## Skeleton file structure

The following is a summary of the Basic Module Structure document by Onokazu. Note that this structure was outlined for XOOPS 1 RC3 modules. Not all of these files are needed [TO DO: WHICH ONES ARE ACTUALLY REQUIRED?]

Create the following directory structure and files as a skeleton code that will form the basis of your new module.

```
your_module
      /admin
             admin_header.php
             index.php
            menu.php
      /blocks
             blocks.php
      /cache
      /images
      /language
             /english
                   admin.php
                   blocks.php
                   main.php
                   modinfo.php
      /sql
      /templates
            /blocks
             module start page.html
      xoops version.php
      header.php
      index.php
```

## Function of skeleton directories and files

The actual \*functions\* of these directories and files are described below. This is based partly on the Basic Module Structure by Onokazu and Coolpop's Module Kickstart Guide. It is also based on an analysis of a simple module – Polls – and the code and comments therein.

### your module

The top level directory for your module must sit under the path:

XOOPS\_root/modules/your\_module or you will not be able to install it. There are three files found in the suggested skeleton structure:

### xoops version.php

This is the most important file in the module as it contains various module configuration variables. This file indicates:

- Basic information about the module (name, author, credits etc)
- The location of the sql database file, and the names of the database tables generated by the module
- Whether the module has an administration page, and its location.
- List of templates used in the module, with optional descriptions
- List of blocks used in the module, with optional description
- Whether the module should be included in the main menu
- Whether the module uses comments, and on what pages

#### General variables & statements

Statement/variable	Description
<pre>\$modversion['name'] = _MI_POLLS_NAME; \$modversion['image'] = "images/xoopspoll_slogo.png";</pre>	A variable holding the name of the module (the name is specified in the file: language/english/modinfo.php file  The path to the module image (for the administration menu)
<pre>\$modversion['version'] = 1.00;</pre>	The current version number for the module
<pre>\$modversion['description'] = _MI_POLLS_DESC;</pre>	A description of the module's function
<pre>\$modversion['author'] = "Kazumi Ono  ( http://www.myweb.ne.jp/ )";</pre>	The author of the module (you can include additional contact information here)
<pre>\$modversion['credits'] = "The XOOPS Project";</pre>	A credit list for the module. If you have used someone else's code you should credit them here
<pre>\$modversion['help'] = "xoopspoll.html";</pre>	???? location of a help file ? doesn't exist ????
<pre>\$modversion['license'] = "GPL see LICENSE";</pre>	Provide details of the license type here. Note that if you have used GPL code from elsewhere you *must* use a GPL license
\$modversion['official'] = 1;	Indicates whether this module is an officially sanctioned release by the XOOPS.org Module Development Team. Set this value at 1 for

	official modules, and at 0 for all others
<pre>\$modversion['dirname'] = "xoopspoll";</pre>	The name of the directory housing your module (which sits under XOOPS_root/modules/). If you get this wrong users will not be able to install your module.

# SQL-related variables and statements

Statement/variable	Description
<pre>\$modversion['sqlfile']['mysql'] = "sql/mysql.sql"; // \$modversion['sqlfile']['postgresql'] = "sql/pgsql.sql";</pre>	Indicates which database application you are using (in this case, mySQL which is the standard for XOOPS) and gives the location of the sql file. It must contain sql generated by phpMyAdmin or phpPgAdmin). None of the tables should have any prefix!  This is an alternative sqlfile statement that would allow you to use the Postgres database instead. Note that it is commented out. If you wanted to use Postgres you would have to uncomment this statement and comment out the previous one.
<pre>\$modversion['tables'][0] = "xoopspoll_option"; \$modversion['tables'][1] = "xoopspoll_desc"; \$modversion['tables'][2] = "xoopspoll_log";</pre>	This is a list of the database tables that are created by the sql file. None of the tables should include any prefix!

# Administrative things

Statement/variable	Description
\$modversion['hasAdmin'] = 1;	Indicates if the module has an administrative page ('1') or not ('0'). If this value is set at zero the module icon will not appear in the list on the left side of the control panel.
<pre>\$modversion['adminindex'] = "admin/index.php";</pre>	Indicates the path to the module's administration index page
<pre>\$modversion['adminmenu'] = "admin/menu.php";</pre>	Path to the file holding the module's administrative menu (the list displayed when you hold your mouse over the module icon)
<pre>\$modversion['templates'][1]['file'] = 'xoopspoll_index.html'; \$modversion['templates'][1]['description'] = "; \$modversion['templates'][2]['file'] = 'xoopspoll_view.html'; \$modversion['templates'][2]['description'] = "; \$modversion['templates'][3]['file'] =</pre>	These statements: i) list the templates that are used in the module ii) provide an optional description of each template that is displayed in the Template Set Manager (System - > Templates). Here the descriptions have been left blank.

