LOYOLA UNIVERSITY CHICAGO

CENTER FOR TEXTUAL STUDIES AND
DIGITAL HUMANITIES

DIGH 402 - Introduction to Digital Humanities Design and Programming

Spring Semester 2015

Week 7

PHP and MySQL

Week 6

1. Forking a repo
2. GitHub - 402framework
3. testing with DB

DIGH 402 - Introduction to Digital Humanities Design and Programming

I	E	R	O	T	C	U	R	T	S	N	O	C
N	M	T	I	N	S	T	A	N	C	E	D	Q
H	E	L	A	J	T	M	K	G	Q	A	Q	P
E	T	R	D	L	R	N	E	L	B	M	A	K
R	H	E	E	J	U	T	A	S	N	R	R	S
I	O	P	Q	Q	T	S	T	T	A	G	E	Z
T	D	O	D	E	U	R	P	M	S	T	Q	T
A	S	C	R	D	A	I	E	A	T	N	C	Y
N	J	S	M	C	P	T	R	E	C	E	O	Y
C	L	Y	T	N	E	Z	R	E	J	N	Z	C
E	J	I	L	R	L	Z	P	B	R	L	E	J
T	O	T	S	G	R	J	O	N	R	P	K	Y
N	N	R	X	R	L	M	K	P	G	M	R	Z

OOP way of including a file within a class etc

Parent to child

A method used for getting

A method used for setting

Variable value persistent across classes and not a scope

Process of placing data (data structure etc) with methods inside the same module, normally a class

Instance of a class

Functions within a class

Concept of setting members of a class as private etc

If included in a class it will always be called

A way of passing data to a method

Object created by a class

Represent essential features without including background details or explanations

Object Oriented Programming

Word Search - answers

Require / OOP way of including a file within a class etc
Inheritance / Parent to child
Getter / A method used for getting
Setter / A method used for setting
Constant / Variable value persistent across classes and not a scope
Encapsulate / Process of placing data (data structure etc) with methods inside the same module, normally a class
Object / Instance of a class
Methods / Functions within a class
Scope / Concept of setting members of a class as private etc
Constructor / If included in a class it will always be called
Parameters / A way of passing data to a method
Instance / Object created by a class
Abstraction / Represent essential features without including background details or explanations

JQuery & JQuery UI

Framework plugins and Javascript

- how do we use JQuery and Javascript in the framework design
- plugin design and implementation
- Spring break work on JQuery and Javascript...

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - next on our to-do list

- send content to view before returning for output
    - allows us to introduce view plugins, viewers etc

- add some templating and design for our framework

- allow for greater flexibility and abstraction of content, format, and parameters

- add some more error checking and reporting…

- add default content handler for non controller/format/params URI requests including index.php

and so on...

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - basic theme templates and views for the framework

- added ‘themes’ directory to ‘design’ directory
    - updated directory.php constants for themes

- default template for framework includes both default theme, css, and javascript

- user themes will build on default template and replace default theme where necessary
    - css, javascript etc can be customised as required

- header metadata will be customised per use (eg: project installation)
    - meta settings in settings.php file
    - called in view.php draw_head() method

GitHub Code

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - updated /system/library/loader.php file

- we now need to initialise the theme using the init_theme() method
    - we require the view.php file to set the theme, theme dir, and allow us to check the current user select theme

- init_theme() method and setters in view.php are used to check and set the user theme

- draw_theme() method allows us to call various view.php methods to actually build and render our template and theme

- load_controller() method now checks selected theme, and then uses the draw_theme() method to draw the framework template with the user's selected content

GitHub Code

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - /frame/view/html_builder.php file

- parent class to view.php View class
    - allows abstracted HTML building for the framework viewer and template

- currently allows to build any specified HTML start and end element
    - two methods start_element() and end_element()

- start_element() methods accepts two parameters for required HTML element with associated attributes and attribute values

- end_element() method simply accepts one parameter for the required HTML element

- values are returned for output as required within template rendering, currently within View and Loader classes

GitHub Code

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - /system/library/view.php file

- View class is currently the main rendering class for the 402 framework

- View class extends BuildHTML class thereby allowing it to use the HTML building methods

- setters for selected user theme

- various draw methods for defined structural components of the framework's HTML template

    - currently output start and end elements for each structural component (eg: head, body, header, footer…)
    - draw_main() and draw_middle() methods also accepts parameters for outputting content

GitHub Code

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

v0.3

Object Oriented Programming

402framework - Database update for Week 7

- SQL - Week 7
- Update local database for new weekly import
  - drop existing 402framework
  - import 402framework.sql from week7 on GitHub
  - set collation for DB to utf-8_unicode
  - check privileges for 402 users and DB
  - test with existing framework

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

constants.php file

- updated for default html framework and CSS and JS

- added constants for default HTML elements used within template
    - used with loader, view, and htmlbuilder
    - allows abstraction of element names for HTML markup of framework template

- added constants for default CSS and JS files for framework template
    - frame and grid CSS
    - frame and JQuery js

GitHub Code

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

/system/library/functions.php file

- class Functions stores methods (functions) for general framework wide usage

- required from loader.php file

- first function allows us to use an extended function of implode() to output attributes
    - array_implode() implodes an array of element attributes to output a string of attributes for use with a specified element

- other general functions will be added

GitHub Code

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - default css and js file

- default css stylesheets and javascript functions for the framework
    - design/css/frame.css
    - design/css/grid.css
    - design/js/frame.js

- javascript will be built upon JQuery library
    - design/js/jquery.js

- selected personal theme will supplement and customise the default stylesheets and javascript functions
    - chosen theme added as parameter to init_theme() method in bootstrap.php

- colours, javascript functions etc can be added in chosen theme directory
    - eg: design/themes/minimal etc

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

/design/css/frame.css

- basic css for structural elements of the framework
    - body
    - header
    - centre and node_content
    - sidebar
    - footer

- basic css styling for framework layout including
    - body
    - headers (h1 to h6)
    - links

and so on...

GitHub Code

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

/design/css/grid.css

- allows framework template to be organised using a grid

- grid can be up to 12 divisions horizontally
    eg: - a parent container specified as grid 12
        - two child divisions specified as grid 3 and grid 9
        - each grid is calculated as an approximate percentage upto 100%
        - small allowance for borders etc on each grids
        - required size of grid set as a value within the class attribute of the element

GitHub Code

Object Oriented Programming

Initial Outline - framework so far...

- HTML template output Home Page

- HTML template output sample content