet Club	Northwest YMCA	Sunnyvale Swim Complex at Fremont H.S.
Address of Facility	One Washington Square	21250 Stevens Creek Blvd	2400 Grant Rd.	696 Sheraton Ave.	2625 Patricia Drive	14855 Oka Road	Spartan Complex; One Washington Square,	680 Hubbard Avenue	20803 Alves Drive	1283 Sunnyvale-Saratoga Road
City of Facility	San Jose	Cupertino	Mountain View	Sunnyvale	Santa Clara	Los Gatos	San Jose	Santa Clara	Cupertino	Sunnyvale
Zip code	95192	95014	94040	94087	95051	95032	95192	95051	95014	94087
Telephone number	408.924.6341	408 864-8751	650 9666-9622	408 79-3833	408 615-3153	408 358-3636	408 924-3010	408 984-3330	408 257-7160	408 732-2257
Email address	rharper@union.sjsu.edu	schroederrich@deanza.edu	aquatics@midpenymca.org	manager@fairbrae.com	swiminfo@calsportscenter.com	justin@svjcc.org	bare@kin.sjsu.edu	konakai@sbcglibal.net	shopkins@scvymca.org	swiminfo@calsportscenter.com
Website	http://www.union.sjsu.edu/Aquatic_Center/aquatic_center.html	http://www.deanza.edu/pe/facilities.html	http://www.midpenymca.org	http://www.fairbrae.com/	http://www.ci.santa-clara.ca.us/park_recreation/park_internat_swim.html	http://www.svjcc.org/	http://www2.sjsu.edu/kinesiology/about/kin.htm#Programs	http://www.konakaiclub.com/swimming.html	http://www.scvymca.org/northwest/	http://www.calsportscenter.com
Type of swimming pool	Diving well; Main/General; Outdoor	Diving well; Main/General; Outdoor;	Learner/Teaching/Trining; Main/General; Outdoor;	Diving well; Main/General; Outdoor;	Diving well; Learner/Teaching/Training; Main/General; Outdoor;	Learner/Teaching/Training; Main/General; Indoor;	Indoor; Learner/Teaching/Training;	Diving well; Main/General; Outdoor	Indoor; Learner/Teaching/Training; Main/General;	Main/General; Outdoor

LIBR 247.01 Metadata schema: Silicon Valley Swimming Facilities....23

Owner Type	Commercial mgmt;	Community college	Nonprofit organization;	Private member-owned	City facility	Nonprofit organization;	University	Private member-owned	Nonprofit organization;	City facility; Public school
Manager type	Commercial mgmt;	School/College /University (in house);	Owner or owner-hired manager	Owner or owner-hired manager;	Local authority (in house);	Owner or owner-hired manager;	School/College /University (in house);	Owner or owner-hired manager;	Owner or owner-hired manager;	Commercial mgmt;
Access policy	Pay and play; Sports club;	School class; Pay and play;	Registered membership;	Registered membership; Sports club;	Free public access; Pay and play; Sports club;	Registered membership;	School class;	Registered membership;	Registered membership;	Pay and play; School class;
Number of lanes	26	N/a	6	6	N/a	6	5	6	3	N/a
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>I think you really should standardize yards/meters/feet, and the abbreviation (or not) you will use.</p> </div>										
Length	60 meters	50 meters	25 yards	25 yards	50 meters	25 yards	76 feet	25 yards	25 yards	50 meters
Width	25 yards	25 yards	18 feet	12 yards	25 yards	N/a	44 feet	12 yards	25 feet	25 yards
Maximum depth	13 meters	5.5 ft.	5 feet	5.5 feet	6 ft.	N/a	8 ft.	6 ft.	5 feet	9 ft.
Minimum depth	3.5 meters	3.5 ft.	3.5 feet	3 ft.	4 ft.	N/	3 ft.	3 ft.	3 feet	4 ft.
Diving boards	2 3 meter 6 meter	4	no	1	3		no	0	no	
Year built	1970s	1970s	1987	1962	1960s	N/a	1920s	1960s	2001	2002
Year refurbished	0	2003	2003	1982	N/a		1990	2005	0	0
Changing facilities	Changing rooms; Lockers; Showers; Toilets .	Changing rooms; Lockers; Showers; Toilets	Changing rooms; Lockers; Showers; Toilets	Changing rooms; Showers; Toilets	Changing rooms; Lockers; Showers; Toilets	Changing rooms; Lockers; Showers; Toilets	Changing rooms; Lockers; Showers; Toilets	Changing rooms; Lockers; Showers; Toilets	Changing rooms; Lockers; Showers; Toilets .	Changing rooms; Lockers; Showers; Toilets
Disability access	yes	yes	yes	no	yes	N/a	no	no	yes	yes

