

3 - Templates

What is a template?

A template is a piece of HTML (and possibly JavaScript and CSS) which can be located in the database. This piece of data can then be used by your plugin (or even MyBB itself). Since templates can be edited from the AdminCP, users don't need to make core edits to your plugins in case they want to change something in the "look" of the pages created by your plugin (for example).

How can I create a template?

To create a template, you simply insert the HTML (and inline JS, CSS) into the MYBBPREFIX_templates database template. Below is an example of it. I personally prefer to create them in the `*_activate` routine and remove them in the `*_deactivate` routine. But some people (perhaps the majority..) prefer to do it in the `*_install` and `*_uninstall` routines, respectively.

Create / Remove template Example

```
function hello_activate()
{
    global $db;

    // Add a new template (hello_tmp) to our global templates (sid = -1)
    $templatearray = array(
        "tid" => "NULL",
        "title" => 'hello_tmp',
        "template" => $db->escape_string('
Hello, this is our data:<br />{$data}<br />'),
        "sid" => "-1",
    );

    $db->insert_query("templates", $templatearray);
}

function hello_deactivate()
{
    global $db;

    // remove our template
    $db->delete_query('templates', 'title IN (\`hello_tmp\`) AND sid=\`-1\`');
}
```

As you can see, we use MyBB's `$db` object to take care of the queries for us (this will be detailed in a later "lesson"). We use it to insert our template, which is made of the following fields:

- 'tid' - template ID; it's an auto increment field, we set it to NULL so the database engine will take care of creating an ID for it.
- 'title' - the template title (should start with the plugin codename, followed by an underscore and the title of the template)
- 'template' - the actual HTML!
- 'sid' - the template set. Usually -1 so it's in the Global Templates set.

In the `*_deactivate` routine we remove the template (again, some people prefer to do it in the `*_uninstall` routine and I'll explain my motives somewhere below).

How can I use templates?

So far you haven't understood (or perhaps you did?) how you can use templates in your code. Let's use the example from the Hooks lesson in which we placed a hook for when we access:

`www.yourforum.com/misc.php?action=donate`

So here's our function (now a bit different from the one used in the Hooks lesson):

testplugin_donate() example

```
function testplugin_donate()
{
    global $mybb, $db, $templates;

    // If our 'action' is not 'donate' we do not want to be here
    if($mybb->input['action'] != 'donate')
        return;

    $data = 'Boooooo!';

    // We eval $page as our 'hello_tmp' template
    eval("\$page = \"".$templates->get('hello_tmp')."\"");

    output_page($page);
    exit;
}
```

In our function we first make sure (like we did in the Hooks example) that our 'action' field is 'donate' so we're executing the code in the right place and then we set `$data` to a certain value (in case you haven't noticed, our template `hello_tmp` has `{ $data }` in its content) and finally we evaluate `$page` to our template. Then we output its content and terminate.

Cache your templates

Whenever this is run:

```
$templates->get('hello_tmp')
```

The templates object will check if this template has been loaded already, and if not, it will query from the database. Now, MyBB loads the necessary templates at the start of each file (in this case, it's `misc.php`) using a single query. If we don't tell MyBB to load ours as well, we'll end up with two queries for getting templates (one for those used by MyBB and one for ours).

So we just have to tell MyBB to cache ours as well! How? It's actually fairly simple:

Cache Templates Example

```
// cache templates - this is important when it comes to performance
// THIS_SCRIPT is defined by some of the MyBB scripts, including misc.php
if(THIS_SCRIPT == 'misc.php')
{
    global $templatelist;
    if(isset($templatelist))
    {
        $templatelist .= ',';
    }
    $templatelist .= 'hello_tmp';
}
```

Placing that code before the `*_info` routine (for example), i.e. in the global scope, will make sure we add our template to the global variable which contains the templates to be loaded by MyBB.

Final Considerations

So now you know how to create templates, how to remove them, how to make use of them and even how to cache them. I'd like to explain now why I create my templates in `*_activate` instead of `*_install` and why I remove them in `*_deactivate` instead of `*_uninstall`.

I noticed that most of the times I do updates to my plugins, I rarely do changes to the database scheme, but I do updates to the templates quite often. So, if I were to create templates in `*_install` and remove them in `*_uninstall`, users would need to re-install the plugin OR I'd need to write an upgrade script to do the template changes. If I implement these the way I do, then the user can just re-activate the plugin and have it upgraded to the latest changes. This has its downsides too of course. If the user wants to temporarily disable the plugin and deactivates it, he will lose any custom changes made to the plugin's templates - so it's your choice in the end!