

Understanding and Using Hooks

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Advanced Ads

The ad management plugin for WordPress

Hook examples

Capitalize words in the title

lorem ipsum

Lorem Ipsum

Hook examples

Capitalize words in the title

Forum answer:

put this in your functions.php

```
add_filter( 'the_title',  
    'capitalized_wp_titles_convert' );  
  
function capitalized_wp_titles_convert ($title) {  
    $title = ucwords($title);  
    return $title;  
}
```

Hook examples

Capitalize words in the title

Plugin Code:

```
add_filter( 'the_title',  
    'capitalized_wp_titles_convert' );  
  
function capitalized_wp_titles_convert ($title) {  
    $title = ucwords($title);  
    return $title;  
}
```

Advanced Ads Test

Just another WordPress site

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lorem ipsum

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Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet.

Primary Sidebar Widget Area

This is the Primary Sidebar Widget Area. You can add content to this area by visiting your [Widgets Panel](#) and adding new widgets to this area.

genesis_site_title

Advanced Ads Test

genesis_site_description

Just another WordPress site

genesis_header_right

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genesis_after_header

genesis_before_content_sidebar_wrap

genesis_before_content

genesis_before_loop

genesis_loop

genesis_before_entry

genesis_after_content

genesis_after_content_sidebar_wrap

genesis_before_sidebar_widget_area

Primary Sidebar Widget Area

This is the Primary Sidebar Widget Area. You can add content to this area by visiting your [Widgets Panel](#) and adding new widgets to this area.

genesis_after_sidebar_widget_area

genesis_entry_header

lorem ipsum

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genesis_entry_content

Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor

Why are hooks so cool?

- extend anything without breaking it
- faster alternative to options
- open your plugin to others

HOOKS

actions

do something
e.g. echo

filters

manipulate a value

Elements of a hook routine

Hook (noun)

when

Action / Filter function

what

hook (verb)

connection (*hooked*)

! Action/filter functions can be hooked to an action/filter hook.

Action routine functions

```
do_action( 'genesis_site_title' );
```

```
function logo_before_title( ){...}
```

```
add_action( 'genesis_site_title',  
    'logo_before_title', 10, 1 );
```

wp_head action

```
<html <?php language_attributes(); ?>>
<head>
    ...
    <?php wp_head(); ?>
</head>
```

```
function wp_head() {
    // ...
    do_action( 'wp_head' );
}
```

wp_head action in Core

```
add_action( 'wp_head', '_wp_render_title_tag', 1 );
add_action( 'wp_head', 'wp_enqueue_scripts', 1 );
...
add_action( 'wp_head', 'locale_stylesheet' );
add_action( 'wp_head', 'noindex', 1 );
add_action( 'wp_head', 'print_emoji_detection_script', 7 );
add_action( 'wp_head', 'wp_print_styles', 8 );
add_action( 'wp_head', 'wp_print_head_scripts', 9 );
add_action( 'wp_head', 'wp_generator' );
add_action( 'wp_head', 'rel_canonical' );
add_action( 'wp_head', 'wp_site_icon', 99 );
```

Filter routine functions

```
$title = apply_filters( 'the_title', $title );
```

```
function capitalize_title( $title ){  
    return ucwords( $title );  
}
```

```
add_filter( 'the_title', 'capitalize_title', 10,  
1 );
```

the_content filter

```
the_content();
```

```
function the_content( $more_link_text = null,  
    $strip_teaser = false) {  
  
    $content = get_the_content( $more_link_text,  
        $strip_teaser );  
  
    $content = apply_filters( 'the_content',  
        $content );  
  
    echo $content;  
}
```

the_content filter in Core

```
add_filter( 'the_content', 'wptexturize' );  
add_filter( 'the_content', 'convert_smilies' );  
add_filter( 'the_content', 'convert_chars' );  
add_filter( 'the_content', 'wpautop' );  
add_filter( 'the_content', 'shortcode_unautop' );  
add_filter( 'the_content', 'prepend_attachment' );
```


Naming your hooks

when

```
do_action( 'before_output' );
```

what + when

```
$content = apply_filters(  
    'content_before_output', $content);
```

