

# PHP and MVC Architecture

Build a better website

Class 1: PHP and Views  
Making HTML Dynamic



# What is PHP?

PHP (PHP Hypertext Protocol)

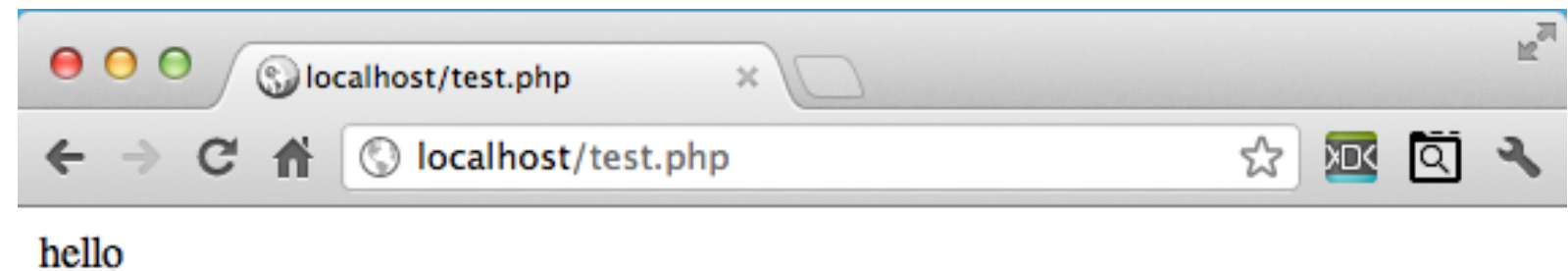
Take HTML and make it dynamic

Talk to databases

Conditional displays



# What does PHP look like?



```
<?php
```

```
    echo "hello";
```

```
?>
```



# What does PHP look like?

## String Variables

```
<?php
```

```
$greeting = "hello";
```

```
echo $greeting;
```

```
?>
```



# What does PHP look like?

## String Variables and Concatenation

```
<?php
```

```
$greeting = "hello";
```

```
$name = "Sara";
```

```
echo $greeting . " " . $name;
```

```
?>
```



# What does PHP look like?

## Numeric Variables

```
<?php
```

```
$year = 2012;
```

```
$startingYear = 1980;
```

```
echo "It is the year " . $year .  
". Nerds starting counting years  
in " . $startingYear;
```

```
?>
```



# What does PHP look like?

## Numeric Variables and Math

```
<?php
```

```
$year = 2012;
```

```
$startingYear = 1980;
```

```
$timePast = $year - $startingYear;
```

```
echo "It is the year " . $year . ".  
Nerds starting counting years in "  
$startingYear . ". That was "  
$timePast . " years ago.";
```

```
?>
```



# What does PHP look like?

## Numeric Variables and Math

+	Addition
-	Subtraction
*	Multiplication
/	Division
%	Modulus
++	Increment
--	Decrement





# What does PHP look like?

## Conditional Statements

```
<?php
```

```
    $year = 2012;
```

```
    $startingYear = 1980;
```

```
    $timePast = $year - $startingYear;
```

```
    if($timePast == 1) {
```

```
        $years = "year";
```

```
    }
```

```
    else{
```

```
        $years = "years";
```

```
    }
```

