



Model View Controller

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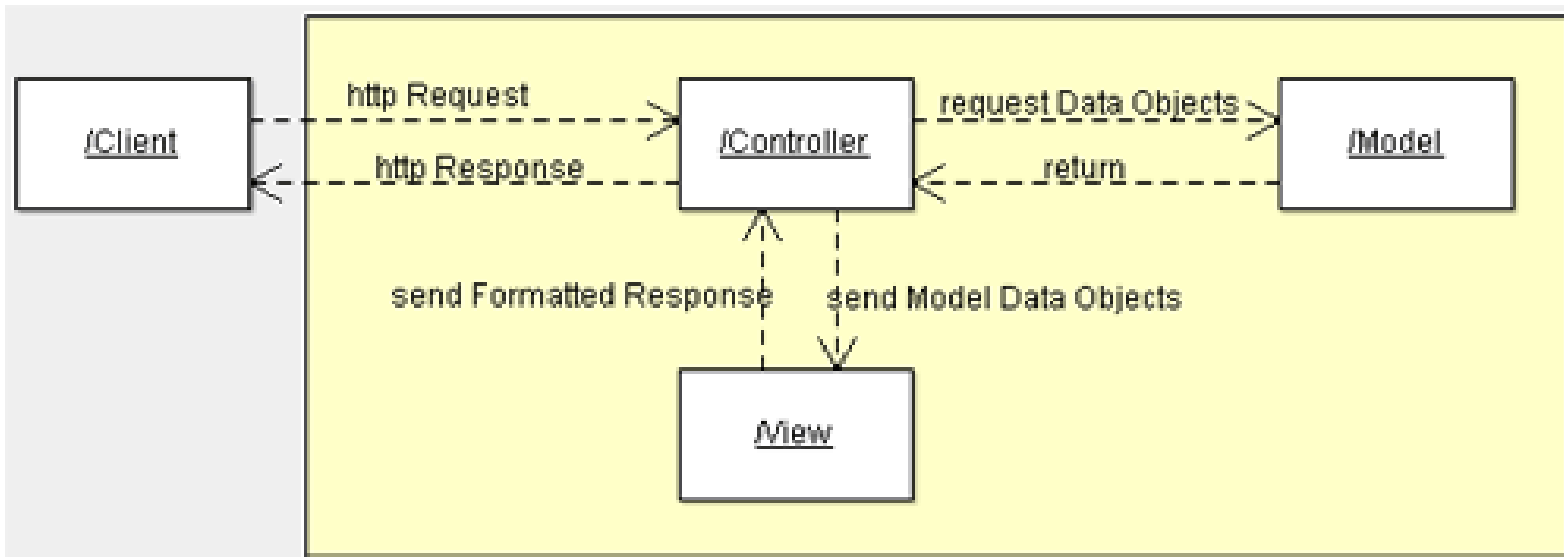
PHP & MVC

- The model view controller pattern is the most used pattern for today's world web applications
- It has been used for the first time in Smalltalk and then adopted and popularized by Java
- At present there are more than a dozen PHP web frameworks based on MVC pattern

