

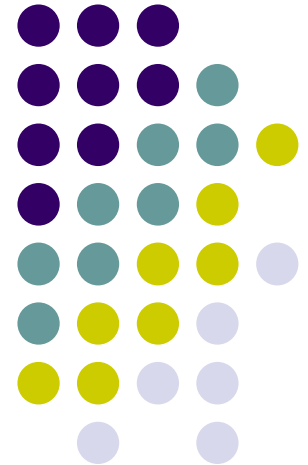


ຄະນະວິທະຍາສາດທຳມະຊາດ
ພາກວິຊາ ວິທະຍາສາດຄອມພິວເຕີ

ເວບໂປຣແກຣມມິງ 2

(Web Programming 2)

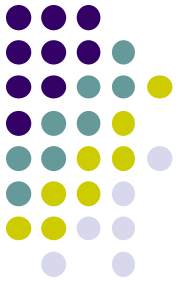
ສອນໂດຍ: ອຈ. ເພັດ ສອນວິໄລ
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ບົດທີ11

Web Application Framework ແລະ ຄວາມປອດໄພ





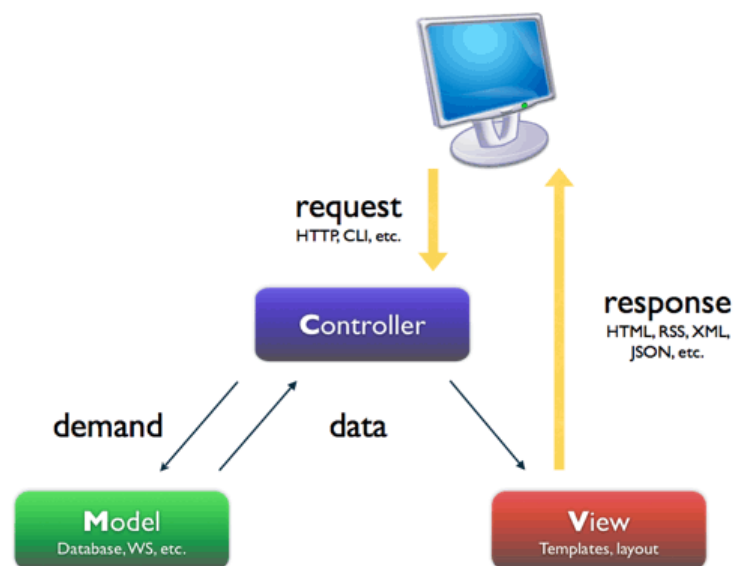
ເນື້ອໃນໂດຍລວມ

- ແນະນຳ MVC ເບື້ອງຕົ້ນ
- Codeigniter Framework
- ການນຳໃຊ້ MVC ດ້ວຍ Codeigniter
- ການເຊື່ອມຕໍ່ຖານຂໍ້ມູນ

ແນະນຳ MVC ເບື້ອງຕົ້ນ



- Model–view–controller (MVC) ເປັນການອອກແບບໂຄງສ້າງຊອບແວ ເພື່ອໃຫ້ງ່າຍໃນການພັດທະນາ, ຊຶ່ງ ແບ່ງຊອບແວອອກເປັນ 3 ພາກສ່ວນ ທີ່ມີການພົວພັນກັນ.



ແນະນຳ MVC ເບື້ອງຕົ້ນ



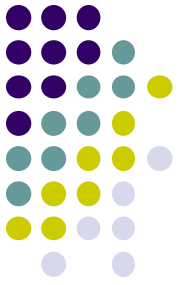
- Controller ສາມາດສົ່ງຄຳສັ່ງໄປຍັງ Model ເພື່ອປ່ຽນແປງ ຫຼື ແກ້ໄຂຂໍ້ມູນ. ນອກນັ້ນ, ຍັງສາມາດສົ່ງຄຳສັ່ງໄປຍັງ View ເພື່ອປ່ຽນແປງການສະແດງຜິນຂໍ້ມູນ ຫຼື ນຳຂໍ້ມູນຈາກ Model ມາສະແດງຢູ່ໃນ View ໄດ້.

ແນະນຳ MVC ເບື້ອງຕົ້ນ



- Model ເປັນຊຸດຄຳສັ່ງທີ່ເຮັດວຽກຢູ່ເບື້ອງຫຼັງ, ຊຶ່ງ Model ຈະແຈ້ງໃຫ້ Controller ແລະ View ເມື່ອມີການປ່ຽນແປງຂໍ້ມູນ.

ແນະນຳ MVC ເບື້ອງຕົ້ນ



- View ນຳໃຊ້ໃນການສະແດງຜົນຂໍ້ມູນຈາກ Model



CodeIgniter Framework

- ໂຄງສ້າງໄຟລຂອງ Codeigniter

```
-application/  
- -config/  
- -controllers/  
- -models/  
- -views/
```


ການນຳໃຊ້ MVC ດ້ວຍ Codeigniter



- Controller

```
Welcome.php
1 <?php defined('BASEPATH') OR exit('No direct script access allowed');
2
3 class Welcome extends CI_Controller {
4
5     public function index()
6     {
7         $this->load->view('welcome_message');
8     }
9 }
```

ການນຳໃຊ້ MVC ດ້ວຍ Codeigniter



- ການສົ່ງຂໍ້ມູນໄປຍັງ View

```
1 <?php defined('BASEPATH') OR exit('No direct script access allowed');
2
3 class Welcome extends CI_Controller {
4
5     public function index()
6     {
7         $data['page_title'] = 'Our first CodeIgniter application';
8         $this->load->view('welcome_message', $data);
9     }
10 }
```

