Winnowing the Chaff: Designing and Building a Grain Milling and Processing Web Library

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Grain Milling and Processing - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://www.grainmilling.org/ Go Links

www.grainmilling.org

Grain Milling & Processing

AgNIC

Welcome to the site devoted to milling and processing of cereal grains and their use in baking, animal feed production, and industrial applications. Grain Milling and Processing is created by Kansas State University Libraries in collaboration with the K-State Department of Grain Science and Industry and is a component of Agnic.
Read more about this site.

An AgNIC site sponsored by KSU Libraries

milling | baking | cereal foods | feeds | industrial uses | contact us

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Text Only | About This Site

Done Internet

Start Microsoft PowerPoint - [... Grain Milling and Proc... 1:20 PM Friday

Need for a website for grain milling

- KSU's Grain Science curriculum is unique
- Covers post harvest grain processing. Includes milling, baking, snacks, animal feeds, and industrial uses
- International Grains Program trains industrial professionals
- Information is all over the web; librarians had an opportunity to select and organize.

Project Participants

- Yongli Zhou
- Diana Farmer
- Mohan Ramaswamy
- Mike Haddock

Collection of user input

- We spoke with faculty and students in the Grain Science department
- Obtained valuable input about selecting content and developing subject categories
- Iterated the process as we developed the web design and added content

Website design

- Original design was created as a story board and was used to obtain user feedback
- Initial web design had static HTML pages
- Users and librarians agreed that having search capability would be useful
- Created an Access database to store the data; developed a dynamic website
- Included a “librarian interface” for content management

Usability & maintenance

- Eye-catching interface
- Easy navigation
  - uniform top navigation menu
  - standard footer
- Easy maintenance
  - Templates
  - Database driven
- Searchable

Index
Site Map
Abou Us

Milling

- Associations & Organizations
- Commercial Sites
- Education & Careers
- Marketing
- Research & Statistics
- Storage & Quality

Baking

- Associations & Organizations
- Cereal Chemistry
- Commercial Sites
- Education & Careers
- Marketing
- Research & Statistics

Cereal Foods

- Associations & Organizations
- Commercial Sites
- Education & Careers
- Marketing
- Research & Statistics

Feed Production

- Associations & Organizations
- Commercial Sites
- Education & Careers
- Extrusion
- Marketing
- Processing & Premixing
- Research & Statistics
- Storage & Quality

Industrial Uses

- Associations & Organizations
- Commercial Sites
- Education & Careers
- Patent Resources
- Product Development
- Research & Statistics

About Us

- Ask A Question
- Comments

home | site map | milling | baking | cereal foods | feeds | industrial uses
about us | contact us

SAIN

Grain Milling & Processing Database

View Tables: Content & Profiles Full | Content & Profiles Brief | Content | Profiles | Subjects, Categories, Subcategories | Database Home

Create a New Record: Create Content | Create Profile

Update Tables & Delete Records: In order to update a record, you visit one of these tables, content & profiles, content, or profiles first. Click "update record" or "delete record" link to do the update or deletion. You cannot update subjects, categories, nor subcategories.

If you have any questions pls contact Yongli.

home | site map | milling | baking | cereal foods | feeds | industrial uses
about us | contact us

Create a New Record for Content

View Tables: Content & Profiles Full | Content & Profiles Brief | Content | Profiles | Subjects, Categories, Subcategories | Database Home

Create a New Record: Create Content | Create Profile

Update Tables & Delete Records: In order to update a record, you visit one of these tables, content & profiles, content, or profiles first. Click "update record" or "delete record" link to do the update or deletion. You cannot update subjects, categories, nor subcategories.

The Last Record's Content ID is356

* **Content_id:**

* **Title:**

Creator:

* **Description:**

Publisher:

Date:

Resource Type Lookup:

Resource Identifier:
include http://

Language: Eng,

Coverage:

Format:

Resource Size:

Insert record

USAIN

Database: Create a Profile

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* **Profile ID:** [ ] max number of charactors are 4, input integers only

* **Content ID:** [ ] max number of charactors are 4, input integers only

* **Subject Id:**
- milling
- baking
- cereal foods
- feeds
- industrial uses

* **Category ID:**
- Associations & Organizations
- Commercial Sites
- Education & Careers
- Marketing
- Research & Statistics
- Patent Resources

* **Subcategory Id:**
- U.S.
- Other National
- International
- Magazine/Newsletter
- Full Text
- Print Resource
- Statistics
- Database
- Research Project
- Research Lab

Insert record

USAIN

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Subjects

Subject ID	Subject Name
1	milling
2	baking
3	cereal foods
4	feeds
5	industrial uses

Categories

Category ID	Category Name
1	associations & organizations
2	commercial sites
3	education & careers
4	marketing
5	research & statistics
6	patent resources