LIBR 247.01 Metadata schema: Silicon Valley Swimming Facilities....24

s										
Activities and programs	Lap swim; Seasonal only activities; Swim lessons children; Water polo; Youth swim team;	Lap swim; Swim lessons adult; Swim lessons children; Water aerobics; Water polo; Youth swim team;	Lap swim; Masters swim; Recreation swim; Seasonal only activities; Swim lessons adult; Swim lessons children; Water aerobics; Water polo; Youth swim team;	Lap swim; Recreation swim; Seasonal only activities; Swim lessons adult; Swim lessons children; Youth swim team;	Lap swim; Masters swim; Recreation swim; Seasonal only activities; Swim lessons children; Youth swim team;	Lap swim; Masters swim; Recreation swim; Swim lessons children; Water aerobics; Youth swim team;	Swim lessons adult; Swim lessons children;	Lap swim; Recreation swim; Seasonal only activities; Swim lessons children; Youth swim team;	Lap swim; Recreation swim; Swim lessons children; Water aerobics; Youth swim team;	Lap swim; Masters swim; Recreation swim; Seasonal only activities; Swim lessons children; Water aerobics; Water polo; Youth swim team;
Safety equipment	Backboard; Depth marking; Emergency exits; Emergency telephone; Lifeguard; Pool rules; Rescue tube; Ring buoy;	AED; Backboard; Backstroke flags; Depth marking; Emergency exits; Lifeguard; Pool rules; Rescue tube; Resuscitation mask; Ring buoy;	AED; Backboard; Backstroke flags; Depth marking; Emergency exits; Emergency telephone; Lifeguard; Management on site; Oxygen; Pool rules; Rescue tube; Resuscitation mask; Ring buoy;	Backboard; Backstroke flags; Depth marking; Emergency exits; Emergency telephone; Ring buoy; Seasonal lifeguard;	Backboard; Backstroke flags; Depth marking; Emergency exits; Emergency telephone; Lifeguard; Management on site; Pool rules; Rescue tube; Resuscitation mask; Ring buoy	N/a	Depth marking; Emergency exits; Emergency telephone; Lifeguard; Rescue tube; Resuscitation mask; Ring buoy	Depth marking; Emergency exits; Pool rules; Ring buoy; Seasonal lifeguard	AED; Backboard; Backstroke flags; Depth marking; Emergency exits; Emergency telephone; Lifeguard; Management on site; Oxygen; Pool rules; Rescue tube; Resuscitation mask; Ring buoy;	Backboard; Backstroke flags; Depth marking; Emergency exits; Emergency telephone; Lifeguard; Management on site; Rescue tube; Ring buoy;
Structural features	Lounge area; Spectator area; Umbrellas	Benches; Car park area; Spectator area;	Benches; Car park; Indoor social area;	BBQ; Benches; Canopy/shade area; Car park; Indoor social area; Landscaping; Lounge furniture;	Car park area; Spectator area	N/a	none	BBQ; Benches; Canopy/shade area; Car park; Indoor social area; Landscaping; Lounge furniture;	Benches; Car park area; Indoor social area; Play structures;	Car park area; Spectator area; Umbrellas;