ການນຳໃຊ້ MVC ດ້ວຍ Codeigniter



- View

```
application/views/welcome_message.php
1  <!DOCTYPE html>
2
3  <html>
4
5  <head>
6    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
7    <title>Your Website</title>
8  </head>
9
10 <body>
11   <h1>Hello from your CodeIgniter application</h1>
12   <p>Hello</p>
13 </body>
14
15 </html>
```

ການນຳໃຊ້ MVC ດ້ວຍ Codeigniter



```
$this->load->view('welcome_message',$data);
```

```
$data = array('page_title'=>'This is the title of the page',  
'another_var' => 6);
```

```
application/views/welcome_message.php
1 <!DOCTYPE html>
2
3 <html>
4
5 <head>
6   <meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
7   <title><?php echo $page_title;?></title>
8 </head>
9
10 <body>
11   <h1>Hello from <?php echo strtolower($page_title);?></h1>
12   <p>Hello</p>
13
14 </body>
15
16 </html>
```

ການເຊື່ອມຕໍ່ຖານຂໍ້ມູນ



- ແກ້ໄຂໄຟລ

/config/database.php ➡

```
78 'hostname' => 'localhost',
79 'username' => 'root',
80 'password' => '',
81 'database' => 'test',
82 'dbdriver' => 'mysqli',
```

id	name	qty
1	pepsi	5
2	candy	10
3	Milk	20



```
<?php
class Product_model extends CI_Model
{
function get_product()
{
    /* all the queries relating to the data we want to retrieve will go in here.
    */
    /* after we've made the queries from the database, we will store them
    inside a variable
    called $data, and return the variable to the controller */
    return $data;
}
}
}
```

ການເຊື່ອມຕໍ່ຖານຂໍ້ມູນ



1. `$q = $this->db->query("SELECT * FROM product WHERE id=1 AND name = 'pepsi'");`

**2. `$sql = "SELECT name FROM product WHERE id = ? AND name = ?";`
`$q = $this->db->query($sql, array(1, "pepsi"));`**

**3. `$this->db->where(array('id'=>1, 'name'=>'pepsi'));`
`// the 'where' clause`
`$this->db->select('name');` *// the select statement*
`$q = $this->db->get('product');` *// the table***

4. `$q=$this->db->get('product');`

ການເຊື່ອມຕໍ່ຖານຂໍ້ມູນ



id	name	qty
1	pepsi	5
2	candy	10
3	Milk	20



```
<?php
class Product_model extends CI_Model
{
function get_product()
{
$this->db-
>where(array('id'=>1,name'=>pepsi'));
    $this->db->select('id,name');
    $q = $this->db->get('product');

    return $q->result();
}
}
}
```

ການເຊື່ອມຕໍ່ຖານຂໍ້ມູນ



■ Controller

```
<?php
if(!defined("BASEPATH")) exit("No direct script access allowed");
class Product extends CI_Controller
{
    public function index()
    {
        //if you decided NOT to autoload the database library you would have to add this
        line: $this->load->library('database');
        $this->load->model("product_model"); // we load the model that we saved in the
        application/models folder, so that the controller will know where to get the methods
        from
        $data["product"]=$this->product_model->get_product(); // we will load the result of
        the query inside the $data array having the key 'product'
        $this->load->view("product_view",$data);// after you stored the query results inside
        the $data array, you will have to send the array to the view which will display it
        inside the browser.
    }
}
```


ການເຊື່ອມຕໍ່ຖານຂໍ້ມູນ



```
<html>
<head>
  <title>Product</title>
</head>
<body>
  <h1>Product</h1>
  <ul>
    <?php
      /* first we will make sure we have data to display. $users variable is actually the $data['users']
      that we sent from the controller to the view... */
      if(!empty($product))
      {
        foreach($product as $row) // $row is an object.
        {
          echo "<li>ID: ".$row->id."; Name: ".$row->name."</li>";
        }
      }
    ?>
  </ul>
</body>
</html>
```



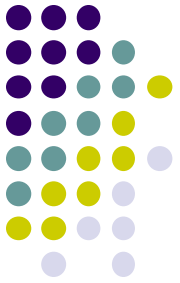
ຄວາມປອດໄພຂອງເວບໄຊ

- ຄວາມປອດໄພຂອງ Framework
 - ຄວາມປອດໄພ (Security) ເປັນໜຶ່ງໃນບັນດາອົງປະກອບທີ່ສຳຄັນຂອງລະບົບ, ໂດຍສະເພາະແມ່ນການພັດທະນາລະບົບເພື່ອຄວບຄຸມ ແລະ ບໍລິຫານທຸກລະກິດໃດໜຶ່ງ.
 - ຄຸນລັກສະນະຂອງ Framework ຈະມີຄວາມປອດໄພ ແລະ ໂຄງສ້າງທີ່ເປັນມາດຕະຖານໃນການປ້ອງກັນຈຸດອ່ອນໃນການຂຽນໂປຣແກຣມໄວ້ແລ້ວ ເຊັ່ນວ່າ: ການປ້ອງກັນການໂຈມຕີດ້ວຍ SQL Injection, XSS ແລະ ອື່ນໆໂດຍພື້ນຖານໄວ້.

ຂໍ້ມູນອ້າງອີງ



- [1] <http://codesamplez.com/codeigniter-tutorials>
- [2] ບັນຊາ ປະສິລະເຕສັງ. ພັດທະນາເວບແອັບພລິກເຄຊັນ ດ້ວຍ PHP ຮ່ວມກັບ MySQL ແລະ jQuery. ຊີເອສ, ໄທ. ໜ້າ 126-183. 2557.
- [3] <https://dev.mysql.com/doc/refman/8.0/en/create-procedure.html>



ព្យាបាល និង ព័ត៌មាន

ឧបករណ៍