

DRUPAL MODULE DEVELOPMENT

Bas Vredeling



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PROGRAMMA

- Resources
- Development tools
- Module development essentials
- Demo module
- Updates



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DEVELOPER RESOURCES

- Module developer's guide <http://drupal.org/contributors-guide>
- Drupal beyond the basics: <http://drupal.org/handbook/customization>
- Drupal coding standards: <http://drupal.org/coding-standards>
- Writing secure code: <http://drupal.org/writing-secure-code>
- Best practices: <http://drupal.org/node/287350>
- Working with Drupal API <http://drupal.org/node/326>
- Use of underscore in Drupal functions <http://drupal.org/node/70335>
- Guidelines for writing efficient SQL code <http://drupal.org/node/559302>
- Creating new content type <http://drupal.org/node/231019>
- Using Theme layer <http://drupal.org/node/165706>



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DEVELOPMENT TOOLS



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ONTWIKKELOMGEVING

- (w)(m)(l)AMP stack
- IDE
- VCS (subversion, git)
- xdebug



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DRUPAL TOOLS

- Drupal for firebug <http://drupal.org/project/drupalforfirebug>
- Devel module: <http://drupal.org/project/devel>
- Cache disable http://drupal.org/project/cache_disable
- Use to check you coding on: <http://drupal.org/project/coder>
- Use to extensively check your code on: http://drupal.org/project/coder_tough_love
- Trace <http://ar.to/2006/12/easier-drupal-debugging-with-trace>
- Simpletest <http://drupal.org/project/simpletest>



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MODULE DEVELOPMENT ESSENTIALS



DRUPAL API

- <http://api.drupal.org>
- Zoek op voorbeeld functies:
 - l()
 - url()
 - arg()
 - t()
 - format_date()
 - check_plain()
 - drupal_get_path()
 - drupal_goto()
 - drupal_set_message()



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HOOKS

- Hooks <http://api.drupal.org/api/group/hooks/6>
- Cheatsheet http://drupal.org/files/drupal_6_core_hooks_cheat_sheet.pdf
- Flowchart http://drupal.org/files/issues/fapi_workflow.png
- Naamgeving en hooks



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NAAAMGEVING

- Zorg voor unieke id in benaming van module, de naam werkt door in:
 - Module map en definiëring
 - Functies in de module
 - system variables
 - js behaviors
 - css classes
 - Theming files
- Begin niet met cijfer of karakter
- Drupal doorloopt de modules in alfabetische volgorde.
- Het is mogelijk een weight aan een module toe te kennen.



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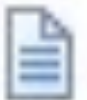
MODULE TUTORIAL

<http://drupal.org/node/206753>



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▼  node_example
  node_example.info
  node_example.install
  node_example.module

MODULE FILE STRUCTUUR

.info, .module, .install



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- Benodigde bestanden:
 - .info definiering module info en dependencies
 - .module de code
- Optioneel
 - LICENSE.txt
 - README.txt
 - UPGRADE.txt
 - .inc voornamelijk voor modules met veel code
 - .install
 - Translation files in aparte folder
 - Theming files (tpl.php)



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MENU

- `hook_menu()`
- `hook_menu_alter()`
- menu types
- page callback
- access callback



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FORMS & FORM API

- `hook_form()`
- `hook_form_alter()`
- the form array
- form state
- form elements
- element parameters



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VARIABLES

- `variable_get()`
- `variable_set()`
- `variable_del()`



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ADMIN SETTINGS

- `hook_admin()`
- variables wegschrijven



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USERS & PERMISSIONS

- `hook_perm()`
- `user_access()`
- `user_load()`
- user object



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NODE OBJECT

- node_load()
- node object



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DATABASE & QUERIES

- Schema
- db_query()
- db_fetch_object()



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DEMO MODULE



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PORTFOLIO GALLERY

- screenshots van websites in een modal box
- feature module: portfolio
- users (associates) kunnen eigen portfolio items aanmaken



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FEATURES

- Strongarmed variables
- node types
- views
- menus
- taxonomy
- context
- etc



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BEKIJKEN INHOUD

- .info
- .module



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VAR_DUMP()

- node object
- user object
- form



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TOEVOEGEN AAN FEATURE

- custom permissions (public / private photos)
- admin settings & variable (max number of sets, photos)
- extra validatie (max number check bij aanmaak photo of set)
- menu wijziging (title callback op basis van login, access callback permission)
- vormgeving



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MODULE VORMGEVING

- css toevoegen `drupal_add_css()`
- js toevoegen `drupal_add_js()`
- `.tpl.php` templates declareren
- `hook_theme()`



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UPDATES



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UPDATES

- Update status
- Versioning (voor code)
- update.php (voor database)
- .install hook_update_n()
- drush updates



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STAGING

- Staging in Drupal een vak apart
- Content vs Configuratie
- Features & CVS deployment



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MORGEN

Oefening, 3 modules bouwen



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