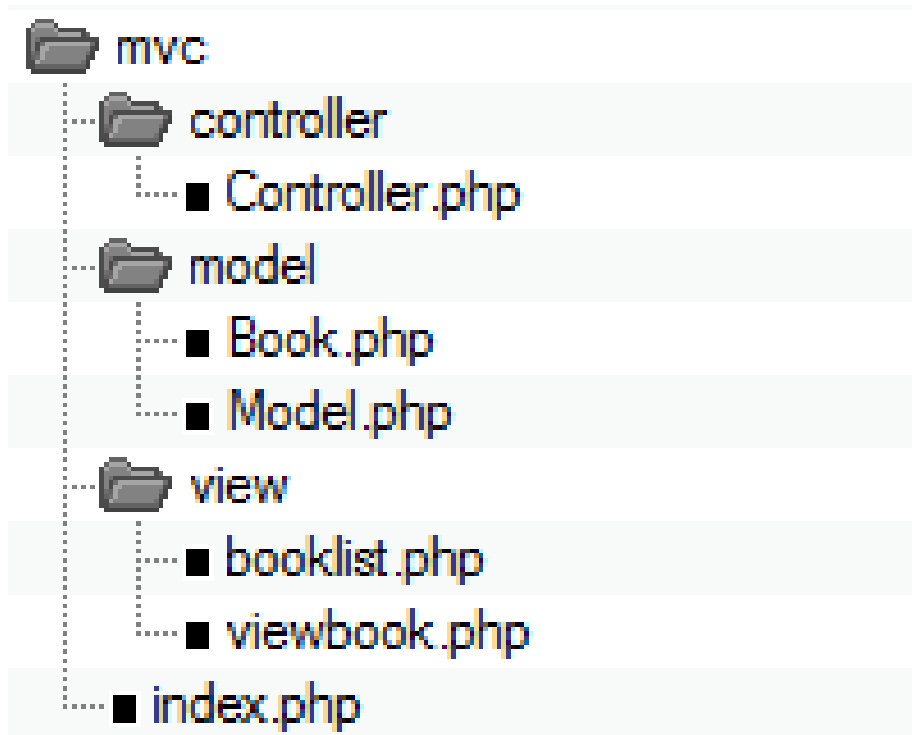
PHP & MVC

- The **model** is responsible to manage the data
- The **view (presentation)** is responsible to display the data provided by the model in a specific format
- The **controller** handles the model and view layers to work together

PHP & MVC



PHP & MVC



model/Book.php

```
<?php
class Book {
    public $title;
    public $author;
    public $description;

    public function __construct($title, $author,
    $description)
    {
        $this->title = $title;
        $this->author = $author;
        $this->description = $description;
    }
}
?>
```

model/Model.php

```
<?php
include_once("model/Book.php");

class Model {
    public function getBookList()
    {
        // here goes some hardcoded values to simulate the database
        return array(
            "Jungle Book" => new Book("Jungle Book", "R. Kipling", "A classic book."),
            "Moonwalker" => new Book("Moonwalker", "J. Walker", ""),
            "PHP for Dummies" => new Book("PHP for Dummies", "Some Smart Guy", "")
        );
    }
    public function getBook($title)
    {
        // we use the previous function to get all the books
        // and then we return the requested one.
        // in a real life scenario this will be done through
        // a database select command
        $allBooks = $this->getBookList();
        return $allBooks[$title];
    }
}
?>
```

view/viewbook.php

```
<html>
<head></head>
<body>
    <?php

        echo 'Title:' . $book->title . '<br/>';
        echo 'Author:' . $book->author . '<br/>';
        echo 'Description:' . $book->description . '<br/>';

    ?>
</body>
</html>
```


view/booklist.php

```
<html>
<head></head>
<body>
  <table>
    <tbody>
      <tr><td>Title</td><td>Author</td><td>Description</td></tr>
    </tbody>
  <?php

      foreach ($books as $book)
      {
        echo '<tr><td><a href="index.php?book=' .
          $book->title . '>' . $book->title .
'</a></td><td>' .
          $book->author . '</td><td>' . $book-
>description . '</td></tr>';
      }
    ?>
  </table>
</body>
</html>
```

controller/Controller.php

```
<?php
include_once("model/Model.php");

class Controller {
    public $model;

    public function __construct()
    {
        $this->model = new Model();
    }
}
```

controller/Controller.php

```
public function invoke()
{
    if (!isset($_GET['book']))
    {
        // no special book is requested, we'll show a
list of all available books
        $books = $this->model->getBookList();
        include 'view/booklist.php';
    }
    else
    {
        // show the requested book
        $book = $this->model->getBook($_GET['book']);
        include 'view/viewbook.php';
    }
}
?>
```

index.php

```
<?php
```

```
// All interaction goes through the index and is  
forwarded
```

```
// directly to the controller
```

