

# Joomla! Extensions

## Writing Modules

# Modules

## News & Events

### Latest Events

APR HUBbub 2010

13

Workshop for the HUBzero User Community  
What's the hubbub? A platform fo ...

More events ▾

### Latest News

FEB Doing science on the hub

17

International Science Grid This Week -  
Feature The HUBzero platform will ...

NOV

16

Purdue Highlights Cloud Computing Tools at  
SC09

Facebook for scientists -- but built to facilitate  
serious research rather ...

SEP

12

Purdue receives \$105M to lead earthquake  
engineering network

Advancing research and education to reduce  
the devastation and loss of ...

More news ▾

## Module Positioning - Slot

The screenshot shows the nanoHUB.org homepage with several search results overlaid with labels:

- frontResources**: A large search result for "frontResources".
- spotlight**: A search result for "spotlight".
- frontFarRight**: A search result for "frontFarRight".
- frontLeft**: A search result for "frontLeft".
- frontRight**: A search result for "frontRight".
- playlist**: A search result for "playlist".

Other visible labels include:

- Banner**: A banner advertisement.
- RESOURCES**: A category label.
- FEATURED**: A category label.
- NOTABLE QUOTE**: A category label.
- NEW IN RESOURCES**: A category label.
- Search**: The search bar at the top right.
- ONLINE SIMULATION AND MORE FOR NANOTECHNOLOGY**: The tagline at the top.
- Help!**: The help link at the top right.
- Advertise jobs**, **Connect with employers**, **New Jobs service**: Job-related links.
- SIMULATE**, **COLLABORATE**, **SHARE & PUBLISH**: Main navigation links.
- A resource for nanoscience and technology**, **Over 100,000 users annually**: Site statistics.
- Devices**, **Quantum transport**, **Tutorial**, **Nano electro-mechanical systems**, **Molecular electronics**, **Transistors**, **NEGF**: Resource categories.
- Paul R Selvin**, University of Illinois, Urbana-Champaign: A featured quote by Paul R Selvin.
- Contributions: 26**, **Average resource ranking: 6.73**: User statistics.
- APR Nano Aqua Conference**, **11 Industries Conference**, **MAY Illinois 2010 Nano-Biophotonics Summer School**: Conference and school events.
- Resources**, **Personal Home Page**, **nanoHUB**, **Resonant Tunneling Diode Simulation with NEGF**: Resource links.
- More events**, **More videos**: Additional content links.
- Get Help**, **Forgot username?**, **Last password?**, **Contact us**: Support links.
- Get Involved**, **Environmental points**, **Personalize my HUB**, **Submit a tool**, **Create a group**: Community links.
- Legal**, **Privacy Policy**: Legal links.
- nanoHUB.org is supported by the National Science Foundation and other funding agencies**: Funding information.
- NSF**: National Science Foundation logo.
- Terms of use**, **Copyright © 2009 NCN**, **Powered by HUBzero**: Footer links.

```
<jdoc:include  
type="modules"  
name="banner" />
```

```
{xhub:module  
position="spotlight"}
```

# Module Administration

Site Menus Content Components Extensions Tools Help

Preview 0 1 Logout

## Module Manager

Module Manager

Plugin Manager

Template Manager

Language Manager

Enable Disable Copy Delete Edit New Help

Site Administrator

Filter:  Go Reset - Select Template - - Select Position - - Select Type - - Select State -