LIBR 247.01 Metadata schema: Silicon Valley Swimming Facilities....25

				Picnic area; Umbrellas				Picnic area; Umbrellas		
State of repair of pool site and facilities	N/a	N/a	Area of disrepair; good water clarity; Messy locker room; organized storage area;	Messy locker room; Organized storage area;	Clean locker room; Good water clarity; Well maintained	N/a	Clean locker room; Good water clarity; Well maintained;	N/a	Good water clarity; Messy locker room; Organized storage area;	N/a
Ambience	Adequate; Dingy;	Adequate; Competitive; Functional; Sparkling	Adequate; competitive; functional;	Adequate; Child friendly; Pleasant; Quiet	Busy; Competitive; Crowded; Functional;	N/a	Pleasant; Quiet; Sparkling;	Beautiful; Busy; Child friendly; Fun; Sparkling;	Child friendly; fun; pleasant; quiet	N/a
Comments	Underwater hockey; Diving	Adapted water aerobics; Diving	Adapted water aerobics		Synchronized swimming; Diving	Survey not returned in time.				

this is great; very thorough. It would have been useful to indicate somehow, maybe with color, which of these fields will be searchable initially, and which will be used in other ways.

Annotated Relevant Literature

User surveys

Sport England. (October 2002). *National Benchmarking Service for sports halls and swimming pools: Guidance and survey documentation*. Retrieved November 29, 2005, from <http://www.sportengland.org/national-benchmark-final.pdf>,
<http://66.102.7.104/search?q=cache:EArvSq5nCLUJ:www.sportengland.org/national-benchmark-final.pdf+national+benchmarking+service&hl=en>.

Here I found an example of user surveys for sports facilities and swimming pools that is designed to measure sports participation. It provides details of the organization and management of user surveys. The surveys are to be carried out by managers of sports facilities and swimming pools and this document provides the guidance. This document provided me with a benchmark for user surveys in the domain of swimming pools, although the survey was not designed for users of information retrieval systems but for the pools themselves.

United Kingdom Parliament. House of Commons. Session 2001-02. (January 15, 2002. *Select Committee on Culture, Media and Sport Second Report*. Retrieved November 29, 2005, from <http://www.parliament.the-stationery-office.co.uk/pa/cm200102/cmselect/cmcmcomeds/418/41802.htm> .

Sections of this report, which “looks at the state of swimming in the UK taking evidence on swimming facilities available in the community,” added to my understanding that collecting information about swimming pools is actually done on a national basis in the UK and has government backing. Specific sections of interest are: The Appeal of Swimming and the Challenge and Appendix 7.

Shoreditch New Deal Trust. (January 15, 2002). *Memorandum submitted by Haggerston Pool Action Group, Hackney*. Retrieved December 3, 2005. from <http://www.parliament.the-stationery-office.co.uk/pa/cm200102/cmselect/cmcmds/418/1120410.htm>.

These Minutes of Evidence, given to the Committee on Culture, Media and Sport, present a business plan for a Healthy Living Center that includes user studies of interest to my project.

no annotations for 2 preceding citations?

University of Birmingham. (n.d.). *Altis: The guide to Internet resources in hospitality, leisure, sport and tourism*. Retrieved November 29, 2005, from <http://altis.ac.uk/index.html>, <http://altis.ac.uk/browse/cabi/f36f71f69d1af0064c424b240fe4af37.html>.

At this site, which provides “trusted sources of ...high quality Internet information” in the areas of sports, hospitality, and tourism, I found 29 research articles on my domain relevant to my study.

Healy, V. and Herder, R. (2002). A walk-up-and-use information system for the Sydney Olympics: A case study in user-centered design [Electronic version]. *International Journal of Human-Computer Interaction*, 14, (3/4), 335-347. Retrieved December 2, 2005, from Academic Search Premier Ebscohost database.

This article gives a substantial literature review of information seeking behavior from 1970 print era to the current Internet era.

Earnest, D. J., Level, A. V., and Culbertson, M. (2005). Information-seeking behavior for recreational activities and its implications for libraries [Electronic version]. *Reference Services Review*, 33(1), 88-103. Retrieved December. 2, 2005, from Emerald Fulltext database.

The developers of this information retrieval system, which included a user-centered design team, conducted a user task analysis in the development stage and organized metadata categories that reflected the information included in the system.

