PHP/MySQL development a Twitter-like application

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Outline

The project

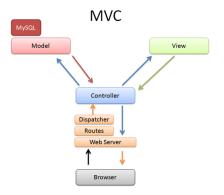
PHP

PHP and MySQL

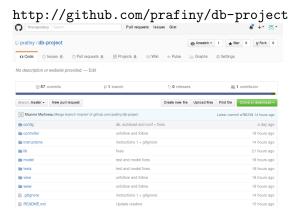
Twitter application

- Users : can post, follow a user, ...
- ▶ Post : message from a user
- Notification system
- ► Hashtag : to mark a given topic (ex: #DevelopersBeLike)

Project structure



Code



Code

http://github.com/prafiny/db-project
Needed:

- User table
- ► Follow table
- → Models to be completed (files in model)

PHP: Data

► Declare a variable

```
$a = 23; // $a is an int
$b = 2.3; // $b is a float
$c = true; // $c is a boolean
$d = array("a", 1, "b"); // $d is an array
```

PHP: Data

Deal with arrays

```
$a = array("a", "b", 1);
echo $a[0]; // prints "a"
$a[0] = "A";
echo $a[0]; // ?
$a[] = 2; // $a == ?
```

Associative arrays

```
$fruit = array("name" => "orange", "color" => "orange");
echo $fruit["name"]; // ?
echo $fruit["color"]; // ?
$a["color"] = "black";
```

PHP: Data

Create and use a stdClass object

PHP: Controls

▶ If stanzas

```
if($a == 1) {
   echo "voohoo :D";
else {
   echo "oh :(";
}
$fruit1 = array("name" => "orange", "color" => "orange");
$fruit1copy = array("name" => "orange", "color" =>
    "orange");
$fruit2 = array("name" => "blueberry", "color" => "blue");
if($fruit1 == $fruit1copy) { /* Goes there ? */ }
if($fruit2 == $fruit2) { /* And there ? */ }
```

PHP: Controls

While loops

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

For loops

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

Foreach loops

```
$arr = array(0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10);
foreach($arr as $i) {
   echo $i;
}
```

PHP: Functions

Create a function

```
function inverse($nb) {
   return 1/$nb;
}
```

Use a function

```
echo inverse(3); // ?
```

PHP: Error handling with exceptions

► Throw an exception

```
function inverse($nb) {
   if($nb == 0) { throw new Exception('Division by
        zero.'); }
   return 1/$nb;
}
echo inverse(0);
echo "I can has display ?"; // ?
```

PHP: Error handling with exceptions

► Throw an exception

```
function inverse($nb) {
    if($nb == 0) { throw new Exception('Division by
        zero.'); }
    return 1/$nb;
}
echo inverse(0);
echo "I can has display ?"; // ?
```

Catch an exception

```
try {
    echo inverse(0);
}
catch(Exception $e) {
    echo $e->getMessage();
}
echo "I can has display ?"; // ?
```

PHP and MySQL: PDO

PHP Data Object

Connection

Queries

```
$sql = 'SELECT name, color, calories FROM fruit ORDER BY
    name';
foreach ($db->query($sql) as $row) {
    print $row['name'] . "\t";
    print $row['color'] . "\t";
    print $row['calories'] . "\n";
}
```

PHP and MySQL: PDO

PHP Data Object

Prepare query (with variables)

```
$sql = 'SELECT name, colour, calories FROM fruit WHERE
    calories < :calories AND colour = :colour';
$sth = $dbh->prepare($sql);
$sth->execute(array(':calories' => 150, ':colour' =>
    'red'));
```

PHP and MySQL: PDO

PHP Data Object

Prepare query (with variables)

Error handling (with Exceptions)

```
try {
    $sql = 'SELECT name, color, calories FROM fruit ORDER
        BY name';
    foreach ($db->query($sql) as $row)
    { do stuff; }
} catch (\PDOException $e) { print $e->getMessage(); }
```