

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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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

genesis_header_right

Advanced Ads Test

genesis_site_description

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lorem ipsum
with MR in content](#)

genesis_after_header

genesis_before_content_sidebar_wrap

genesis_before_content

genesis_before_loop

genesis_loop

genesis_before_entry

genesis_after_content

genesis_before_sidebar_widget_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

Primary Sidebar Widget Area

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genesis_after_sidebar_widget_area

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' );
```