



Hands On Guide to Module Development

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Hands On Guide to Module Development

Session Overview

- Examining a recently developed module:
 - http://drupal.org/project/keyword_autocomplete
- Download step-by-step examples:
 - <http://www.ubercart.org/files/handson.zip>
- Discussing best practices to improve your first versions
- Writing code that is easier to maintain



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Development Environment

- IDE / Text Editor (ex: jEdit)
- Firefox + Firebug
- FTP (if necessary, ex: FileZilla)
- <http://api.drupal.org>
- <http://drupal.org/coding-standards>



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Preliminary Questions

- What are your specifications?
- What should be configurable?
- What data is being stored?
- What pages will you need?
- What forms will you need?



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Getting Started on the Module - Example 1

- Opening lines and comments
- Commenting as you go...
 - <http://drupal.org/node/1354>
- Standardize your module layout
 - Ex: `hook_menu()` - module table of contents



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Defining and Handling Data - Example 2

- Create an install file using the new Schema API
- Write an API (set of functions) to handle...
 - Saving that data (create and update)
 - Loading that data
 - Deleting that data
- Use the API to avoid queries in form handlers



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Those First Hooks - Example 3

- Implement `hook_menu()`; good changes in D6!
 - Eliminating `arg()` with callback arguments
 - Using the file handler for performance
 - Local tasks (secondary tabs)
 - Path placeholders
- Defining the module based permissions



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Writing Smarter Functions - `uc_cart.module`

- Avoid large, multi-purpose functions
- Make functions smaller and reusable
- Comment the parameters and return values!
- Perform actions on form submit not page load
- Follow security standards the first time around



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Altering a Form

- How to implement `hook_form_alter()`
- How to figure out a form ID using Firebug
- How to alter existing elements on a form
- Testing the autocomplete



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Other Concepts in Keyword Autocomplete

- Using a theme function to prepare output
- Creating simple system settings forms
- Using Drupal's autocomplete API for forms
- Deciding on a navigation scheme



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Resources

- Programming Best Practices - thanks, dww!
- <http://drupal.org/node/287350>
- <http://drupal.org/coding-standards>
- <http://drupal.org/writing-secure-code>