Subcategories

Subcategory ID	Subcategory Name
1	United States
2	Other National
3	International
4	Magazines/Newsletter
5	Full Text Resources
6	Print Resources
7	Statistics

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Content ID & Profile ID:	39 & 39
subject | category | subcategory:	baking-> associations & organizations -> International
Record # 41	
Title	American Association of Cereal Chemists International
Creator	
Description	An interntaional non-profit organization of members who are specialists in the use of cereal grains in foods. This association publishes Cereal Chemistry and Cereal Foods World as well as books on grain and food science.
Publisher	AACC International
Date	
Reource Type Lookup	web page
Resource Identifier	http://www.aaccnet.org/
Language	eng,
Coverage	
Format	
Resource Size	

Update Content | Update Profile | Delete Profile | Add Profile | Delete Record

Content ID & Profile ID:	39 & 40
subject | category | subcategory:	cereal foods-> associations & organizations -> International
Record # 42	
Title	American Association of Cereal Chemists International
Creator	
Description	An interntaional non-profit organization of members who are specialists in the use of cereal grains in foods. This association publishes Cereal Chemistry and Cereal Foods World as well as books on grain and food science.
Publisher	AACC International
Date	
Reource Type Lookup	web page
Resource Identifier	http://www.aaccnet.org/
Language	eng,
Coverage	
Format	
Resource Size	

Update Content | Update Profile | Delete Profile | Add Profile | Delete Record

USAIN

Create a New Record: Create Content | Create Profile

Update Tables & Delete Records: In order to update a record, you visit one of these tables, content & profiles, content, or profiles first. Click "update record" or "delete record" link to do the update or deletion. You cannot update subjects, categories, nor subcategories.

Note: This page is ordered by page titles

Total Record #: **521** First Page Previous Page Next Page Last Page

1	Content ID/Profile ID	239 & 100
Title	AAFCO Feed Inspector's Manual, 2nd ed.	
2	Content ID/Profile ID	248 & 292
Title	ABA Labeling Manual	
3	Content ID/Profile ID	79 & 329
Title	ABNA : Associated British Nutrition & Agriproducts	
4	Content ID/Profile ID	79 & 330
Title	ABNA : Associated British Nutrition & Agriproducts	
5	Content ID/Profile ID	271 & 318
Title	Acrivarn	
6	Content ID/Profile ID	164 & 162
Title	Advanced Grain Marketing, Iowa State University	
7	Content ID/Profile ID	340 & 502
Title	AFRIS: Animal Feed Resources Information System	
8	Content ID/Profile ID	114 & 110
Title	Ag Biotechnology Patents and New Technologies	
9	Content ID/Profile ID	48 & 52
Title	AgBioForum	
10	Content ID/Profile ID	172 & 167
Title	AGRI-associates, Inc.	
11	Content ID/Profile ID	172 & 253
Title	AGRI-associates, Inc.	
12	Content ID/Profile ID	172 & 254
Title	AGRI-associates, Inc.	
13	Content ID/Profile ID	172 & 255
Title	AGRI-associates, Inc.	
14	Content ID/Profile ID	172 & 256
Title	AGRI-associates, Inc.	
15	Content ID/Profile ID	184 & 237

USAIN

Building a dynamic site

- MySQL database
- Used phpMyAdmin to manage the database
- Programmed in PHP language to create dynamic web pages
- Used Google Search Appliance for local search

Building database using phpMyAdmin

- Building the database is as easy as filling out forms
- Can import text file for table entries
- Can export table entries as text, SQL, or Excel files
- Can manage multiple databases under the same interface

phpMyAdmin interface

phpMyAdmin

Database

grainmilling (6)

grainmilling (6)

- categories
- content
- login
- profiles
- subcategories
- subjects

Server: localhost ▸ Database: grainmilling ▸ Table: content *"InnoDB free: 9216 kB"*

Browse | Structure | SQL | Search | Insert | Export | Import | Operations

Showing rows 0 - 29 (356 total, Query took 0.0009 sec)