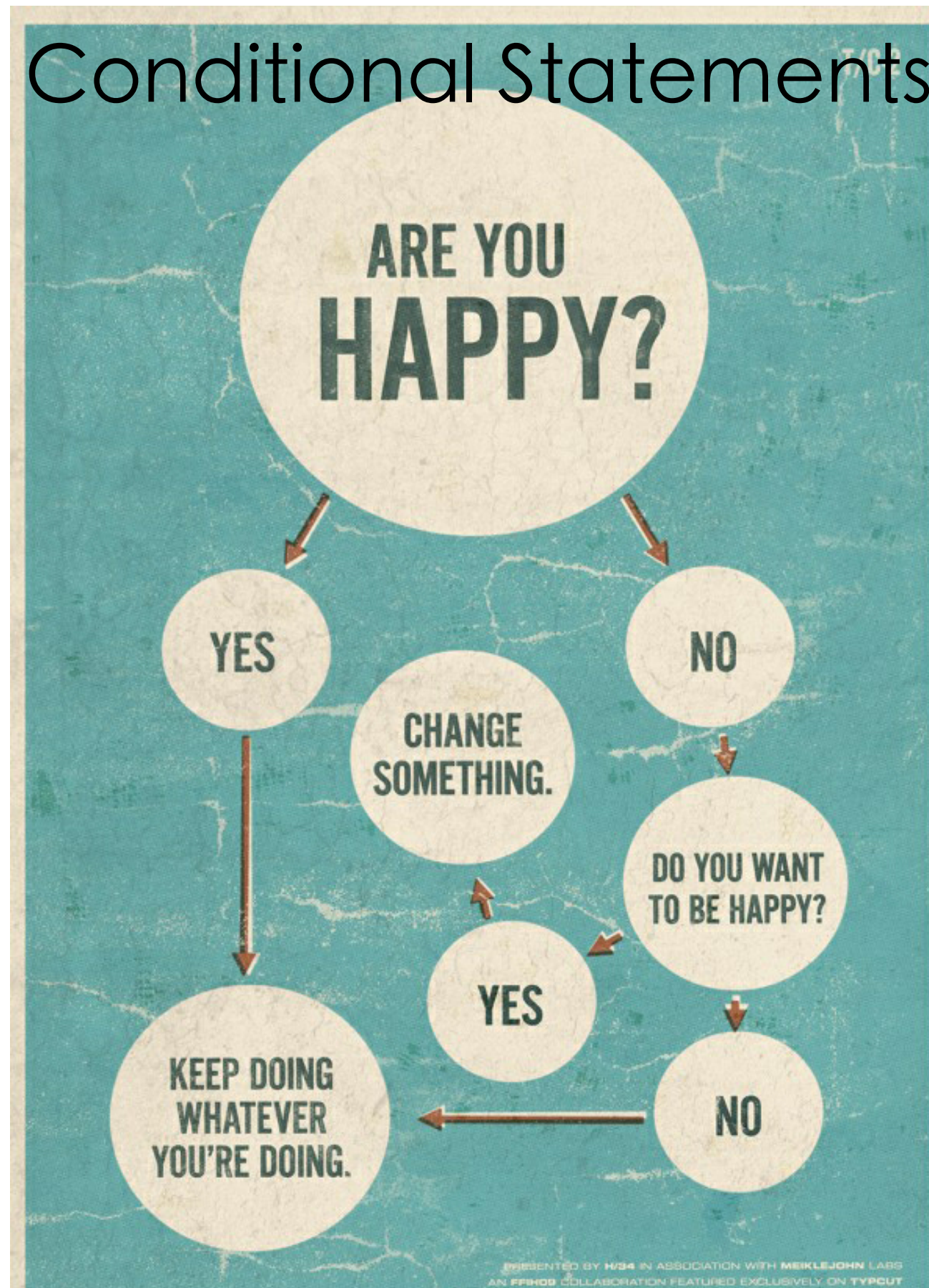
```
    echo "It is the year " . $year . ".  
    Nerds starting counting years in " .  
    $startingYear . ". That was " .  
    $timePast . " " . $years . " ago.";
```

```
?>
```



# What does PHP look like?

## Conditional Statements



# What does PHP look like?

## Conditional Statements

```
<?php
    if(some type of comparison here) {
        do code here;
    }
    else{
        do other code here;
    }
?>
```

==	Equals?
>	Greater than?
<	Less than?
!=	Not Equal to?
&&	AND
	OR



# What does PHP look like?

## Conditional Loops

```
<?php
    $i = 0;
    while ($i<10) {
        echo $i;
        $i++;
    }
?>
```

```
<?php
    for ($i=0; $i<10; $i++) {
        echo $i;
    }
?>
```



# What does PHP look like?

## Arrays

Arrays are series of data held under one variable name

You can access the data through an index (a number)

Or you can access the data through a name





# What does PHP look like?

## Arrays with an Index

```
<?php
```

```
$daysOfWeek = array();  
$daysOfWeek[0] = "Sunday";  
$daysOfWeek[1] = "Monday";  
$daysOfWeek[2] = "Tuesday";  
$daysOfWeek[3] = "Wednesday";  
$daysOfWeek[4] = "Thursday";  
$daysOfWeek[5] = "Friday";  
$daysOfWeek[6] = "Saturday";
```

```
?>
```



# What does PHP look like?

## Arrays with an Name

```
<?php
    $person = array();
    $person['name'] = "Izzy";
    $person['email'] = "izzy@girldevelopit.com";
    $person['address'] = "123 Main Street";
    $person['pets_name'] = "Winifred";
?>
```