Information retrieval systems

Sport England. (n.d.). *Active Places*. Retrieved November 29, 2005, from <http://www.activeplaces.com/>.

This state-of-the-art database of sports and fitness facilities in England enables three different search capabilities: by postcode and facility type; by specific criteria such as facility type, name of site, town; and by an interactive map that brings up the facilities in cities you click on. This site inspired me and convinced me that I was into something worthwhile.

Sport England. (n.d.). *Welcome to Sport England*. Retrieved November 29, 2005, from <http://www.sportengland.org/>.

The funding agency for Active Places and the quasi-government agency that gets funding from the National Lotto, this site helped me understand the depth and breadth of the Active Places database.

Landmark Information Group. (2004). *Landmark Government*. Retrieved November 29, 2005, from http://www.landmarkinfo.co.uk/corp/govern_home.jsp.

Landmark Government is the parent company for Landmark Solutions, the developer the Active Places portal. I was interested in their metadata, which is proprietary.

Landmark Information Group. (2004). *Landmark develop and host Sport England's 'Active Places' web portal*. Retrieved November 29, 2005, from <http://www.landmarkinfo.co.uk/corp/article.jsp?articlekey=1417>.

This article reports the Landmark Active Places project and describes its five key stages of which

stage 2, data model development and data definitions, was most interesting to me.

Landmark Solutions. (2005). *Case study: The development of "Active Places" – a portal of sports facilities*. Retrieved November 29, 2005, from <http://www.ligsolutions.co.uk/PDFs/Active%20Places%20case%20study.pdf>.

This article more extensively discusses the Active Places project including the goal, the problems and Landmark's solutions: Active Places, the public site, and Active Places Power, a password protected site designed to assist government investment decisions.

Recreation Department. Philadelphia. (n.d.). *Welcome to the City of Philadelphia Recreation Department's Activity List*. Retrieved November 29, 2005, from <http://www.phila.gov/cgi-bin/recreation/phillarec/index.cgi>.

At this Web site, the database, searchable by recreation center name, street address, zip code, or by the location of the recreation center on a map and by activity name, day of the week, or age range, provided me with insight into what fields are relevant in a database of swimming pools.

Merrington, O. (September 2005). *Lidos in the United Kingdom*. Retrieved November 29, 2005, from www.lidos.org.uk.

This site, which provides historical information about lidos in England and the British Isles complete with photographs, physical descriptions, and personal accounts, gave me insight into the background of these open-air swimming pools.

HM Leisure Planning. (September 2005). *Welcome to HM Leisure Planning Pty Ltd home page*. Retrieved November 29, 2005, from <http://www.hmleisureplanning.com/ConsultBusiness.htm>.

This Australian company provides services in recreation planning and research, one, recreation

facility program and service inventories and data bases, could be relevant to me if I could get more information.

Metadata schemes

Warner, A. (2001). *The power of metadata: Tips, techniques, and cases*. Paper presented at Internet Librarian, Nov. 7, 2001, Pasadena, CA. Retrieved PowerPoint slides December 5, 2005, from <http://www.infoday.com/il2001/presentations/default.htm>.

I made extensive use of Warner's metadata grid and made modifications to both the requirements axis and the field name axis.

Canadian Heritage Information Network Glossary. (July 31, 2000). *Taxonomy of knowledge organization sources/systems (KOS)*. Retrieved November 29, 2005, from http://nkos.slis.kent.edu/KOS_taxonomy.htm,

<http://www.chin.gc.ca/English/Standards/glossary.html#element>

I printed out this glossary of terms related to metadata to get a better understanding of what I was reading throughout my research of metadata and metadata standards.

Search Tools Consulting. (2005). *Background topics: Faceted metadata search and browse*. Retrieved November 29, 2005, from <http://www.searchtools.com/info/faceted-metadata.html>.

This site, which compares traditional search structures like parametric search and full-text search with faceted search and gives links to faceted metadata search resources such as Flamenco, helped me understand how to limit my initial search to basic fields and with options to narrow the search results by additional fields.

ANSI/NISO. (September 10, 2001). Z39.85 - 2001 *The Dublin core metadata element set*.