SQL query:

```
SELECT *
FROM `content`
LIMIT 0 , 30
```

[

Show: 30 row(s) starting from record # 30 > >> Page

in horizontal mode and repeat headers after 100 cells

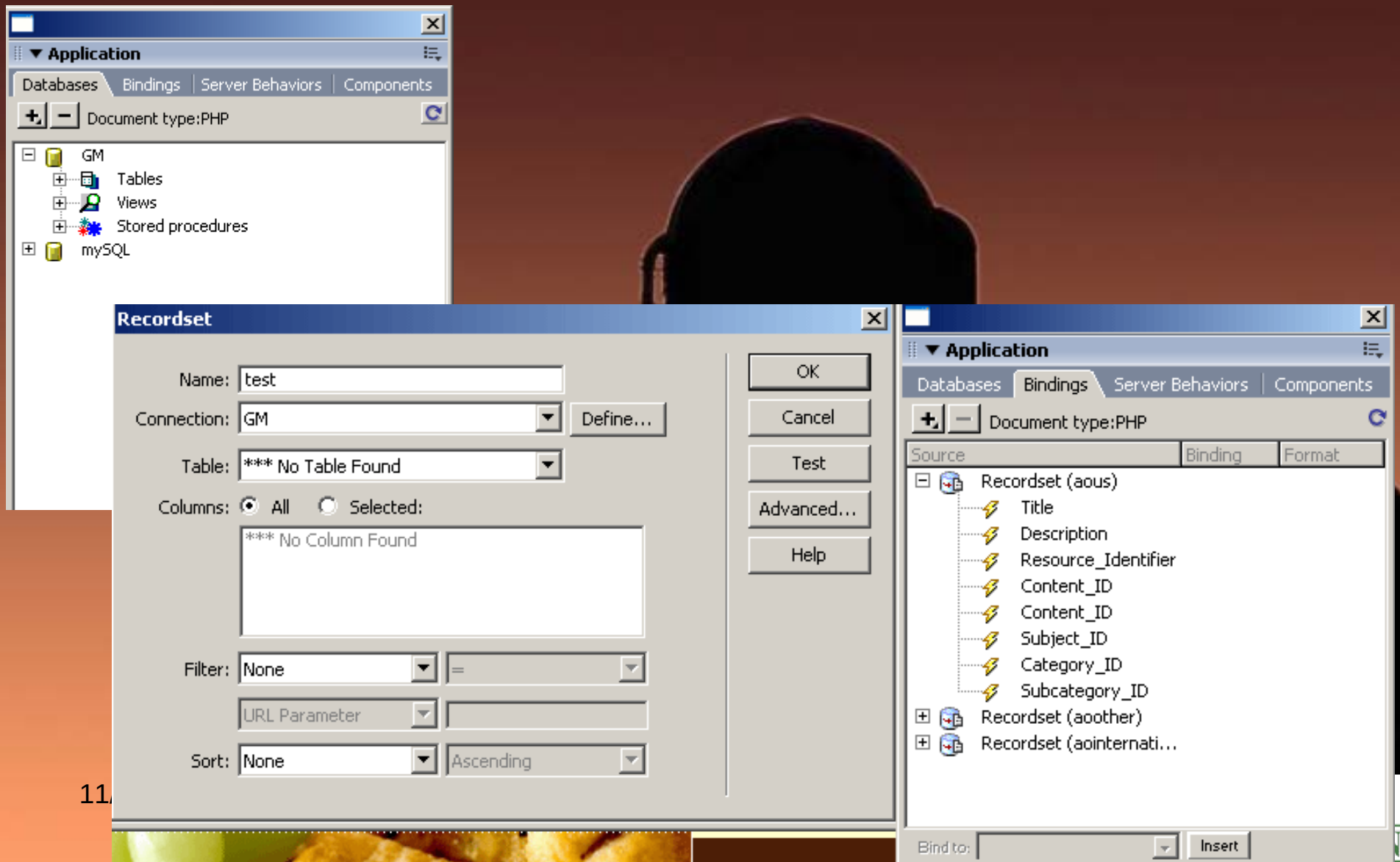
Sort by key: None Go

←T→	content_id	title	creator	description	publi
	1	Rain damage reduced grain quality	*NULL*	Grain that is re-wet by rainfall after it is dried...	North Dak University Extension
	2	American Institute of Baking	American Institute of Baking	A not-for-profit corporation, founded by the North...	American of Baking

Creating PHP pages using Dreamweaver

- Can create PHP & ASP pages
- Steps to create dynamic pages
  - Create a database connection
  - Define a recordset
  - Display records by drag and drop
  - Add customized queries (not required)
- Can create record insert forms and updating forms

Dreamweaver DB interface



Site Search

- Free Google search plug-in
- Google Search Appliance
  - Locally hosted
  - No waiting
  - User friendly interface
  - Probably the best search application

Issue – What domain name would be used?

Solution:

- Important to have an easy-to-remember URL
- The Dean of Libraries gave approval to register “grainmilling.org”

Issue – Inability of campus central computing to support site as designed

Solution:

- Approval was given to go with commercial hosting of the site on a reliable, secure service.
- MySQL & PHP are more economical

Issue – Meeting AgNIC Standards vis-à-vis User Needs

- Demographics of users necessitated some commercial content; AgNIC standards specify scholarly and research content.
- Clarifications from AgNIC Coordinator led to placing a disclaimer about the commercial content.

Conclusion

- Protocols are established for similar websites
- You are not restricted to only what your university supports
- Having a team to do the development and design work is a lot better than relying on one individual

Questions ?

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