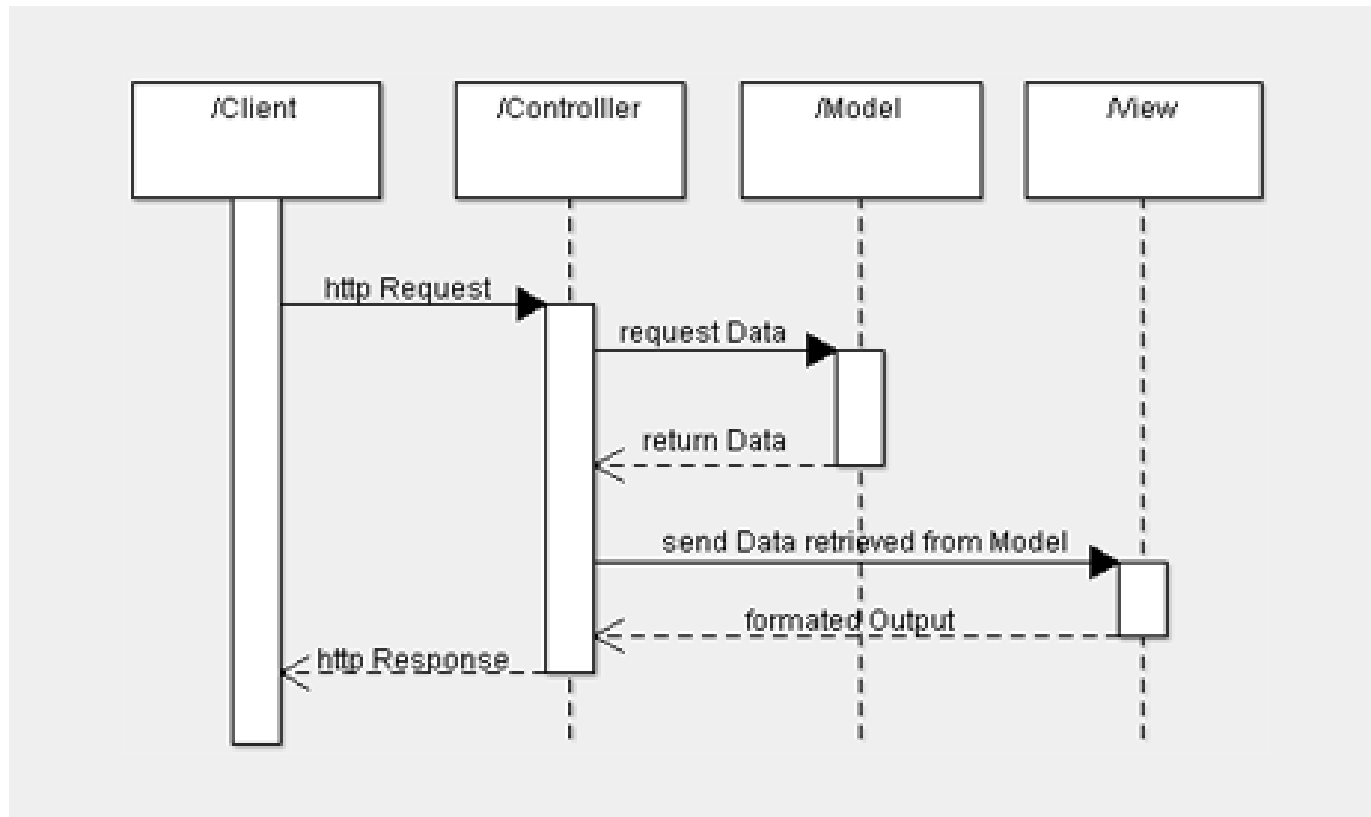
```
include_once("controller/Controller.php");
```

```
$controller = new Controller();
```

```
$controller->invoke();
```

```
?>
```

PHP & MVC





THANK YOU...