



CENTER FOR TEXTUAL STUDIES AND DIGITAL HUMANITIES

DIGH 402 - Introduction to Digital Humanities Design and Programming

Spring Semester 2014

Week 10

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

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - ContentController class

- set private static property for default content
- getter method to return selected basic content
- very basic test of content query from DB using 'id' parameter
- set value for default content property which can be used in Loader class to output content

[GitHub Code](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - basic constants.php file

- required (included) as part of the loader.php file
- we now have a couple of general constants for use within our framework
 - FRAME_EXTENSION to allow us to specify '.php' for file endings
 - CONTROLLER_CLASS_NAME to allow us to specify that all controller class must follow the same naming pattern ie: ContentController etc

[GitHub Code](#)

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - loading the content so far (Part 1)

- user opens framework and requests a URI, which loads the following
 - index.php
 - config/directory.php
 - frame/bootstrap.php
- bootstrap.php requires loader.php file, and instantiates a loader object, which is used to call
 - init_settings() method
 - init_db() method
 - auto_load_controller() method
- auto_load_controller() method requires router.php, instantiates a router object, and calls the getter methods to output required variables for load_controller() method

cont'd...

Object Oriented Programming

Object Oriented Programming - Abstract overview of current framework structure

Initial Outline - loading the content so far (Part 2)

- load_controller() method uses the supplied parameters for controller, controller_dir, format, params to
 - determine the required controller (eg:content)
 - load the required controller class (eg:ContentController)
 - check and instantiate an object for required controller class
 - check content format and parameters for controller
 - use getter method in controller class to request and output basic returned content
 - raw content is returned based upon ID, but format will be used later to call viewer

[Example basic content output](#)

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 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 - 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 - 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](#)