Retrieved October 10, 2005, as PDF file from: <http://www.niso.org/standards/index.html>.

Most of these data elements are not relevant to my domain although it's purported to be the standard for cross-domain information resource description, information resource defined as anything that has identity, which covers swimming pools. Elements like: creator, subject, publisher, contributor, format, language, and rights, have nothing to do with swimming pools.

Bell, M. (2004). *A controlled vocabulary supports knowledge management*. Paper presented at Public Health Information Network (PHIN) Conference, May 24, 2004. Retrieved pdf document December 2, 2004, from <http://www.cdc.gov/phin/04conference/05-24-04/index.html>, <http://www.cdc.gov/phin/04conference/05-24-04/Session 1 E- Mamie Bell.pdf>.

This document discusses the metadata attributes for the public health domain, swimming pools being a standard term in the vocabulary for the Setting field.

Vocabularies

North Shore Pool Spa. (2004). *Vocabulary*. Retrieved November 25, 2005, from <http://www.northshorepoolspa.com/FAQs/vocabulary.html>.

This glossary of water purification concepts and pool chemicals did not affect my metadata schema.

National Research Council Canada. (2005). *Canadian thesaurus of construction science and technology*. Retrieved December 5, 2005, from <http://irc.nrc-cnrc.gc.ca/thesaurus/>, http://irc.nrc-cnrc.gc.ca/thesaurus/swimming_pools.html.

A search in this thesaurus for swimming pools brought up the BT, French term (FT), part term (PT), RT, and NTs and provided 19 instances of swimming pools, which helped me create the controlled vocabulary for the Pool Types category.

Canadian Heritage Information Network. (2004). *Glossary*. Retrieved December 5, 2005, from <http://www.chin.gc.ca/English/Standards/glossary.html#element>.

Another glossary of terms associated with information that helped me initially to conceptualize this assignment.

Australian Government National Archives. (September 30, 2005). *Australian governments' interactive functions thesaurus – AGIFT*. Retrieved November 29, 2005, from <http://www.naa.gov.au/recordkeeping/thesaurus/001616.htm>.

I checked this site to see the hierarchy for swimming pools and found it a non-preferred term, it being under Sporting facilities management, which I didn't think was specific enough.

J. Paul Getty Trust. (2000). *Art & architecture thesaurus (AAT)*. Retrieved December 3, 2005, from <http://www.getty.edu/research/tools/vocabulary/aat/>.

Here I pulled up the hierarchical and full record displays for swimming pools, of interest because of the hierarchical placement and the controlled vocabulary for swimming pools, which included terms such as natatoria and baths but not lido.

Networked Knowledge Organization System/Services (NKOS). (2000). *Taxonomy of knowledge organization sources/systems*. Draft, July 31, 2000. Retrieved December 5, 2005, from http://nkos.slis.kent.edu/KOS_taxonomy.htm.

The site's definitions of terms associated with knowledge organization gave me background knowledge useful in attempting this project.

Your annotations do a good job of providing the information requested – how each source contributed to your design work.

Discussion of Decisions

At the beginning of the project, I had difficulty differentiating between the front end search

engine and the back end database. I was confusing the needs of the indexers to populate the database with the requirements of users. [This is an important distinction](#). Users want detailed information but do not need more than a few fields to initiate a search. The indexers need to populate all fields with data, and part of my data collecting was to acquire data to populate all fields, whether searchable or not.

My original metadata schema had to be reevaluated. Not all of the fields in this survey made sense as user searches. I had too many fields for allowing all to be searchable either as a basic search or advanced search. I realized that no one is going to have patience to search in most of those fields. [The issue really isn't that of patience: making fields available for searching doesn't require people to use them if they don't want to. The issue is really what people will want to use as criteria for deciding which pools they want more information about – is location the only thing they will need to search on, for instance, or will the existence of diving wells be an essential criterion, and they won't want to even look at a record for a pool that doesn't have one? Since you envision the search as a two step process, the key issue is what information do they need to make that first cut – what are the basic criteria that make a pool a “yes maybe” or a “no interest at all”?](#) Information such as Web site, email address, maximum depth, year refurbished is unnecessary to the swimmers user group, but may be useful to the business user group. [excellent point; the two groups will have different minimum criteria for the first cut.](#)

The Active Places Web site uses only a few categories to initiate a search: Find facility search where you can search any of the following categories: Facility type, Name of the site, Town, Local authority, Postcode. Find nearest facility search where you search in order: Postcode, Facility type and subtype, and Specify distance 1 to 50 miles (how far from your location). Freestyle: where you used the interactive map or a minimal first part of the postcode.