! never use the same name for actions and filters

Prefix!

```
do_action( 'advanced_ads_before_output' );
```

```
$content = apply_filters(  
    'advanced_ads_content_before_output',  
    $content );
```

Dynamic Hooks

when changing post status, e.g. *pending_to_publish*

```
do_action( "{$old_status}_to_{$new_status}",  
$post );
```

when getting an option, e.g. *option_default_category*

```
function get_option( $option, $default = false )  
{  
    // ...  
    return apply_filters( 'option_' . $option,  
        maybe_unserialize( $value ) );  
}
```

The *all* hook

"all" = will be called for all action and filter hooks

```
function my_show_filter() {  
    echo current_filter(); // == current_action();  
}  
  
add_action( 'all', 'my_show_filter' );
```

Functions

```
function my_capitalize_title( $title ){  
    return ucwords( $title );  
}  
  
add_filter( 'the_title', 'my_capitalize_title' );
```

```
class my_class {  
    public function capitalize_title(  
        $title ){  
        return ucwords( $title );  
    }  
}  
  
add_filter( 'the_title',  
    array( 'my_class', 'capitalize_title' ) );
```

```
class my_class {  
    public function __construct() {  
        add_filter( 'the_title',  
            array( $this, 'capitalize_title' ) );  
    }  
  
    public function capitalize_title( $title ) {  
        return ucwords( $title );  
    }  
}
```

using PHP functions

instead of

```
function my_capitalize_title( $title ){  
    return ucwords( $title );  
}  
  
add_filter( 'the_title', 'my_capitalize_title' );
```

use this

```
add_filter( 'the_title', 'ucwords' );
```


Priority

- default: 10
- lower numbers run first

```
add_filter( 'the_content',  
    'inject_ad_before_paragraph', 5 );  
  
add_filter( 'the_content', 'wpautop' );
```

What is going to happen?

Arguments

```
do_action( 'delete_term',  
    $term, $tt_id, $taxonomy, $deleted_term );
```

up to 4 arguments can be used

```
add_action( 'delete_term',  
    '_wp_delete_tax_menu_item', 10, 3 );
```

```
function _wp_delete_tax_menu_item(  
    $object_id = 0, $tt_id, $taxonomy ) {  
        // ...  
}
```

remove

```
function disable_emojis() {  
    remove_action( 'wp_head', 'print_emoji_detection_script', 7 );  
    remove_action( 'admin_print_scripts',  
        'print_emoji_detection_script' );  
    remove_action( 'wp_print_styles', 'print_emoji_styles' );  
    remove_action( 'admin_print_styles', 'print_emoji_styles' );  
    remove_filter( 'the_content_feed', 'wp_staticize_emoji' );  
    remove_filter( 'comment_text_rss', 'wp_staticize_emoji' );  
    remove_filter( 'wp_mail', 'wp_staticize_emoji_for_email' );  
}  
  
add_action( 'init', 'disable_emojis' );
```

Testing for hooks

```
function _wp_render_title_tag() {  
    ...  
  
    if ( ! did_action( 'wp_head' ) && !  
        doing_action( 'wp_head' ) ) {  
        return;  
    }  
  
    echo ...;  
}
```

```
function build_query_string() {  
    ...  
    if ( has_filter( 'query_string' ) ) {  
        ...  
    }  
}
```

Debugging Tips

use `DEBUG_LOG` to log errors in `wp-content/debug.log` file

```
error_log();
```

use a plugin like `DEBUG OBJECTS` to list filters and actions

Want to learn more?

- code
- https://codex.wordpress.org/Plugin_API
- search
- plugin or theme manuals

! there are more filters or actions than you can think of

Learned something?

```
add_action( 'end_of_talk', 'answer_questions' );

function answer_questions( $questions ) {
    foreach( $questions as $_q ) {
        try{
            echo find_answer_to( $_q );
        } catch(Exception $e) {
            mail( 'thomas.maier@webgilde.com',
                'contact', $_q );
        }
    }
}

do_action( 'end_of_talk' );
```

source: <http://webgilde.com/>