



Plugin Required Files





version.php

The file masthead - a full GPL copyright statement.

```
<?php
// This file is part of Moodle - https://moodle.org/
//
// Moodle is free software: you can redistribute it and/or modify
// it under the terms of the GNU General Public License as published by
// the Free Software Foundation, either version 3 of the License, or
// (at your option) any later version.
//
// Moodle is distributed in the hope that it will be useful,
// but WITHOUT ANY WARRANTY; without even the implied warranty of
// MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
// GNU General Public License for more details.
//
// You should have received a copy of the GNU General Public License
// along with Moodle. If not, see <https://www.gnu.org/licenses/>.
```





version.php

All files that contain PHP code should contain a **SEPARATE** docblock under the masthead.

```
/**  
 * This is a one-line short description of the file.  
 *  
 * You can have a rather longer description of the file as well,  
 * if you like, and it can span multiple lines.  
 *  
 * @package   mod_mymodule  
 * @category  backup (only when the file is related to one of the Core APIs)  
 * @copyright 2021 Mukudu Publishing  
 * @license  https://www.gnu.org/copyleft/gpl.html GNU GPL v3 or later  
 */
```





version.php

```
/* HEADER STUFF HERE */
```

```
defined('MOODLE_INTERNAL') || die();
```

```
$plugin->version = 2020061500;
```

```
$plugin->requires = 2020061500; // Requires M3.9.
```

```
$plugin->component = 'auth_textfile';
```

```
$plugin->dependencies = array();
```

For more information on these and other variables, please see the Moodle documentation's 'version.php' page (<https://docs.moodle.org/dev/version.php>).





The Language File

- Support for over 80 languages by defining the language strings and locale information in language packs. English, the Australian version, is the default language for code, comments, and documentation.
- Language strings are defined in the required **lang/** subdirectory with the **lang/en/** subdirectory being the default.
- File name follows the plugin naming convention AKA **Frankenstyle** as per *plugintype_pluginname.php*, so for our authentication plugin it is ***/auth/textfile/lang/en/auth_textfile.php***
- Strings are defined in the file as items of the **\$strings** associative array and the minimum required definition is `$string['pluginname']` e.g.

```
$string['pluginname'] = 'Textfile Authentication';
```





The Language Strings

- To retrieve the string, call `get_string('mystringname', 'mypluginname')` in the code. If, for example, the site is Swahili and a Swahili translation is available, the Swahili term will be returned. The function `print_string('mystringname', 'mypluginname')` will echo the string directly.
- Run time parameters can be passed for substitution in the string. These are passed as the third parameter to the `get_string()` calls and can be a scalar, an array or even an object and saved in the `$a` variable. The defined string then can be defined with `{ $a }` or `{ $a->parametername }`, e.g.

```
$string['mystringname'] = 'My full name is { $a->fullname }';
```

A word of warning: for this to work, the string must be defined in single quotes.





db/install.xml

- Defines the plugin's database tables
- Required for modules – optional for all others
- **XMLDB Tool** to help design tables except for modules





lib.php

- Exceptions: authentication, blocks and local plugins.
- Each plugin type will have a minimum of functions that must be implemented but sometimes, the API requires it to be a class definition, for example, for course formats
- Since Moodle loads all plugins' ***lib.php*** files, it is recommended that the file is kept to a minimum