Eventually I developed a faceted system that enabled a basic search for the swimmer user group and a more advanced search for the business user group. [How does the concept of faceting apply here exactly? In one sense, all databases are faceted; each separate data element is a facet. But I think you mean the swimmer and business facet; I'm not positive that "facets" is the right word since you don't actually divide those data elements, but I know what you mean. .](#)

Somewhere into my planning I realized that I was collecting data about my swimming pools that had to be used at two levels: information at the detailed level would populate the backend database and information at the basic level, which I ended up designing around facets, as the front end basic search. But first I had to gather information for the back end database and to get this information I had to send out surveys to pool managers.

This led to another problem: collecting data from 10-15 swimming pools. I created a survey form that I sent out by email as a Word document attachment to the contact person at the pool, which ended up being the pool manager. This was problematic for several reasons. First was the issue of asking people whose jobs were managing a facility to make subjective decisions about the appearance or management of the facility. Obviously this is a conflict of interest. I had no time to interview facility users to look for subjective information. [Understandable and appropriate for this project. How many of the questionnaires did you actually get back? This needs to be reported somewhere. And what did you do for the pools for which you didn't get a questionnaire, if there were some?](#)

Second was the physical problem of distributing the form. Because the form was a table, it couldn't be pasted into an email message box, to which people can respond simply by hitting Reply and typing in their information. The directions are to circle the appropriate items from the controlled vocabulary that relate to your pool. This requires the form be printed out and I pick it

up in person. Or they can underline or bold the vocabulary they've selected and send it back as a Word doc attachment. But this underlining takes much effort and people are busy. [Yes; this is always a problem with survey research; you never get 100% response, and often you have to consider 30% or less good \(if it's a large enough original pool of people\).](#)

Plus I'm doing this project solo. Having a partner to split up the work would be great plus more motivational especially at the beginning. [...yes...](#)

I had problems with the controlled vocabulary. One problem that I have yet to solve is the measurement standard for pool length, width, and maximum and minimum depth. Pools are measured in meters, yards, and feet. Both 50 meters and 25 yards are standard lengths that swimmers can visualize, like 3, 5, 9, and 12 feet in depth. I decided to leave the measurement standard in the original, whatever it was, and not convert all to one standard. Americans don't easily visualize 3 feet as .9 meters or 5 feet as 1.5 meters and that inability may be dangerous. However, not having a uniform standard for measurement across pools is awkward. Users can't compare pools easily and it just isn't elegant. I just couldn't decide on one standard. Depth markings on pool decks are usually in feet. But the Active Places database has all measurements in meters. [I agree that this is a problem It's a simple enough arithmetic problem to convert all to one unit of measurement; I'd do that.](#)

I had problems with controlled vocabulary and made the mistake of allowing for multiple entries in subjective fields, resulting in possible [hmm – for instance?](#) . I should have allowed for one entry in ambience and state of repair categories, as did Warner. Plus I didn't have a valid user group to comment on subjective fields. Some managers wouldn't respond to this category.

Unfortunately for the subjective fields I didn't find a controlled vocabulary in time and ended up making up my own, which didn't feel right. [Nothing wrong with creating your own.](#)

However, given time and money, you'd want to do some user testing to see if those categories work for people, and if there are others they would like to have; also, as you say, looking farther for existing vocabularies is a good idea. With more time I would adapt a standard vocabulary for subjective information, and I would cast a broader net in gathering subjective information, like from pool users themselves in addition to management.