'x(	oopspoll_results.html';
\$n	nodversion['templates'][3]['description'] = ";

## **Blocks**

These statements provide information about the module's blocks:

Statement/variable	Description
<pre>\$modversion['blocks'][1]['file'] = "xoopspoll.php";</pre>	???? A file that displays the polls and their options ???? What is the abstracted function of this file ???
<pre>\$modversion['blocks'][1]['name'] = _MI_POLLS_BNAME1;</pre>	Variable holding the name of the block (the value is specified in the file language/english/modinfo.php file
<pre>\$modversion['blocks'][1]['description'] = "Shows unlimited number of polls/surveys";</pre>	Provides a description of the block's function. This is visible when you are editing an individual block template in the Template Set Manager
<pre>\$modversion['blocks'][1]['show_func'] = "b_xoopspoll_show";</pre>	The name of the function that displays this block (contained in blocks/xoopspoll.php)
<pre>\$modversion['blocks'][1]['template'] = 'xoopspoll_block_poll.html';</pre>	Specifies the html template file to be used for this block
	Note: If your module had multiple blocks you would repeat these statements for each, incrementing the block number (ie [2], [3], [4] etc) and customising the values as appropriate

## Menu

Statement/variable	Description
<pre>\$modversion['hasMain'] = 1;</pre>	Specifies if the module should be included in the main menu ('1') or not ('0').

## Comments

Statement/variable	Description
<pre>\$modversion['hasComments'] = 1;</pre>	Specifies if the module uses comments ('1') or not ('0'). If you set this at 0 comment options will not be available in your module.
<pre>\$modversion['comments']['pageName'] = 'pollresults.php';</pre>	???? Not sure what this does. Look at the 'including comments in your module' guide in the Wiki etc. ????
<pre>\$modversion['comments']['itemName'] = 'poll_id';</pre>	???? Not sure what this does. Look at the 'including comments in your module' guide in the Wiki etc. ????

### header.php (not required)

Inclusion of required core files is done here. This file is not present in the Polls module.

TO DO: LOOK AT ANOTHER MODULE AND SEE WHAT IT DOES THERE

## index.php

Module main contents come here.

#### /admin

All the admin related files for the module belong to this directory. Access to this directory must be restricted.

admin header.php

Permission checks, inclusion of mainfile.php and language files are done here.

index.php

Module administration contents come here.

menu.php

This file includes variables used for creating popup admin menu for the module.

#### /blocks

This directory contains files that define block display/edit functions

blocks.php

#### /cache

Files that are created/updated dynamically belong to this directory. To create new files within the directory, the permission of this directory should be set writeable by the server (chmod 666 or 777 for UNIX/LINUX servers).

The permission of files in this directory should be set writeable by the server (chmod 666 or 777 for UNIX/LINUX servers).

#### /images

This directory simply houses all of the images used in your module. Put them here. Easy!

### /language

The language directory contains most of the text used in the interface of your module (ideally all of it). The official XOOPS modules are mainly distributed in English (only) but translations are available in many languages and you are free to install as many as you like – they coexist peacefully. Each language sits in its own subdirectory, ie:

/language/english /language/spanish /language/chinese etc

To translate a module simply copy (say) the english subdirectory, rename it and then translate the english text strings inside. Its that easy. If you want to change the text in a module, all you need do is to look in the appropriate language file.

## /language/english

The text used in a module is not hard-coded into its interface, rather it is held within constants as you will see below. This keeps the module's business logic separated from the text used in its display. That is why it is so easy to translate a XOOPS modules into many languages.

#### admin.php

This file defines the value of language constants used in the administrative side of the module: If there are not many used in the administration pages, this file may be merged with english/main.php.

Statement/variable	Description
define("_AM_DBUPDATED","Database Updated Successfully!");	This is just a sample of the language constant definitions in the Polls admin.php file. The use
define("_AM_POLLCONF","Polls Configuration");	of language constants (as opposed to hard- coded text) makes it easy to change words (or
define("_AM_POLLSLIST", "Polls List");	language!) without having to modify (and risk
define("_AM_AUTHOR", "Author of this poll");	damaging) the module's code.
define("_AM_DISPLAYBLOCK", "Display in block?");admin.php	

### blocks.php

The language constants for block/blocks.php are defined here in the same manner as in admin.php above. This file is empty in the Polls module as it only has one block which doesn't use pre-defined text.

## main.php

This file defines the language constants used in the main contents of the module (general *user-side* operation) in the same manner as in admin.php above (other than block text, which is defined separately as in blocks.php above). In the polls module this file defines language constants used in three other files: pollresults.php, index.php, xoopspollrenderer.php

#### modinfo.php

This file defines language constants used in xoops\_version.php – mainly these relate to general information about the module. Note that in other modules this file may be used for additional types of information beyond those in the Polls module (below) including sub-menu items for the Main Menu; title and description of configuration items (such as notifications).

Statement/variable	Description
define("_MI_POLLS_NAME","Polls");	The name of this module
define("_MI_POLLS_DESC","Shows a poll/survey block");	A brief description of this module
define("_MI_POLLS_BNAME1","Polls");	Names of blocks for this module (note that not all modules have blocks)
define("_MI_POLLS_ADMENU1","List Polls"); define("_MI_POLLS_ADMENU2","Add Poll");	Names of administration menu items

### /sql

SQL dump files used for module installation belong to this directory.

```
mysql.sql
mysql dump file
postgresql.sql
postgreSQL dump file
```

## /templates

HTML files for Xoops 2 RC3 and later module templates to be called by xoops\_version.php & modversion array. All templates used in the module should be found in this directory.

```
module_start_page.html
```

## /templates/blocks

HTML files for Xoops 2 RC3 and later module blocks templates to be called by xoops\_version.php & modversion array for 'blocks' items. These files use smarty variables to display module information.

All templates used in module blocks should be found here. These use smarty block variables variables to display module blocks information.