

So what is PHP?

- PHP Hypertext Preprocessor
- Server side scripting language
 - Programming language because it has logic (loops, condition, etc)
- Can combine with HTML
- Allows us to create dynamic webpages!
 - Can incorporate HTML and PHP in the same file or pass information from separate files

Crash Course!

- Declaring variables
 - No need to specify type!
 - Loosely or dynamically typed -> determined at runtime
 - `$var = 3;`
- Arrays can be associative!
 - `$array = [key1 => value1, key2 => value2]`
 - However, keys are optional!
 - `$array = [10, 20, 30]`
 - Index would be just like in C!
 - `$array[1] = 20;`

Crash Course!

- == versus ===
 - == checks for equality after type juggling
 - === checks if they are equal and of the same type

- foreach loop

- Way to iterate over arrays
- If there are no keys

```
foreach ($array as $value) {  
    //do this  
}
```

- If there are keys

```
foreach ($array as $key => $value) {  
    //do this  
}
```

Two ways to pass info

- GET
 - Information passed via URL
- POST
 - Passes data in the HTTP message body
 - Consider the data to be “hidden” compared to GET requests

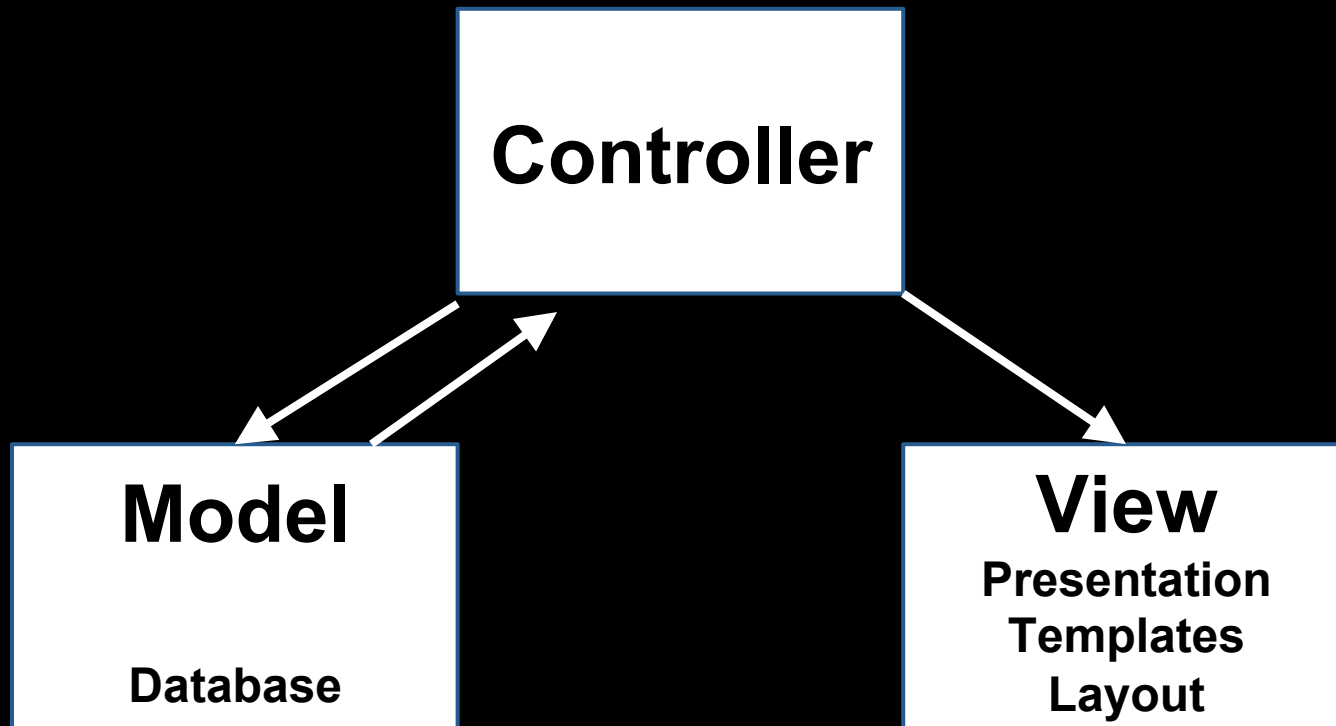
```
<form action="action.php" method="post">
  <p>Your name: <input type="text" name="name" /></p>
  <p>Your age: <input type="text" name="age" /></p>
  <p><input type="submit" /></p>
</form>
```

```
Hi <?php echo htmlspecialchars($_POST['name']); ?>.
You are <?php echo (int)$_POST['age']; ?> years old.
```

SQL

- UPDATE
 - Update data in a database table
- INSERT INTO
 - Insert certain values into a table
- SELECT
 - Select values to view
- DELETE
 - Delete from table

MVC



Model-View-Controller

MVC

COMPONENT	FUNCTION	EXAMPLE
Model	<ul style="list-style-type: none">- Persistent storage of information- Managing and organizing data	<ul style="list-style-type: none">- MySQL database- Data files
View	<ul style="list-style-type: none">- Presentation of information to user- User interface	<ul style="list-style-type: none">- HTML- Minimal PHP (e.g., for iterating over data to print it out)
Controller	<ul style="list-style-type: none">- Handles user requests, gets information from the model	<ul style="list-style-type: none">- PHP

C\$50 Finance: Model



C\$50 Finance: Controller

```
$result = query("SELECT * FROM some_table");

if ($result !== false)
{
    foreach ($result as &$row)
    {
        /* process row of result */
    }    render("some_template", array("data" => $result));
}
else
{
    apologize("Error communicating with database.");
}
```

C\$50 Finance: View

some_template.php:

```
<ul>
  <?php foreach($data as $row): ?>
    <li><?= $row["name"] ?></li>
  <?php endforeach ?>
</ul>
```