#	Module Name	Enabled	Order	Access Level	Position	Pages	Type	ID
1	About	✓	3	Public	left	Varies	mod_mainmenu	17

```
mysql> select title, published, ordering, access, position, (select group_concat(menuid) from jos_modules_menu where moduleid = id) as pages, module, id from jos_modules where module not in ('mod_menu', 'mod_submenu', 'mod_dashboard') order by title limit 10;
+-----+-----+-----+-----+-----+-----+-----+-----+
| title | published | ordering | access | position | pages | module | id |
+-----+-----+-----+-----+-----+-----+-----+-----+
| About | 1 | 3 | 0 | left | 9,17,20,21,22,57,58,59,60 | mod_mainmenu | 17 |
| Announcements | 1 | 3 | 0 | frontLeft | 4 | mod_events_latest | 99 |
| default | 0 | 2 | 0 | left | 0 | mod_mainmenu | 51 |
| Events Announcements | 0 | 1 | 0 | frontRight | 4 | mod_news | 56 |
| Events Calendar | 0 | 1 | 0 | frontLeft | 4 | mod_events_cal | 53 |
| Extended Statistics | 1 | 4 | 0 | userInfo | NULL | mod_xstats | 77 |
| Extended Who is Online | 1 | 3 | 0 | userInfo | NULL | mod_xwhosonline | 62 |
| Featured Profile | 1 | 3 | 0 | feature | 0 | mod_featuredmember | 88 |
| Featured Question | 1 | 4 | 0 | feature | 4 | mod_featuredquestion | 93 |
| Featured Resource | 1 | 2 | 0 | feature | 0 | mod_featuredresource | 89 |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

10  Featured Resource ✓ ⌂ 2 Public feature All mod\_featuredresource 89

# Module Positioning - Pages

**Details**

Module Type:	<i>mod_mainmenu</i>
Title:	About
Show Title:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Enabled:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Position:	left
Order:	3::About
Access Level:	Public Registered Special
ID:	17
Description:	Displays a Menu.

**Menu Assignment**

Menus:	<input type="radio"/> All <input type="radio"/> None <input checked="" type="radio"/> Select Menu Item(s) from the List
Menu Selection:	<b>about</b> About Us - Participants - Partners - Middleware - Our Cyberinfrastructure - Contact Us - Link to us - Travel Information - - Notable Quotes - Usage Metrics - In The News - - Nanotechnology Links

```
mysql> select position, jos_menu.name from jos_modules
left join jos_modules_menu on moduleid = jos_modules.id
inner join jos_menu on jos_menu.id = menuid where module = 'mod_mainmenu';
+-----+-----+
| position | name
+-----+-----+
| left     | About
| left     | Copyright Infringement Notification
| left     | Feedback
| left     | In The News
| left     | About Us
| left     | Notable Quotes
| left     | Partners
| left     | Abuse Policy
| left     | Privacy Policy
| left     | Terms of Use
| left     | Legal
| left     | Licensing Content
| left     | Copyright Infringement
+-----+
13 rows in set (0.00 sec)
```

## mod\_currenttime

Get your questions answered and help others find the clues on the HUBzero Answers forum. For your participation you can even earn points and spend them in the HUBzero store.

Learn more ▶

Usage for prior 12 months

- Users
- Resources
- Tools
- Simulations

Who's online?

 **TOP**

 ABA

 course

 educ

 mate

 mole

 nano

 nanotutorial

 nano

 nec

**CURRENT TIME**

Friday, April 4 2010

 **FEATURED TOOL**

 ABACUS - Assembly of Basic Applications for Coordinated Understanding of Semiconductors: One-stop-shop for teaching semiconductor device education

 **FEATURED ONLINE PRESENTATION**

 Funding Opportunities for Bilateral Activities between USA and India:

## mod\_currenttime: Administration

 **Module: [ Edit ]** Save  Apply  Close 

**Details**

Module Type:	mod_currenttime
Title:	Current Time
Show Title:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Enabled:	<input type="radio"/> No <input checked="" type="radio"/> Yes
Position:	feature <input type="button" value="▼"/>

**Parameters**

<b>Module Parameters</b>	
Date format	I, F n Y