# What does PHP look like?

## Arrays within Arrays

```
<?php
```

```
$teacherA = array();  
$teacherA['name'] = "Izzy";  
$teacherA['email'] = "izzy@girldevelopit.com";
```

```
$teacherB = array();  
$teacherB['name'] = "Leo";  
$teacherB['email'] = "leo@girldevelopit.com";
```

```
$teachers = array();  
$teachers['0'] = $teacherA;  
$teachers['1'] = $teacherB;
```

```
?>
```





# What does PHP look like?

## Arrays within Arrays and Loops

```
<?php
    echo $teachers[0]['name']; //Izzy
?>
```

```
<?php
    foreach ($teachers as $teacher) {
        echo "The name is: " . $teacher['name'];
        echo "The email is: " . $teacher['email'];
    }
?>
```



# How does PHP work?

## Server side language

PHP is a server-side language

Unlike HTML and CSS, it can't be understood by a browser

A server "translates" the code to HTML

The browser then presents the translated code

Website hosts like Dreamhost, Bluehost, or Rackspace have PHP servers to understand your code



# How does PHP work?

## Server side language

To develop locally, you need a server

Macs:

MAMP (<http://www.mamp.info>)

Once downloaded, put files into htdocs

Open MAMP

Go to <http://localhost:8888>

PCs:

WAMP (<http://www.wampserver.com/>)

Once downloaded, put files into www

Open WAMP

Go to <http://localhost>



# How does PHP work?

## Sharing code: Functions

```
<?php
    function convertFeetToInches ($feet) {
        return $feet*12;
    }
```

```
?>
```

```
<?php
    $width = 2;
    $length = 2;

    echo "My rectangle is " . $width . " feet wide
    and " . $length . " feet long.";

    echo "That is " . convertFeetToInches ($width) .
    " inches wide and " .
    convertFeetToInches ($height) . " inches long.";

?>
```



# How does PHP work?

## Sharing code: Inclusion

`include`

`require`

`require_once`



# What is MVC?

Way of constructing an application

Websites

Mobile applications

## Model

Data structure

Tells your website what kind of data it will get from the database

## View

What the user sees when they visit your website

The PHP that is translated to HTML

## Controller

The glue that holds everything together

Gets data from model to view

Does all the heavy lifting for the website



# What is MVC?

## Starting with Views: index.php

```
<?php require_once ('config/config.php');?>
<?php include 'application/views/template/header.php'; ?>
    <div id="content" class="clear">
        <div id="primary-content">
            <?php include 'application/views/posts/list.php';?>
        </div>
        <div id="secondary-content">
            <?php include 'application/views/bloggers/
list.php'; ?>
        </div>
    </div>
<?php include 'application/views/template/footer.php';?>
```



# What is MVC?

## Starting with Views: header.php

```
<html>
  <head>
    <title>GDI PHP MVC</title>
    <link rel = 'stylesheet' href='/public/css/style.css'>
    <script src='/public/js/jquery.min.js' type='text/
javascript'></script>
    <script src='/public/js/global.js' type = 'text/
javascript'></script>
  </head>
  <body>
```





# What is MVC?

## Starting with Views: footer.php

```
<br class= "clear"/>
<div id="footer">
    <div id="about">Developed for the Girl Develop It PHP
MVC Architecture course. License <?php echo date('Y')?>
    </div>
    <span id="cc-license">...</span>
</div>
</body>
</html>
```



# What is MVC?

## Starting with Views: blogger/list.php

```
<?php $data = Blogger_Controller::_list();?>
<div id="bloggers-list">
    <h2>Bloggers</h2>
    <?php foreach ($data['bloggers'] as $blogger): ?>
        <div class="blogger">
            <span class="blogger-name"><?php echo
$blogger['username']; ?></span>
        </div>
    <?php endforeach; ?>
</div>
```



# What is MVC?

## Starting with Views: posts/list.php

```
<?php $data = Post_Controller::_list(); ?>

<div id="posts-list">
    <h2>Blog Posts</h2>
    <?php foreach ($data['posts'] as $post): ?>
        <div class="post">
            <h3><?php echo $post['title']; ?></h3>
            <div class = "post-text"><?php echo $post['text']; ?></div>
            <div class = "post-footer">
                <div class = "post-date"><?php echo date("F j, Y g:i a",
strtotime($post['date_created'])); ?></div>
                <div class = "post-blogger"><?php echo
$post['username']; ?></div>
            </div>
            <br class="clear"/>
        </div>
    <?php endforeach; ?>
</div>
```



# Coming Up!

## Models and Databases

How to create a database

How to connect your site to the database

How to 'query' the database to get information out or put information in

How to build a model for the data in your database



A large, stylized red question mark graphic that serves as a background for the text.

Questions?

