Computer Club & Library Projects

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Why? How?

PC Tracker
- Public PCs availability
- Student Computer Club project
- Collaboration with Computer Science Dept.

Faculty authors Virtual Bookshelf
- Faculty Authors Celebration event
- Virtual bookshelf
- Data harvest from Aleph catalog
Tongji University Library, Shanghai, China.

2012
Tongji University Library, Shanghai, China.
Sojourner Truth Library, SUNY New Paltz
http://library.newpaltz.edu/pcttracker/
PC Tracker

Goals

- View available Public PCs
- Collect Statistics on Usage
- Maintain User Privacy
- Be Open-Source
PC Tracker

Requirements

- Web Application
- Cross-Platform
- Manage Computer Information
- Live Feed
PC Tracker

Design

- End-user Interface
  - Map of the Computer Lab
  - Availability Indicators per PC
- Admin Console
  - Computer / Location Management
  - User Account System
PC Tracker

How the client works

- Program or Script runs on User Login
- Pings the server every minute (heartbeat)
- Server stores timestamp in memory
PC Tracker

Implementation

- Front-End
  - HTML, CSS, and Javascript
- Back-end
  - PHP, MySQL, and Memcache
- Client PCs
  - C-based Program or Script
PC Tracker

In Progress

- Optimizing/Simplifying code
- Improving User Interface
- Implementing AJAX functionality
- Making the App more modular
  - Help with expansions
- Implementing Statistics
PC Tracker

Future Expansions

- Implementing frameworks
- Create a custom Web Platform
  - Add additional features (i.e. Room Booking System)
- Integration with Digital Signage
PC Tracker

Library-Community Outreach

- Gives opportunities to Students
  - Resume Builder
  - Practice for realistic programming
- Provides services to the Library
Library PC Availability

CURRENT PC USAGE
38 PCs Available out of 38

For information only. You may not reserve PCs.

Library PCs

STL Main 01 Available
STL Main 05 Available
STL Main 09 Available
STL Main 13 Available
STL Main 17 Available
STL Main 21 Available
STL Main 25 Available
STL Main 29 Available
STL Main 33 Available
STL Media M3 Available

STL Main 02 Available
STL Main 06 Available
STL Main 10 Available
STL Main 14 Available
STL Main 18 Available
STL Main 22 Available
STL Main 26 Available
STL Main 30 Available
STL Main 34 Available
STL Main G0nd Floor Available

STL Main 03 Available
STL Main 07 Available
STL Main 11 Available
STL Main 15 Available
STL Main 19 Available
STL Main 23 Available
STL Main 27 Available
STL Main 31 Available
STL Media M1 Available

STL Main 04 Available
STL Main 08 Available
STL Main 12 Available
STL Main 16 Available
STL Main 20 Available
STL Main 24 Available
STL Main 28 Available
STL Main 32 Available
STL Media M2 Available
PC Tracker

More Info:
- Email: divittom@newpaltz.edu
- GitHub: github.com/mikedivitto
- Website: library.newpaltz.edu/pctracker
A data driven recent authors page in PHP and Javascript

http://library.newpaltz.edu/facpublished.php
Useful lessons we learned along the way

Data gathering from Aleph and other sources

For example put Aleph record data directly into your web page forms and apps

Example code https://mybookdatapage.wordpress.com/
The construction of the faculty authors page

The public facing pages

❖ Listing of newly published major works by our faculty Sorted by author

❖ With book cover images, faculty photos, & book descriptions with useful links

❖ Menus with filters by author & year

❖ Form for authors to tell us about their works

❖ Style that fits into our current design but with a new interesting look

The backend setup side

❖ Two large data tables:
  ➢ Newly entered data table
  ➢ Final data that is loaded by the public page

❖ PHP form for adding individual book records

❖ PHP form to load and edit all records

❖ PHP form that lets us edit the raw data tables as text for deleting and corrections
The public facing pages

**The main page**

- Is a PHP scripted page that loops through our data table of records and plugs each field into the appropriate HTML.

- If the record is missing a piece of data it inserts alternative information:
  - If the record has no Google books ID a WorldCat link is created.
  - If no author image then a generic image is used.

- It counts titles by each author and inserts authors and count in the “Browse by author” menu.

- It counts titles published each year and creates a menu to filter by year.
The public facing pages

The faculty contact form

- A PHP form that calls two PHP data gathering scripts so the form will fill itself in automatically

- The first data gathering script searches the campus faculty directory
  - It gathers contact information
  - It grabs the link to a portrait photo

- The second data gathering PHP script gets the Aleph record if you give it an ISBN or OCLC number

These are the useful data gathering scripts we’ve shared with you online.

https://mybookdatapage.wordpress.com/
The behind the scenes setup pages

**The main record edit form**

The main form is very much like the main page in that it loops through each record and arranges the fields of data.

Not quite as pretty or space efficient though.

It places every field of data into giant html form that contains:

- Scripts to upload faculty photos
- Scripts to check for better Google covers
- Scripts to check again for updated Aleph records
It turned out that in getting the data together problems would arise causing weird behaviour.

Instead of sending our data to counseling we decided to make a form where we could directly edit the data tables as text.

The data is in a folder that does not give the same permissions to edit them so we let PHP do the job with a very simple form that loads the table in a text box.
Demo URLs - faculty authors page and data gathering scripts

http://library.newpaltz.edu/facpublished.php

http://library.newpaltz.edu/facpublishform.php

https://library.newpaltz.edu/42015/facbooksetupdemo.php

https://library.newpaltz.edu/facinfo.php?first=k&last=lee

http://library.newpaltz.edu/42015/?oclc=891718686

https://library.newpaltz.edu/42015/facpub.php

https://library.newpaltz.edu/42015/jsonloop.html

https://mybookdatapage.wordpress.com/
Thank you!

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