```
<?xml version="1.0" encoding="utf-8"?>
<install type="module" version="1.5.0">
    <name>Current Time</name>
    <author>HUBzero</author>
    <creationDate>April 2010</creationDate>
    <version>1.5.0</version>
    <description>Show the current time in a given format</description>
    <files>
        <filename module="mod_currenttime">mod_currenttime.php</filename>
    </files>
    <params>
        <param name="format" type="text" default="l, F n Y" label="Date format"
               description="As supplied to PHP's date() function, see http://php.net/manual/en/function.date.php" />
    </params>
</install>
```

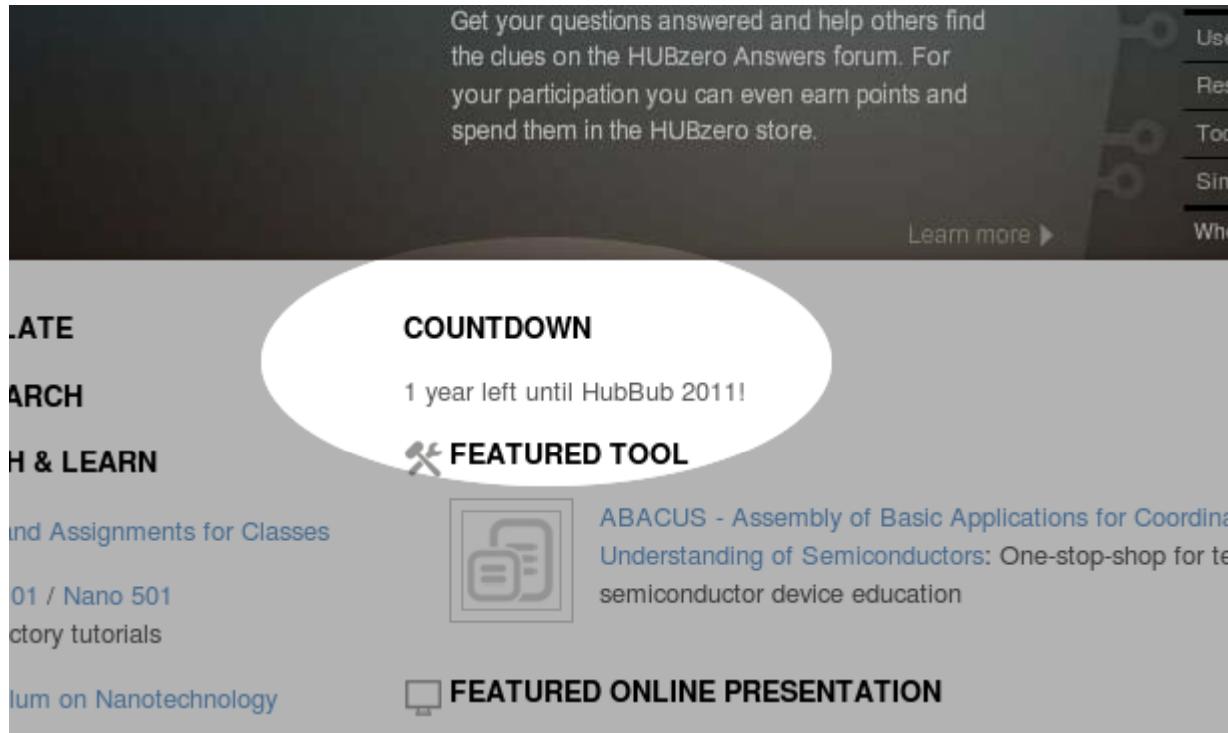
- Home  
- Privacy Policy  
- Terms of Use  
- Licensing Content  
- Copyright Infringement

**mainmenu** Home

## mod\_currenttime: PHP

```
<?php
$params = new JParameter(JModuleHelper::getModule('currenttime')->params);
echo '<p>'.date($params->get('format')).'</p>'[]
```

## Exercise! mod\_countdown



The screenshot shows a section of the HUBzero website. On the left, there's a sidebar with links like "HOME", "ABOUT", "ARTICLES", "FORUM", "ANSWERS", "STORE", and "CONTACT". The main content area features a "COUNTDOWN" module with a large button that says "1 year left until HubHub 2011!". Below it is a "FEATURED TOOL" module for "ABACUS - Assembly of Basic Applications for Coordinating Understanding of Semiconductors", which is described as a one-stop-shop for semiconductor device education. There's also a "FEATURED ONLINE PRESENTATION" module.

Get your questions answered and help others find the clues on the HUBzero Answers forum. For your participation you can even earn points and spend them in the HUBzero store.

Learn more ▶

COUNTDOWN

1 year left until HubHub 2011!

FEATURED TOOL

ABACUS - Assembly of Basic Applications for Coordinating Understanding of Semiconductors: One-stop-shop for semiconductor device education

FEATURED ONLINE PRESENTATION

## Exercise! mod\_countdown

- Download [http://hubzero.org/mod\\_currenttime.tar](http://hubzero.org/mod_currenttime.tar)
  - » Extract to a temporary directory
    - ✓ wget http://hubzero.org/mod\_currenttime.tar && tar xvf com\_currenttime.tar /www/myhub/tmp/
  - » Rename files
  - » Edit XML
    - ✓ Module name
    - ✓ File names
    - ✓ Add calendar parameter
    - ✓ Change text parameter to request date description

## Exercise! mod\_countdown

- Install from temporary directory
- Visit administration to verify install
  - » Enter a date with the calendar widget & enter a bit of text describing the significance of that date
- Edit the module PHP
  - » `text_date_diff()` included

## MVC Modules

- Models
  - » extend JModel
  - » share with component and administration interface(s) if possible
- Controllers
  - » extend JController
- Views
  - » create template files:
    - ✓ modules/mod\_foo tmpl/bar.php
  - » use helper to load the appropriate template:
    - ✓ require JModuleHelper::getLayoutPath('mod\_foo', 'bar');