



CENTER FOR TEXTUAL STUDIES AND DIGITAL HUMANITIES

402 - Introduction to Digital Humanities Design and Programming

Spring Semester 2016

Week 13

Final Presentation - Wednesday 27th April 2016

- create DH project resource
 - text, images, audio, video, maps...
- individual or group
 - if group, each member must clearly identify work and role to gain credit
- ~ 15 minutes in length plus questions
 - peer-reviewed (your answers and assessment will only be shared with myself)
- offer a practical demonstration of their online resource
- answer questions on its development and publication
 - taxonomy, metadata, content structure, design choices, code additions...
- teach the class about a chosen resource and subject material
 - tests weekly reading, understanding of taxonomy, metadata, content structure...
 - content can be age specific or open - any subject, genre...
 - eg: history, literature, culture, music, video etc
 - you may use 3rd party APIs to populate content (good idea for a plugin,,)

402framework v0.6

- Compare and contrast v0.5 with v0.6
 - what has changed in the code and where?
 - what has changed in the view for the user?
 - update flow diagram

402framework resources

- Update SQL to v0.6 - [GitHub SQL v0.6](#)
 - use with 402framework v0.6
- [GitHub v0.5](#) | [GitHub v0.6](#)
- [v0.5 test site - image](#) | [v0.6 test site - image](#) | [v0.6 test site - gallery](#)

402mini v0.3

A fun, mini framework for testing basic PHP routing...

- Compare and contrast v0.2 with v0.3
 - what has changed in the code and where?
 - what has changed in the view for the user?
 - update flow diagram

402mini resources

- [GitHub v0.2](#) | [GitHub v0.3](#)
- [v0.2 test site](#) | [v0.3 test site](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Recent updates to v0.6 include:

- Updated Router class now with handing for 'group'
- Updated Loader class now with handling for 'group'
- New gallery class to help build image galleries
 - Add functionality with plugins
 - Pager plugin for groups
- New BookViewer class for handling text groups...

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Current framework v0.6 examples

- [image page](#)
- [text page](#)
- [gallery](#)
- [book](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

updated Router class - handling 'group'

- Router class can now handle additional user selected option in URI
 - eg: content/image/**gallery**&id=3
 - group option is the third part of the URI eg: gallery
- params['id'] now refers to taxa id due to group in URI
 - eg: taxa_id = 3 in the DB table content_lookup
- value of 'group' is retrieved using a getter method in auto_load_controller() method in Loader class
- additional 'group' parameter now passed to load_controller() method in Loader class

[GitHub Code](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

updated Loader class - handling 'group'

- use updated `auto_load_controller()` method to set `$group` property
- `load_controller()` method updated with `$group` parameter
 - new group view is set based on group specified in URI eg: gallery
 - group class is loaded eg: gallery.php
 - group and taxonomy attributes are passed to new `get_group_content()` method in group class eg: in gallery.php
 - formatted group content is returned and passed as parameter to standard `draw_theme()` method
- plugins can also be passed to `draw_theme()` method for groups...

[GitHub Code](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

new gallery class - building our image gallery as an example of building a 'group'

- designed to handle passed 'content' from selected taxa id in URI router
 - eg: [content/image/gallery&id=3](#)
- group and taxonomy attributes passed as parameters for building gallery HTML
- new methods to `format_gallery_view()` and `format_gallery_layout()`
 - format overall structure of a gallery group page
 - format each image within our gallery page
 - create a container for each thumbnail using our `grid_3` class
 - add image, title with link, and associated attributes
 - return all gallery images and links as `$gallery_content`
- `$gallery_content` is then output as standard content in View class

[GitHub Code](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

new gallery 'group' - additional functionality and design using plugins

- plugins for gallery group
 - checks DB plugins_lookup for content_group column
 - loads required plugin for group, eg: gallery
- checks for required folder in plugins directory and loads JavaScript
- first gallery plugin is for a modal window to preview gallery images

[GitHub Code](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

adding a pager for group results - simple pager plugin in js

- load pager plugin for selected groups via plugins_lookup
 - currently gallery
- load plugin js to add pager functionality to group results
 - calculate and output total number of results returned for gallery etc
 - append new pager html to content div
 - calculate number of pages required based on page size (default 12) and total number of results per query
 - divide total results by page size and round up
 - append page link options to pager and add event handler for clicks on page links
- modifying to create single page/image pager?
 - an option for an additional/modified plugin...

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

book viewer - BookViewer class

- another group view class similar to the GalleryViewer class
- outputs a formatted table view for pages per book selected by the user
 - uses the URI with [content/text/book&id=3](#)
 - uses parameter in URI to query DB for taxonomy matched content
- two main methods to full format_book_view and format_book_layout for page details
 - format_book_layout() method outputs a single row per page
 - “ “ outputs cells for page title, page description, page text snippet, and a link to the full page text
- there is also a help method for table headers
 - NB: could be moved to a generic table builder class...