I created some cumbersome lists of irrelevant things, like all the safety equipment at a pool. While this may be important to business users, most people are not interested in this level of detail. It became tedious well, true, but if it's useful then the tedium is a worthwhile investment to enter this information, and I felt silly asking the questions. Sometimes this is an indication that you need to think through the reason for the metadata element farther – if it's useful information, and you know why it's useful and to whom, you're not as likely to feel silly. on the other hand, if it's not useful to someone, the feeling awkward may be an indication of that.

The user survey

I'm building a database of local pools for a Library Science project. I'm looking for the information given in the Fields area. Please include any terms you feel are missing. Contact info: Kristin Yiotis kyiotis@slis.sjsu.edu 408 479-8522

Field	Description of field	Add information about your pool in the blanks. Where there are terms to select from, circle the ones that apply to your pool.
Name of Facility or Swimming Pool	Local or official name of facility or swimming pool	
Address of Facility	Street address	
City of Facility	Name of city	
Zip code	Zip code of city	
Telephone number	Main telephone number	
Email address	Email address	
Website	Web URL	
Type of swimming pool	Definitions of types see style sheet, scope notes	Diving well; Indoor; Learner/Teaching/Training; Leisure; Main/General; Outdoor
Owner Type	Type of owner org	Apt complex; Church; City facility; Commercial; Community college; County facility; Hospital; Independent school; Nonprofit organization; Private member-owned; Private residence; Public school; University;
Manager type	Type of org that manages site	Commercial management; Local authority (in house); Owner or owner-hired manager; School/College/University (in house);
Access policy	Defined as how to access the pool	Free public access: There is no charge to use this facility. Pay and play: The main means of public access to the facility is on payment of a charge, although the facility may also have a membership scheme. Sports Club/School class: The main means of public access to the facility is via sports clubs or school class. Registered membership use: The main public access to the facility is by membership, and members usually pay a joining fee as well as a monthly or annual subscription. Private use: The facility cannot be used by the public either on a pay and play basis, through a recreational club or a school class, or through registered membership.
Number of lanes	Number of pool lanes marked by ropes or otherwise	
Length	Length of pool	Specify meters / yards / feet

Width	Width of pool	Specify meters / yards / feet
Maximum depth	Depth	Specify meters / yards / feet
Minimum depth	Depth	Specify meters / yards / feet
Diving boards	Number of diving boards at pool	
Year built	Year originally built	
Year refurbished	Year reburished or resurfaced	
Changing facilities	Description of changing facility	Changing rooms; Lockers; Showers; Toilets
Disability access	Disabled Access into pool only	Yes or No
Activities and programs	Scheduled activities only	Lap swim; Masters swim; Recreation swim; Seasonal only activities; Swim lessons adult; Swim lessons children; Water aerobics; Water polo; Youth swim team;
Safety equipment	Safety equipment at site	Automatic Electronic Defibrillator (AED); Backboard; Backstroke flags; Depth marking; Emergency exits; Emergency telephone; Lifeguard; Management on site; Oxygen delivery system; Pool rules; Rescue tube; Resuscitation mask; Ring buoy; Seasonal lifeguard;
Structural features	Objects, buildings, landscape features, or other notable items at site	Structural features: BBQ; Benches; Canopy/shade area; Car park area; Indoor social area; Landscaping; Lounge area; Lounge furniture; Picnic area; Play structures; Spectator area; Sports activity area; Tables; Trees; Umbrellas;
State of repair of pool site and facilities	general visual impression of cleanliness, upkeep, and safety	Repair/cleanliness: Areas of disrepair; Clean locker rooms; Disorganized storage areas; Good water clarity; Messy locker rooms; Organized storage areas; Poor water clarity; Well maintained;
Ambience	subjective impression of the feeling or mood of the pool site as setting	Adequate; Child-friendly; Competitive; Crowded; Dingy; Fun; Functional; Luxurious; Pleasant; Quiet; Sparkling;
Comments	Information not entered elsewhere in the record.	

I'm glad you included this¹

This project is very well done! It's thoughtful and thorough. You're very good at thinking things through step by step, and this project shows that.