

## CS 328 PHP Coding Standards so far

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- For CS 328, you are expected to use **ONLY the following two types of tags** for your PHP embedded within a document:

**<?php**

...

**?>**

or

**<?= ... ?>**

- I'll call these **regular PHP tags** and **PHP expression tags**, respectively, below.
- For CS 328, we'll put the opening and closing parts of a **regular PHP tag** (**<?php** and **?>**) each on their **own** line, as shown above.
- Do the regular PHP tag's opening and closing parts need to line up? They can, as shown above, and when possible do so. However, see below for some possible exceptions.
  - Typically, indent the PHP statements within a regular PHP tag at least 3 spaces, and line then up.
  - BUT sometimes, for example when "jumping" in and out of static HTML, it is acceptable to line up its contents even with the regular PHP tag's parts.
  - AND I'll accept the opening and closing parts for regular PHP tags NOT lined-up with each other if they are instead lined up with the surrounding code, if the result maintains "overall" logic indentation in a pleasing way.
  - ...and **HERE** docs have their own required indentation idiosyncrasies!
  - **(the goal: for your document including PHP to be neat and readable)**
- It is **encouraged** to place **PHP expression tags** inline within HTML or document content. For example,  
`<h1> Welcome to <?= $destination ?>! </h1>`
- While the PHP Engine may not enforce these, you are expected to:
  - **end** each statement within a **regular PHP tag** with a semicolon, but
  - **AVOID** putting a semicolon after the expression in a **PHP expression tag**.
- Unless you genuinely want the contents of a file to be able to be included more than once in a document (as for, perhaps, frequently-used HTML snippets), use **require\_once** or **include\_once** rather than **require** or **include**.
  - ...and choose between **require\_once** or **include\_once** based on whether the content being included **SHOULD** cause a fatal error if not available or not, respectively.
- When you are including a PHP function from another file into a PHP document, use **require\_once** within that document's **head** element.

- You are expected to **avoid** using `print` and `echo` statements in regular PHP tags in CS 328 (unless you get prior, explicit approval).
- PHP indentation guidelines: when you are using the style of control structures that include `{` and `}`:
  - the statement(s) within the body of the control structure should **not** be on the same line as the start of the control structure
  - the statement(s) within the body of the control structure should be indented by 3 or more spaces, and lined up
- `goto` and `continue` statements are not to be used, and `break` statements may **only** be used in `switch` statements.
- You are expected to treat ALL user input as **UNTRUSTED** -- don't send it anywhere without trying to take steps to make sure that any attacks are detected and neutralized.
  - To guard against cross-site scripting, appropriately use PHP functions such as **`htmlspecialchars`**, **`trim`**, **`strip_tags`**, and **`htmlentities`**.
  - To guard against SQL injection, avoid dynamic SQL statements built using concatenation by, for example, use of bind variables, carefully-designed Oracle stored procedures, and carefully-designed Oracle stored functions.
  - (When you must use dynamic SQL statements built using concatenation, take special care to somehow check what is being concatenated.)