[GitHub Code](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Current framework v0.6 examples

- [image page](#)
- [text page](#)
- [gallery](#)
- [book](#)

Object Oriented Programming

402framework - v0.7

- update framework to v0.7 - available on GitHub
 - [GitHub v0.7](#)
- update database SQL to v0.7 - available on GitHub
 - [GitHub SQL v0.7](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Recent updates to v0.7 include:

- Update DB for adding site menus
 - new DB tables for menu and menu_lookup
- Adding a main menu to the framework site
 - new MenuController class
 - updated View class
- Handling requests for generic controller and params URI
 - Load all content for requested params id in URI
 - updated Loader class and load_controller() method
 - updated taxonomy query, output...
 - updated content controller, viewer...
 - plugins available for generic controller and params URI

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

adding a menu - database tables

- two new database tables for menu and menu_lookup
- menu allows us to specify different menus for the framework
 - for example a persistent site-wide menu in the header
 - content menus in the sidebar...
- menu_lookup table allows us to associate a menu with a node and define the menu's tree
 - uses a node set in the new table 'node'
 - eg: parent links and child links
 - no grandchild links at the moment
- node table allows us to specify menu and content nodes to link to static pages
 - links can be to any page with format
 - could be static page with html, image or text etc from DB table content

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

adding a main menu

- new main menu rendered to header section of framework template
- load_menu() method added to Loader class
 - new constant is set for known menu ids in DB
 - accepts menu_id as parameter allowing us to build any required site menu
 - loads MenuController class
 - instantiates object for class
 - gets menu using menu_id parameter
 - sets menu output to static property in Loader class
- load_menu() called in draw_theme() method
- property set in load_menu() is now passed to draw_header() method

[GitHub Code](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

adding a main menu - new MenuController class

- getter method returns structured menu links for menu_id parameter
- menu_links_query() queries the DB for all parent links for the required menu_id
 - then menu_child_query() queries the DB for all child links for specified parent_id
- child links are pushed into an array with parent links
 - parent links and child links, then next parent and child links etc...
- each combined parent and child array is then pushed into the main menu_links array
- we can now use menu_links array to output our menu

[GitHub Code](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

adding a main menu - updated View class

- draw_menu() method added to View class allows us to abstract menu output
 - uses the menu_links array from MenuController class
 - checks for parent links and then each child link
 - structures the links as and in HTML
- main menu is drawn from the draw_header() method
 - site wide persistent menu for links such as home, about, contact, help etc...
- css is currently in the frame.css file
- links are based on node link in node table in DB
 - allows creation of holder pages for site content etc based on Router URI standard
 - eg: page for image galleries could list info on all site galleries etc...
 - create link to a specific content item in content table in DB
 - links can be to single items, such as image or text, or holder pages etc...

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

handling requests for generic controller and params URI

- updated Loader class and load_controller() method to handle controller and params URI
 - eg: content&id=22
taxonomy&id=3
- new conditional check for controller and params
- loads class for frame/controller (eg: taxonomy, content...)
- then loads applicable frame/view
 - eg: frame/view/taxonomy.php
frame/view/content.php

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

handling requests for generic controller and params URI - taxonomy.php

- this loads a tabular view of all content for the specific params id in URI
- eg: [taxonomy&id=3](#) will load all content (images, texts etc) for taxa_id=3 from content table using content_lookup
- new taxonomy_content_query() method in TaxonomyController class
 - TaxonomyController class in frame/controller/taxonomy.php
- TaxonomyViewer class is used to render the tabular output for the DB result
 - TaxonomyController class in frame/view/taxonomy.php

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

handling requests for generic controller and params URI - content.php

- follows same pattern as taxonomy.php for loading content&id=?
- ContentController class has now been updated with get_controller_content() method
 - accepts controller and params
- returns requested content for content and params['id']
- ContentViewer class formats content for output
 - currently outputs split content view to match image and text content options in DB
 - parallel display of image and text
 - can be updated to only handle contentformat (eg: contentimage) where content is available for requested id
 - simply checks DB returned result for values

eg: [content&id=15](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

handling requests for generic controller and params URI - plugins

- plugins are also available for controller and params view
- checks plugin_type in plugins_lookup table for available plugins
- adds available plugins to the rendered view

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

More framework examples

- [taxonomy page](#)
- [content page](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Adding our first sets of data to the framework DB

- content, content_group, content_type and content_lookup
- content_meta
- menu and menu_lookup
- node
- plugins and plugins_lookup
- taxonomy and taxonomy_lookup
- users